

1 IN THE COMMONWEALTH OF PENNSYLVANIA

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2 PENNSYLVANIA DEPARTMENT OF : NO. 284 M.D.
GENERAL SERVICES, : 1990

3 PENNSYLVANIA DEPARTMENT :
OF TRANSPORTATION, :

4 PENNSYLVANIA PUBLIC :
UTILITY COMMISSION, :

5 PENNSYLVANIA EMERGENCY :
MANAGEMENT AGENCY and :

6 PENNSYLVANIA DEPARTMENT :
OF STATE :

7 Plaintiffs, :

vs. :

8 UNITED STATES MINERAL :
PRODUCTS COMPANY, :

9 CERTAINTIED CORPORATION, :
COURTAULDS AEROSPACE, :

10 INC., CHEMREX, INC., :
PHILIPS ELECTRONICS :

11 NORTH AMERICA :
CORPORATION, ADVANCE :

12 TRANSFORMER COMPANY :
and MONSANTO COMPANY, :

13 Defendants. :

* * *

14 BEFORE THE HONORABLE
CHARLES P. MIRARCHI, JR.

15 * * *

16 Friday, March 17, 2000

17 * * *

17 Motions arguments and
tesitmony held at City Hall, Courtroom
453, Philadelphia, Pennsylvania 19107
18 commencing at 9:00 a.m., on the above
date, before Linda Rossi Rios, a
19 Federally Approved Registered
Professional Reporter and Notary Public
20 of the Commonwealth of Pennsylvania.

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24

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1 APPEARANCES (con't.)	1 MR. EDGE: In the name of
2 WHITE & WILLIAMS	2 the Commonwealth of Pennsylvania,
3 BY: THOMAS M. GOUTMAN, ESQUIRE	3 this Commonwealth Court is now
4 1800 One Liberty Place, 18th Floor	4 declared open. The Honorable
5 1650 Market Street	5 Charles P. Mirarchi, Jr.
6 Philadelphia, Pennsylvania 19102	6 presiding. Please be seated.
7 (215) 864-7000	7 Good morning, Your Honor.
8 Counsel for Defendant,	8 THE COURT: Good morning.
9 Monsanto Corporation	9 MR. NEAL: Your Honor, I
10 - - -	10 think Mr. Woodyard is on the stand
11	11 under cross-examination.
12	12 THE COURT: Mr. Woodyard may
13	13 take the stand.
14	14 MR. EDGE: Just state your
15	15 name and spell your last name for
16	16 the record, sir.
17	17 THE WITNESS: John Woodyard,
18	18 W-O-O-D-Y-A-R-D.
19	19 MR. EDGE: I remind you,
20	20 you are still under oath.
21	21 - - -
22	22 CROSS-EXAMINATION
23	23 - - -
24	24 BY MR. NEAL:

6 1 Q. Good morning, Mr. Woodyard. 2 A. Good morning. 3 MR. NEAL: Good morning, 4 ladies and gentlemen. 5 THE JURORS: Good morning. 6 MR. NEAL: I'm not going to 7 leave you out, good morning, Your 8 Honor. 9 BY MR. NEAL: 10 Q. Mr. Woodyard, when was it 11 that you first visited the Transportation 12 and Safety Building, do you recall? 13 A. I believe it was in early 14 1997. I can't remember the exact date. 15 Q. And what were you contacted 16 to do? 17 A. By whom? 18 Q. I assume you didn't just go 19 out there on a lark. Someone contacted 20 you to ask you to do something. Is that 21 correct? 22 A. Oh, of course not. Yes, I 23 was at that point getting acquainted with 24 the case and took the opportunity to go	8 1 Building? 2 A. I don't recall. 3 Q. Did you have any of the bulk 4 samples done by the State? 5 A. I had probably at that point 6 reviewed at least a large part of the 7 State's data. 8 Q. And had you come to any 9 conclusions at that time? 10 A. I can't recall to be honest 11 with you. 12 Q. When you went out to the 13 Transportation and Safety Building, did 14 you have anything in mind? Did you draw 15 any conclusions before you stepped into 16 that building? 17 A. That's a pretty broad 18 question. I really don't know. 19 Q. You don't remember? 20 A. No, I don't. 21 Q. When you went out to the 22 Transportation and Safety Building, you 23 said you had gotten yourself acquainted 24 with the case. Did you have an objective
7 1 visit the building and get acquainted 2 with the building. 3 Q. When you say you got 4 acquainted with the case, what did you 5 get acquainted with? 6 A. The case. The issues 7 associated with what we're here about. 8 Q. And what did you understand 9 the issues to be before you stepped foot 10 in the Transportation and Safety 11 Building? 12 A. That there had been a fire 13 and that there had been PCBs found in the 14 building. And that there were PCB 15 containing products burned in the fire. 16 Q. Did you have an objective 17 when you went out there for your visit? 18 A. My personal one was more or 19 less to get acquainted with the facility, 20 having not seen it before, but by having 21 read about it a little bit at that point. 22 Q. Prior to going out there, 23 what material did you have that related 24 to the Transportation and Safety	9 1 as to what you were going to do, for 2 instance, am I going there to see if in 3 fact fire spread the PCBs? Am I going 4 there to see whether PCBs were contained 5 in certain products? Just exactly what 6 did you have in mind? 7 A. I don't know that it was 8 that specific. Again, we looked at light 9 fixtures and duct work. Looked at the 10 general layout of the building. Looked 11 at places where samples had been 12 collected so that I could relate the data 13 to what I was reading about. Just a 14 pretty much standard -- 15 Q. You didn't have in mind when 16 you went out there, hey, I know that the 17 PCBs were spread by fire and they didn't 18 volatilize. You didn't go out there with 19 that pre-conceived idea. Is that 20 correct? 21 A. I can't recall. 22 Q. Did you have in mind when 23 you went out there whether you were going 24 to sample or not and did you design a

1 plan to do any kind of sampling?

2 A. No, no. At that point, I
3 clearly wasn't planning to take samples
4 during the visit.

5 Q. Why?

6 A. Because I hadn't completed
7 the review of all the sampling data that
8 was available.

9 Q. Didn't you want to have your
10 own sampling data to alter review to
11 compare what you had read from the State?

12 A. No, not necessarily.

13 Q. When you went out there, and
14 you looked, you say you walked around on
15 all the floors. Is that correct?

16 A. I think I said I went to a
17 number of floors. I don't recall how
18 many. But the floors above and below the
19 fire floors as they're called.

20 Q. Do you know how many floors
21 you actually walked through?

22 A. No. I would say most. I
23 don't know what that means, but almost
24 all of them I would say including the

1 basement.

2 Q. You walked through the
3 basement?

4 A. Yes.

5 Q. Did you look at the HVAC
6 system?

7 A. Yes, sir.

8 Q. And there was a separate
9 HVAC system for, was it, the first,
10 ground -- the first floor, the ground
11 floor and the basement?

12 A. Yes.

13 Q. And it had separate air
14 handling units. Is that correct?

15 A. Yes.

16 Q. Now, you walked around and
17 you said that on a couple of floors you
18 went above the ceiling. Is that correct?

19 A. Yes. Yes, I did.

20 Q. And other than looking
21 around, I think your testimony was for
22 about a minute, that's the only time you
23 were above the floor. Is that correct?
24 Excuse me, above the ceiling.

1 A. Yes, the few times when we
2 poked out the ceiling tiles and looked
3 inside to see what was there, what was
4 the general condition and configuration.

5 Q. Did you talk with anybody
6 there at the Transportation and Safety
7 Building?

8 A. I don't recall talking to
9 anybody. You mean about the building
10 itself?

11 Q. Yes.

12 A. I can't recall offhand.

13 Q. Did you go with anybody?

14 A. I was there with a number of
15 other people associated with the case who
16 were looking more at construction aspects
17 of the building than the environmental
18 issues.

19 Q. And who were they?

20 A. I can't recall. I think
21 that question was asked before in my
22 deposition and I remembered Mr. DeChiara
23 being one of them. I couldn't remember
24 the other individuals.

1 Q. Did you look at any plans
2 and specifications in connection with the
3 building?

4 A. Not at that time, no.

5 Q. Subsequently you did?

6 A. Yes, I have.

7 Q. And did you take notes while
8 you were at the building?

9 A. I don't really recall.

10 Q. You certainly don't have
11 them here. Is that correct?

12 A. No, I don't.

13 Q. When you came back after
14 going through that walk-through, what is
15 the next step that you did as far as this
16 case is concerned?

17 A. I suspect at the time I had
18 not reviewed the piles of information
19 that were available to me, and I
20 continued to do that review.

21 Q. With what objective in mind?
22 Were you asked to do something specific?
23 Were you asked to investigate something
24 specific to arrive at certain

1 conclusions?

2 A. Well, as a PCB cleanup
3 expert, I was asked to review the PCB
4 cleanup aspects of this particular
5 project. So I was looking at the PCB
6 data, of course, the layout of the
7 building, how smoke may have moved
8 through the building. Looked at
9 videotapes, photographs, things of that
10 nature, to get acquainted with the
11 incident and what had been found out by
12 the sampling results after the incident.

13 Q. And at that particular time
14 you didn't have Mr. Kominsky's results.
15 Is that correct?

16 A. I don't believe so.

17 THE COURT: You did not have
18 Mr. --

19 MR. NEAL: He did not have
20 Mr. Kominsky's results.

21 MR. GOUTMAN: Objection. If
22 we could have a clarification by
23 what he means by what point in
24 time.

1 A. Yes, I believe so.

2 Q. And that was in connection
3 with looking through the refuse. Is that
4 correct?

5 A. Yes. It was actually
6 looking at the sixth floor and
7 particularly looking at the bags of
8 burned up building debris and the like
9 that were still there.

10 Q. And when you sat down to
11 write your report, what other information
12 did you have besides the State's data and
13 Mr. Kominsky's data?

14 A. What specific information
15 are you looking for?

16 Q. The information that you
17 utilized in writing the report. You had
18 to write your report, so you had to have
19 information on which to base it?

20 A. Yes, that's correct.

21 Q. Beside from the State's data
22 and Mr. Kominsky's data which you
23 ultimately received, what other
24 information did you have?

1 BY MR. NEAL:

2 Q. Right after going to the
3 Transportation and Safety Building. The
4 next day. You didn't have Mr. Kominsky's
5 results. Correct?

6 A. I don't think so. I
7 received a fax of those results at some
8 point and later received of course his
9 report.

10 Q. The fax of those results
11 came sometime towards the end of 1998.
12 Correct?

13 A. I can't recall.

14 Q. And you got his report in
15 January of '99. Is that correct?

16 A. I don't remember the exact
17 date.

18 Q. From the time that you went
19 there, to the Transportation and Safety
20 Building, on the first occasion, until
21 the time that you rendered your report,
22 you only went back to the Transportation
23 and Safety Building one more time. Is
24 that correct?

1 A. Some of the sampling results
2 that we talked about that I had analyzed
3 by our lab. They were included in the
4 report.

5 Q. And those were samples that
6 were received by, I say you, by Monsanto
7 and Certainteed and that you had
8 analyzed. Correct?

9 A. Yes. That's correct.

10 Q. Those weren't samples that
11 you took?

12 A. No. They were pre-fire
13 samples that we discussed last time I was
14 here.

15 Q. And had you arrived -- when
16 did you arrive at your opinion that the
17 PCBs were spread by fire as opposed to
18 volatilization?

19 A. I don't recall the exact
20 date. It was of course before I wrote my
21 report.

22 Q. And in writing your report,
23 I think you told us last time that you
24 referred to Dr. Erickson's book.

1 Correct?

2 A. Perhaps. Perhaps. I don't
3 think I cited it. I may have used it for
4 some of the numbers that were contained
5 in his tabular information. That's about
6 it.

7 Q. So you're talking about in
8 connection with vapor pressures and
9 vaporization?

10 A. That's correct.

11 Q. But other than that, you
12 didn't use it?

13 A. No.

14 Q. As a matter of fact, you
15 didn't use any other reference book. Is
16 that correct?

17 A. No, I don't think I did.

18 Q. And did you do a literature
19 search in connection with making sure
20 that the opinion that you were arriving
21 at was based upon sound science?

22 A. No, I didn't. I didn't feel
23 I needed to.

24 Q. So that you sat down with

1 just cleaning things.

2 Q. So again, if I can be more
3 precise, had you the information from the
4 State, you had Mr. Kominsky's data, you
5 had samples collected by someone else and
6 then you wrote your report?

7 A. Yes, I believe that's
8 correct.

9 Q. At any time from the time
10 you went to the T&S Building the first
11 time in '97 until the time you wrote your
12 report, did you request to do any kind of
13 sampling of any nature?

14 A. No, I did not.

15 Q. Did you want to verify the
16 results of the sampling by the State by
17 taking your own samples?

18 A. No, I didn't feel the need
19 to do that.

20 Q. And in connection with that,
21 why didn't you feel -- you felt there
22 were enough test sampling done that you
23 could rely upon that?

24 A. Absolutely.

1 the information you had which was the
2 State's data, Mr. Kominsky's data, and
3 samples that you had received from --
4 actually came from the plaintiffs'
5 through Mr. Goutman's office and then on
6 to your lab. Is that correct?

7 A. Yes, that's correct.

8 Q. And other than that, you
9 didn't have any other information whether
10 by research, testing or otherwise. Is
11 that correct?

12 A. Well, not formally, but as I
13 said before, having worked on projects
14 like the T&S Building for some twenty or
15 more years, I have a lot of background
16 and experience.

17 Q. And those projects are
18 mostly in the area of cleanup which is
19 your specialty. Is that correct?

20 A. Cleanup in its broadest
21 sense certainly, but that would include
22 source identification as we discussed
23 earlier. A number of different aspects
24 associated with different cleanup, not

1 Q. And when you got that, did
2 you make sure that it had the necessary
3 data validation packages along with it?

4 A. Yes.

5 Q. So you reviewed all of
6 those?

7 A. A lot of them. I don't know
8 how many.

9 Q. And you indicated at the
10 time of your testimony last time, that
11 you had done some calculations with
12 regard to how much could have vaporized
13 from the ductboard during the heat
14 sealing process. Correct?

15 A. Yes, sir.

16 Q. At the time you wrote your
17 report, you didn't include that, did you?

18 A. No.

19 Q. At the time you wrote your
20 report, you hadn't done that calculation?

21 A. That's correct.

22 Q. At the time your deposition
23 was taken in January of 2000, you hadn't
24 done the calculation. Correct?

1 A. No, that's correct.
 2 Q. And you did the calculation
 3 before you came into court when you were
 4 cross-examined by me. Is that correct?
 5 A. Yes, shortly after my
 6 deposition.
 7 Q. You also indicated in your
 8 testimony that one of the things that you
 9 noticed that, according to you, if there
 10 were volatilization, you would expect a
 11 kind of uniformity in the PCBs. Is that
 12 correct?
 13 A. Yes. As the whole
 14 off-gassing process was characterized by
 15 Mr. Kominsky.
 16 Q. And if it were spread, that
 17 is, the PCBs were spread by smoke, it
 18 would be more chaotic, is that correct,
 19 and random?
 20 A. Yes. That's correct.
 21 Q. You did review the State's
 22 data in connection with the bulk sampling
 23 they took. Is that correct?
 24 A. Yes, I did.

1 Q. And that was contained, as a
 2 matter of fact, in Mr. Jannetta's letter,
 3 was it not?
 4 A. Yes.
 5 Q. Do you have that letter with
 6 you?
 7 A. No, I don't.
 8 MR. NEAL: Your Honor, I'm
 9 handing Mr. Woodyard PennDOT 996.
 10 Does Your Honor have a copy of
 11 that? We've had this about 37
 12 times.
 13 THE COURT: I'm sure in the
 14 global phase of this case we have
 15 it.
 16 BY MR. NEAL:
 17 Q. Attached to the letter from
 18 Alan Echt, he's from the Department of
 19 Health and Human Services, is that
 20 correct, which is part of NIOSH?
 21 A. Yes, that's correct.
 22 Q. And NIOSH is writing to Mr.
 23 Jannetta who is the Secretary of
 24 Department of General Services. Correct?

1 A. Yes. Yes, sir.
 2 Q. And this is dated August 21,
 3 1995. And he has certain tables in the
 4 back, does he not?
 5 A. Yes.
 6 Q. In which they summarize the
 7 data. Is that correct?
 8 A. Yes.
 9 Q. And he has, does he not, on
 10 Table 6, which is page 20, Your Honor.
 11 Are you with me, Mr. Woodyard?
 12 A. Yes, I am.
 13 MR. NEAL: Your Honor, I'm
 14 petrified, but I'm going to ask
 15 Mr. Henderson to work the machine.
 16 THE COURT: This exhibit
 17 does not refer to PennDOT. It
 18 says Penn 0996 and from the
 19 Department of Health and Human
 20 Services to Mr. Jannetta who is
 21 the Secretary of the Department of
 22 General Services.
 23 MR. NEAL: It may be
 24 referred to as Penn Exhibit 996.

1 THE COURT: I didn't want
 2 the record to be confused by
 3 having PennDOT. And the exhibit
 4 does not evidence DOT, Department
 5 of Transportation.
 6 BY MR. NEAL:
 7 Q. Mr. Woodyard, before we
 8 start talking about this particular
 9 exhibit, your theory is that the fire
 10 caused the burning of the duct work
 11 thereby releasing the 1262s from the
 12 adhesive and then that was carried
 13 throughout the building. Is that
 14 correct?
 15 A. Well, actually it's a fact
 16 that the duct containing 1262 and the
 17 light ballast containing 1242 were burned
 18 in the fire and carried with the smoke
 19 throughout the building.
 20 Q. And when you say carried by
 21 smoke, would I be correct that the
 22 biggest area of contamination would be
 23 occurring on the fire floor? Is that
 24 correct?

1 A. One would certainly expect
2 the contamination levels to be higher on
3 the sixth floor.

4 Q. And you might expect that
5 they would be higher maybe even on the
6 floor below and the floor above. Is that
7 correct?

8 A. Well, that's really hard to
9 say given that the smoke was rising
10 initially before it was redistributed to
11 the building. The floor below it
12 probably would not have been contacted
13 directly by the fire.

14 Q. So you say the smoke is
15 rising, which even a moron like myself
16 can understand that, smoke rises.
17 Correct? And as it rises, it goes to the
18 floors above the fire floor. Correct?

19 A. Yes, until the point that
20 it's redistributed by the ventilation
21 system or other avenues.

22 Q. But the biggest areas of
23 contamination would be the fire floor one
24 would expect plus maybe several of the

1 floors above that, but as you get up in
2 the floors, there shouldn't be as high a
3 contamination as you have on the sixth
4 floor or the fifth floor or the seventh
5 floor. Correct? Normally?

6 A. Well, again, since we don't
7 know exactly how the smoke was
8 distributed, you've seen the video and
9 you've seen how the smoke moved its way
10 up and then down in the building, it went
11 through a variety of avenues, so there's
12 no sure way to determine in theory where
13 the highest levels would be.

14 Q. But normally, under normal
15 circumstances, smoke is being spread,
16 it's rising, the biggest area would be
17 the immediate area where the fire
18 occurred and maybe the next couple of
19 floors, but as you get going farther and
20 farther away, you should not have as much
21 contamination. Is that correct?

22 A. Not necessarily. Because
23 again we don't know how the smoke chose
24 to move through the building. The

1 ventilation system certainly was an
2 avenue, but also there were conduits.
3 There were elevator shafts. There were
4 other ways it could move up and down.
5 And it could pick floors based on factors
6 we don't understand.

7 Q. So it could, as you talked
8 about it, be random. It could pick
9 floors, there might be less
10 contamination, it could pick other
11 floors, there might be more
12 contamination?

13 A. That's correct.

14 Q. And with fire, you wouldn't
15 expect, as you have testified, a
16 uniformity; it would be more chaotic as
17 you explained, some floors it picked,
18 some floors it didn't?

19 A. That's correct. There's no
20 way to predict, so you would expect some
21 variation between the levels you find on
22 each floor.

23 Q. Now, if we look at Table 6
24 and it has the mean. Is that correct?

1 THE COURT: Could you keep
2 your voice up? Was there
3 something that was said that the
4 Court did not hear? I heard
5 conversation.

6 MR. NEAL: I was just
7 mumbling to myself.

8 THE COURT: That's
9 permissible.

10 BY MR. NEAL:

11 Q. On this particular table,
12 this is the Results of Bulk Sampling for
13 PCB 1260, Analysis of Data set SLPCBD.
14 Is that correct? And this is from the
15 State's data. Correct?

16 A. Yes, sir.

17 Q. And on it it has the mean,
18 the median and the maximum. What is the
19 mean?

20 A. The average.

21 Q. So that's one of the
22 measures used by scientist or analysts to
23 analyze data, is that correct, getting
24 the average?

1 A. Yes, that's correct.
 2 Q. And what is the median?
 3 A. The median is essentially
 4 the most common central result. It's
 5 kind of like the average.
 6 Q. Now, if we take a look at
 7 the results of the bulk sampling for
 8 1260, you find that on the sixth floor,
 9 where you would expect you have an
 10 average of 69,990 and I think that's in
 11 micrograms per kilograms. Correct?
 12 A. Yes, that's correct. You
 13 divide by a thousand to get parts per
 14 million roughly.
 15 Q. And on the sixth floor of
 16 course you see the very high, the maximum
 17 was 3,839,000. Is that correct?
 18 A. Yes, sir.
 19 Q. That does have an effect on
 20 the average, does it not?
 21 A. Yes.
 22 Q. So this average, if you
 23 eliminated that one particular maximum,
 24 that one particular high, this average

1 would be significantly lower, would it
 2 not?
 3 A. No, I would have to look at
 4 the data, there might be another one that
 5 is just below that. You can't jump to
 6 that conclusion.
 7 Q. Did you look at the data?
 8 A. Yes. I didn't memorize it
 9 though, I'm sorry.
 10 Q. Did you notice the anomaly,
 11 that 3,839,000 and see whether there were
 12 any other areas that had just as high?
 13 A. Yes, I'm sure I did.
 14 Q. But in any event, that is
 15 69 -- roughly 70,000 micrograms per
 16 kilogram. And then when you go to the
 17 remaining floors for the average, you
 18 have on the first floor roughly 20,556.
 19 You have on the second floor 24,870.
 20 Third floor, 26,720. Fourth floor,
 21 14,637. We jumped up to the seventh, we
 22 get 28,000. Eight, 29,000. We're
 23 talking pretty consistent, are we not?
 24 A. For the mean, that's true.

1 Q. And for the mean, it's
 2 pretty uniform, is it not?
 3 A. The mean is quite uniform.
 4 The range from floor to floor is pretty
 5 dramatically different.
 6 Q. Well, the range in the mean
 7 is not dramatically different, is it?
 8 A. No, but as I pointed out, on
 9 the first floor if you have 16,000 on one
 10 sample and on the thirteenth floor you
 11 have 148,000, that's almost ten times
 12 different. That's a pretty dramatic
 13 different.
 14 Q. We're talking about the
 15 average in the samples. They take all of
 16 the samples with all of the results, they
 17 add it up and divide by the number of
 18 samples, correct, and they get the
 19 average?
 20 A. True, but my point is that
 21 -- going back to your point about chaotic
 22 distribution and a lot of variation from
 23 floor to floor and from sample to sample,
 24 what I'm pointing out here is a pretty

1 significant difference from sample to
 2 sample and floor to floor.
 3 Q. Where is it shown the
 4 dramatic difference from sample to
 5 sample?
 6 A. I just pointed out an
 7 example. The first floor, the median
 8 result is 16,000 which would of course
 9 indicate that there are samples lower
 10 than that. And on the thirteenth floor
 11 you have a maximum of 148,000. That's --
 12 to me that's very different. That's an
 13 indication to me that there is this kind
 14 of chaotic distribution that we're
 15 talking about.
 16 Q. That's the first floor.
 17 Correct?
 18 A. That's correct.
 19 Q. That's operated by a
 20 different HVAC system. Correct?
 21 A. That's correct, but the
 22 smoke went down to the first floor. It
 23 was ventilated out of the first floor by
 24 fans as we saw in the videotape.

1 Q. Which videotape are you
2 talking about? We didn't see any smoke
3 vented out of the first floor. We saw
4 videotape --

5 MR. GOUTMAN: Objection.

6 That's testimony by counsel.

7 THE COURT: Sustained.

8 BY MR. NEAL:

9 Q. Did you look at the
10 videotapes by the police?

11 A. Yes, I did.

12 Q. Did it show smoke coming out
13 of the first floor?

14 A. The first floor or the
15 ground floor, I don't recall which one it
16 was. I haven't looked at it for a while.

17 Q. You haven't looked at it for
18 a while. Did you see any smoke coming
19 out of the basement area?

20 A. No, not in the videotapes.
21 But there's evidence of smoke in the
22 basement.

23 Q. How is that?

24 A. When I went down there and

1 took my tour, you could see visibly where
2 people had taken samples because of the
3 smoke deposits.

4 Q. Who took samples there?

5 A. There were numerous wipe
6 sample locations all over the building
7 from the State to create some of the data
8 that you're talking about.

9 Q. Do you know whether when
10 they wiped it, whether what they were
11 wiping was soot?

12 A. It looked like it to me.

13 Q. Could it have been dust?

14 A. Possibly, but it was pretty
15 dark dust.

16 Q. It's a 30-year-old building.
17 Do you know how long the dust was there?

18 A. This wasn't some closet
19 that only gets open once a year. This
20 was the mechanical room in the basement.

21 Q. There's an easy way of
22 determining whether it's soot or dust,
23 you could have taken a wipe sample
24 yourself, couldn't you?

1 A. But someone had already
2 taken a wipe sample and produced the
3 data.

4 Q. Someone else. You could
5 have done it?

6 A. I had no reason to doubt the
7 results. I don't understand the purpose
8 in taking another sample.

9 Q. So when you were there, you
10 had no reason to doubt the results. You
11 hadn't even reviewed all of the data, you
12 didn't have the data validation packages
13 that you were reviewing at the time.
14 Isn't that correct?

15 MR. GOUTMAN: Objection.
16 Argumentative.

17 THE COURT: Sustained.
18 There was an objection and the
19 court sustained the objection. Of
20 course what may be difficult is
21 the fact that we have a TV between
22 counsel and the court.

23 MR. NEAL: That is true.

24 BY MR. NEAL:

1 Q. Do you know from your own
2 personal knowledge and from your own
3 observation whether or not what was down
4 in the basement level was soot?

5 A. Yes, because it was
6 distributed there by the fire. There was
7 evidence of smoke from testimony of
8 several individuals. Sure.

9 Q. Do you remember testimony of
10 Mr. Buhay? Did you read his deposition?

11 A. Parts of it, yes.

12 Q. Did you read where he said
13 there was no smoke damage in the
14 ground -- in the basement?

15 MR. GOUTMAN: Objection,
16 Your Honor. Counsel is
17 testifying. I move to strike it.

18 THE COURT: Sustained. If
19 you have a particular section of
20 the testimony that you would like
21 to ask the witness about, you may
22 do that. But you may not
23 otherwise use your own
24 recollection.

1 BY MR. NEAL:

2 Q. And you were there three
3 years after the fire?

4 A. Yes, that's correct.

5 Q. Now, you would agree with
6 me, would you not, Mr. Woodyard, that the
7 mean that we see here, other than on the
8 fire floor, is pretty uniform, would you
9 not?

10 A. Yes. It's fairly uniform.

11 Q. And if you looked at the
12 median, you would see that the median,
13 for instance, on the sixth floor, is
14 10,900 but on the basement floor, it's
15 16,150. Is that correct?

16 A. Yes, it is.

17 Q. And that's the fire floor,
18 the sixth floor. Correct?

19 A. Yes.

20 Q. And we have higher levels of
21 the median on the fifth floor, the fourth
22 floor, the third floor, the second floor
23 and the first floor?

24 A. Yes. But as I was saying,

1 the range of the sample results is what
2 is important to me in trying to determine
3 whether it was soot distribution.

4 Q. Well, we know the range that
5 on the sixth floor, the fire floor, was
6 10,900, but when you get down to the
7 first floor where you wouldn't expect to
8 have as much, you have 16,150 as the
9 median.

10 MR. GOUTMAN: Objection.
11 That's a misstatement. The range
12 was not 10,000. That was the
13 median. Perhaps counsel misspoke.

14 MR. NEAL: I don't know if I
15 misspoke or not, Your Honor.

16 BY MR. NEAL:

17 Q. Do you understand my
18 question, Mr. Woodyard?

19 A. In general, yes, I do.

20 Q. Am I correct that the median
21 on the fire floor of 10,900 is less than
22 what you find on the first floor, which
23 is 16,150?

24 A. Yes, that's in fact correct.

1 But as I pointed out, on the thirteenth
2 floor you have a maximum of 148,000.
3 That is a high number to have not been
4 the result of smoke deposits.

5 Q. Well, did you take tests to
6 verify this number to see, gee, 148,000,
7 that doesn't make sense, maybe I should
8 take some tests?

9 A. No. I didn't feel the need
10 to.

11 Q. Because you accepted the
12 data. Is that correct?

13 A. Yes. And Mr. Kominsky's
14 data later in his fireproofing samples
15 confirmed some of what we saw in this
16 data.

17 Q. As a matter of fact, they
18 confirmed the fact that on the basement
19 level, there were high levels, higher
20 than on the sixth floor?

21 A. That, I don't recall.

22 Q. Do you have his report in
23 front of you?

24 A. No, I don't. But an example

1 of what struck me, just since we're
2 picking examples, here one of the sample
3 results, the maximum, I think it's on the
4 eleventh floor, shows a maximum of 102
5 parts per million in the fireproofing
6 which is, of course, higher than most of
7 the maximum found on other floors and
8 there is nothing special about the
9 eleventh floor, going back to your
10 comments about smoke distribution, except
11 it's five floors above where the fire
12 occurred.

13 Q. Which would be unusual?

14 A. Absolutely.

15 Q. It would be unusual in the
16 sense that smoke, you would think in the
17 normal circumstance, the higher up it
18 gets, the less contamination you would
19 have under normal circumstances as a
20 scientist?

21 A. True. So when you see a
22 result like that, that causes you to
23 focus on that result and see if it makes
24 sense to your theory. On the eleventh

1 floor result, since that one is the one
 2 that I picked, if you looked at other
 3 data, you would have seen several things
 4 that are very interesting. One is it's
 5 the only location where Mr. Kominsky
 6 found PCBs above 50 parts per million. I
 7 think his number was 150 parts per
 8 million in one of his outer samples,
 9 which is again one of those really high
 10 numbers. It happens to also be the floor
 11 with the highest average wipe
 12 concentration from the State's data.
 13 It's also the floor with the highest wipe
 14 concentration from the building contents
 15 during the contents strategy sampling.
 16 It's also the only floor where PCBs, the
 17 Aroclor 1262 was found in the air above
 18 this .5 microgram per cubic meter
 19 standard. But what struck me from
 20 looking at the videos and looking at that
 21 data is that a major portion of the
 22 eleventh floor had been remodeled like a
 23 year before the fire. Why would the
 24 result be so much higher on that floor if

1 the surface that you were sampling were
 2 brand new as opposed to 30 years old and
 3 the result of all this off-gassing that
 4 we keep hearing about. That's the kind
 5 of analysis that I did and that's why I
 6 concluded, along with other reasons, why
 7 the smoke distributed PCBs throughout the
 8 building.
 9 Q. Well, you have what you call
 10 this situation where you said why would
 11 that happen, why would that number be the
 12 way it is. And rather than speculate,
 13 Mr. Woodyard, could you not have said, I
 14 am going to go take some sampling on that
 15 floor in all the various portions of that
 16 floor to see if I could verify that
 17 number and then maybe I can draw a
 18 conclusion? Did you do that?
 19 A. No, again, I didn't see the
 20 need to. I trusted the State's thousands
 21 of samples as well as Mr. Kominsky's date
 22 which that confirmed as I said what I
 23 saw.
 24 Q. And how were their levels

1 higher than on the sixth floor, at least
 2 as far as the mean is concerned and the
 3 median, on floor one, the ground and the
 4 basement where they're under a separate
 5 HVAC system?
 6 A. Because the smoke didn't all
 7 follow the HVAC system in distributing
 8 itself throughout the building. Elevator
 9 shafts, electrical conduits, any number
 10 of avenues it could have taken around the
 11 building.
 12 Q. You're saying, then, that
 13 the smoke was as heavy in the basement
 14 and the first floor as it was on the fire
 15 floor because you have the same kind of
 16 levels, if not higher?
 17 A. Yes, that's what the data
 18 would seem to indicate to you.
 19 Q. And the way to verify
 20 whether that data can be verified and to
 21 answer some of your questions would be to
 22 take your own sampling, would it not?
 23 A. Well, the samples wouldn't
 24 answer the question. The only way to

1 verify it in my view would be to recreate
 2 the fire and stand in the basement and
 3 see what happens. But the testimony and
 4 the sampling results would clearly
 5 indicate that there was smoke in the
 6 ground floor and the basement.
 7 Q. Which testimony are you
 8 referring to that says there was smoke in
 9 the ground and the basement?
 10 A. There was testimony from, I
 11 believe it's Mr. Mancuso, who said that
 12 there was soot on every square inch of
 13 the building I think were his words.
 14 There's testimony as I recall from Mr.
 15 Cocciardi, indicated there was evidence
 16 of smoke or odor or something of that
 17 nature on those floors as well.
 18 Q. Did they indicate in their
 19 testimony that the smoke levels down in
 20 that ground floor, in that basement
 21 floor, were as heavy as it was on the
 22 sixth floor?
 23 A. No, but that's a subjective
 24 judgment. This is actually sampling

1 results which are quantitative.

2 Q. Now, Mr. Woodyard, it's
3 important when you do sampling, is it
4 not, that you determine and you have a
5 design plan before you go out and do it.
6 Is that correct?

7 A. Typically. You at least
8 have an objective. You may not actually
9 have a real formal design. But
10 particularly when you're doing the
11 initial characterization, because you
12 don't always know what you're looking for
13 and you use your observations to decide
14 where to take samples.

15 Q. So that you go out as Mr.
16 Kominsky did, you go out to look at the
17 building and then you determine what
18 would be the best sampling plan to give
19 you representative samples of that
20 building. Is that correct?

21 A. Well, that's one approach to
22 taking samples. When you take a grid and
23 you put down on the floor, for example,
24 and you take samples at each little grid

1 location, that's one approach. But as
2 Mr. Kominsky did, it wasn't so much a
3 question of being "representative," as it
4 is of just looking at things you want to
5 sample and having a reason to take those
6 samples.

7 Q. You were present when he
8 testified, were you not?

9 A. Part of the time, yes, sir.

10 Q. And you read his testimony?

11 A. Yes.

12 Q. And you heard him saying in
13 order to get a representative sampling,
14 that I divided the building into
15 quadrants. Do you recall that?

16 A. Yes, sir.

17 Q. And he said I took samples
18 from the east side where the fire was and
19 I wanted to make sure it was
20 representative of the whole floor, so I
21 took samples from the west side.
22 Correct?

23 A. I recall that testimony.

24 Q. So he wanted a

1 representative sampling which is what the
2 objective is of sampling, get something
3 that is representative of the whole.
4 Correct?

5 A. Yes, sir. In that
6 particular instance, that's true.

7 Q. And another thing that is
8 important when you do sampling is sample
9 size, is it not?

10 THE COURT: Sample what?

11 MR. NEAL: Size.

12 THE WITNESS: Size meaning
13 the number of samples that you
14 take?

15 BY MR. NEAL:

16 Q. Well, we'll get to that.
17 I'm talking about the amount that you
18 take, the size of the sample itself?

19 THE COURT: Are you talking
20 about the size of each sample?

21 MR. NEAL: Yes, sir.

22 BY MR. NEAL:

23 Q. So the size of the samples
24 that you take is important also, is it

1 not?

2 A. Yes. The amount of material
3 you collect is important to your
4 detection limit typically and the number
5 of samples is important to statistical
6 analysis.

7 Q. And the more samples you
8 have, the better chance that you have
9 that it's not by chance what you find,
10 but it's more representative of what
11 actually occurred. Is that correct?

12 A. Well, it at least gives you
13 the tools to do an analysis to determine
14 how widely spread these data are and have
15 some idea how they're distributed
16 statistically.

17 Q. Because you as a scientist
18 wouldn't just take a sampling, one sample
19 and say, a-ha, on the basis of that one
20 sample, I can draw a conclusion?

21 A. In a situation like this,
22 that's correct. You would want a number
23 of samples.

24 Q. And where you take the

1 sampling is important also. Is that
 2 correct?
 3 A. Important to? What?
 4 Q. The integrity of the
 5 sampling. Where it's taken, location?
 6 A. Yes, going back to say Mr.
 7 Kominsky's gridding of the building and
 8 whether he took what he called a
 9 representative sample, that's correct.
 10 Q. And I think you just
 11 indicated frequency of sampling is also
 12 important. Is that correct?
 13 A. Number of samples.
 14 Q. Number of samples. And then
 15 when you get those samples --
 16 incidentally, you have done sampling. Is
 17 that correct?
 18 A. Yes, sir.
 19 Q. And when was the last time
 20 you did sampling?
 21 A. It's been many, many years.
 22 Q. When you get the sampling,
 23 did you then fill out a chain of custody
 24 report? Is that correct?

1 A. Yes, sir.
 2 Q. And a chain of custody
 3 report includes things such as location
 4 of the sample, size of the sample, the
 5 instructions as far as what to do. How
 6 it's kept. Am I correct?
 7 A. The latter ones, yes. Chain
 8 of custody forms vary as far as how much
 9 detail people put down about the sampling
 10 locations and the like because they
 11 normally code them and keep their own
 12 records of that kind of detail. The
 13 laboratory doesn't care where you took
 14 the sample.
 15 Q. But it's important for the
 16 laboratory to know that the sampling was
 17 done properly and it was kept properly
 18 before it arrived. Is that correct?
 19 A. It's important for the
 20 lab -- yes, it's important as far as
 21 keeping the sample, if there are rules
 22 about how to keep samples. That's
 23 correct.
 24 Q. And there are rules, are

1 there not?
 2 A. Yes, there are.
 3 Q. And that's from the EPA?
 4 A. Yes.
 5 Q. And the EPA also has rules
 6 or methods for doing sampling. Correct?
 7 A. Yes, for a lot of different
 8 types of samples, that's true.
 9 Q. And they have methods for
 10 when it gets to the laboratory, the
 11 extraction from the material of the
 12 chemical that you want. Correct?
 13 A. Yes.
 14 Q. And then they even have
 15 methods for analyzing it. Is that
 16 correct?
 17 A. Yes, sir.
 18 Q. And you received -- excuse
 19 me for a moment, Your Honor. I hesitate
 20 it's going to be in front of you again.
 21 THE COURT: That be the
 22 case, we will relocate.
 23 MR. NEAL: I am now
 24 referring to Plaintiffs' Exhibit

1 4007A.
 2 BY MR. NEAL:
 3 Q. Mr. Woodyard, 4007A is a
 4 table from your report. Is that correct?
 5 A. Yes, sir.
 6 Q. And that is the table on
 7 which you compared the samples that you
 8 received designated pre-fire to Mr.
 9 Kominsky's samples post-fire. Correct?
 10 A. Yes.
 11 Q. And you used Mr. Kominsky's
 12 outer samples, because as the jury will
 13 recall, am I correct, the samples you
 14 took were both an outer sample and inner
 15 sample. Correct?
 16 A. Yes, the outer being the one
 17 exposed to the air plenum and the inner
 18 being the one up against the building.
 19 Q. So you wanted to compare
 20 apples to apples, you wanted to compare
 21 the outer with the outer. Is that
 22 correct?
 23 A. Originally, yes.
 24 Q. And you found out --

1 incidentally, you never received the
2 samples. Am I correct? They went
3 directly to your laboratory. Is that
4 right?

5 A. Yes, that's correct.

6 Q. And that was the --

7 MR. MCCLAIN: Severn.

8 BY MR. NEAL:

9 Q. Severn, yes. And that,
10 again, was the Severn Trent Laboratories
11 in Chicago. Is that correct?

12 A. Yes, sir.

13 Q. Now, and then they called
14 you up and said, okay, what do you want
15 us to do and you told them what to do.
16 Is that correct?

17 A. As best as I can recall,
18 that's roughly how it went.

19 Q. What did you tell them to
20 do?

21 A. I told them to analyze the
22 samples for PCB.

23 Q. Did you receive from them a
24 data validation package?

1 there was?

2 Q. Yes, how much material?

3 A. I looked at it. I don't
4 recall what it was.

5 Q. Where would that be
6 indicated?

7 A. It would probably be in one
8 of the data packages.

9 Q. Let me just show you Penn
10 4007. Is it included in this? Because
11 that's where I have it.

12 A. No, I don't think so.

13 Q. So what you received, or
14 what the lab received, were samples in
15 which they didn't know -- did they know
16 the date they were taken?

17 A. They knew that the bottom 12
18 I believe were taken in -- was it June of
19 1992? They didn't have dates for the top
20 12 samples.

21 Q. So they didn't have dates
22 for the top 12 samples. They didn't have
23 how they were kept. Is that correct?

24 A. That's correct.

1 A. Yes, I did.

2 Q. Do you have that with you,
3 please?

4 A. No, I don't. It's pretty
5 substantial.

6 Q. You don't have that with
7 you, though?

8 A. No, I don't.

9 Q. Well, let me ask you this.
10 When the results were received by the
11 lab, did they receive a chain of custody?

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

13 Q. And so as far as the lab is
14 concerned, they don't know how they were
15 kept. Is that correct?

16 A. That's correct.

17 Q. And they don't know what
18 they were exposed to?

19 A. No. They had no history on
20 how the samples had been handled.

21 Q. They had no history at all.
22 And did you determine what the size of
23 these samples were?

24 A. You mean how much material

1 Q. So they really had no
2 information other than the samples that
3 they received. Correct? They had no
4 chain of custody?

5 A. No. That's correct.

6 Q. And would you as a
7 scientist, having received a package like
8 that in which there is no chain of
9 custody, there's no indication how it was
10 kept, what it was exposed to, how long it
11 was, would you be comfortable in your
12 analysis of those samples?

13 A. Certainly.

14 Q. You would?

15 A. Oh, absolutely. I sent
16 them the instruction to analyze for PCB
17 without question.

18 Q. And yet with the Gannett
19 Fleming results, you didn't want to see
20 anything because you said it didn't have
21 anything, it just had a summary of their
22 results. Correct? We're talking about
23 the Gannett Fleming being the bottom 14.

24 A. That's correct. But we're

1 talking about apples and oranges here.
2 In their case you're talking about the
3 lab results. In the earlier case you
4 were talking about where the samples came
5 from and how much there was.

6 Q. Well, the lab results you
7 would have like to have seen how they
8 were kept. Right? You received these
9 samples?

10 A. Yes.

11 Q. You would have liked to have
12 seen when they were taken. Correct?

13 A. Perhaps, but that wasn't
14 critical.

15 Q. It wasn't critical to you?

16 A. No. Because they were
17 represented as pre-fire samples. I was
18 not as concerned about the date.

19 Q. And when you found out that
20 for the bottom half, that there were
21 results albeit summary results, did you
22 ask to see those, say I'd like to see the
23 Gannett Fleming results?

24 A. No. When I was made aware

1 of the fact that there were other
2 results, I was also told that there
3 were -- there was no backup information
4 from the laboratory to support it so I
5 could compare it to the backup from my
6 laboratory which had done our results.

7 Q. Did you ask what material
8 they did have?

9 A. I don't think I was
10 specific, but I asked for any data
11 packages associated with those or quality
12 assurance/quality control type backup
13 that I or my staff could use to review
14 it.

15 Q. Were you curious to see, I'd
16 at least like to see what those results
17 are, they may have some importance in
18 verifying my results?

19 THE COURT: Is that a
20 question?

21 MR. NEAL: Yes.

22 BY MR. NEAL:

23 Q. Did you, when you received
24 information that they had Gannett Fleming

1 results, did you say to yourself, gee,
2 I'd at least like to have that to see
3 what they did?

4 A. Not really. Because I
5 thought it would confuse the issue. I
6 had my results from my laboratory which I
7 trust and use year after year to do work.

8 Q. Well, the samples that your
9 laboratory received, what information did
10 you have about the size of those samples?

11 A. I was less concerned about
12 the size of the samples. To answer your
13 question, I don't remember exactly what
14 result or what sample weight information
15 I looked at, but as I pointed out
16 earlier, sample weight is what is
17 important to detection limit. If you
18 don't have enough sample, the detection
19 limit that we talked about before goes
20 higher and higher and it may reach a
21 point where it's too high. It's useless
22 to you. But the information that you
23 just showed me had the lab's detection
24 limits listed on it for the samples where

1 they did and did not find PCB.

2 Q. Were you provided
3 information as to the location that those
4 samples were taken in?

5 A. No. Just inside the
6 Transportation and Safety Building before
7 the fire.

8 Q. So you don't know whether
9 those samples that were taken, whenever
10 they were -- they were taken in '92,
11 where they were in connection with Mr.
12 Kominsky's samples, do you?

13 A. No, I don't.

14 Q. And were you able to
15 determine from the samples whether they
16 were from the outer layer of fireproofing
17 so that you could compare them to the
18 outer layer of Mr. Kominsky's?

19 A. No, I could not. I think as
20 I testified before, I was originally
21 under the impression that they were Mr.
22 Ewing's samples which were in some cases
23 I believe debris and material that had
24 fallen off the fireproofing which would

1 lead me to believe there was outer, which
2 makes a lot of sense, but when I found
3 out that that wasn't the case, there was
4 no way to tell whether it was a whole
5 inner and outer sample or just an outer
6 sample. It could well have been an outer
7 sample based on the way samples are
8 collected.

9 Q. It could well have been an
10 inner sample?

11 A. I seriously doubt that.

12 Q. How do you know that if, A,
13 you don't know where it came from or how
14 it was done?

15 A. If you have a couple inches
16 of fireproofing, there's no point in
17 scraping off the top half-inch to sample
18 the bottom half-inch if all you're
19 looking for is asbestos which was what
20 those samples were originally collected
21 for. It wouldn't make any sense at all.

22 Q. How were they collected?

23 How were these samples collected?

24 A. That, I don't know. I don't

1 recall.

2 Q. So what you're saying is an
3 assumption. Correct? It's not personal
4 knowledge?

5 A. No, it makes good common
6 sense.

7 Q. You can't tell whether
8 they're outer and you're comparing them
9 to Mr. Kominsky's outer. Correct?

10 A. That's true.

11 Q. You can't tell whether
12 they're debris and you're comparing them
13 to Mr. Kominsky's samples which were
14 what, four inches by four inches?

15 A. Debris to me means material
16 that fell down onto the ceiling tiles.
17 It was not that type of material.

18 Q. Also the size?

19 A. Excuse me?

20 Q. Size. Debris has something
21 to do with size also?

22 A. Yes, as I understand it.

23 Q. Sample four inches by four
24 inches would not be considered debris.

1 Is that correct?

2 A. No. Mr. Kominsky took
3 actual fireproofing samples.

4 Q. In the calculations that you
5 did, Mr. Woodyard, with respect to the
6 vaporization, you talked about there
7 being 16 miles, is that correct, 16 miles
8 of duct work?

9 A. That's the number I used. I
10 believe that came from Mr. McClain. I
11 didn't actually measure it myself.

12 Q. That actually came from the
13 testimony, did it not?

14 A. From whose testimony?

15 Q. Mr. Kominsky's?

16 A. That could well be. I
17 didn't recall that.

18 Q. You have no reason to doubt
19 that?

20 A. No, I'll accept that for the
21 moment.

22 Q. We're talking about is this
23 16,000 square miles or miles? Just
24 exactly what are we -- how are we

1 defining 16 miles?

2 A. As I used it, I was defining
3 it as 16 linear miles of this fire work
4 duct.

5 Q. So on one surface all the
6 way across. Is that correct? When I say
7 the measurement, for instance, like you
8 take one side and you measure it all the
9 way down and it comes out 16 miles. Is
10 that correct?

11 A. Yes. Yes. That's what I
12 did.

13 Q. Now, the one thing that was
14 determined from those samples is that
15 they all were Aroclor 1262. Correct?
16 I'm talking about the pre-fire samples.

17 A. Yes, the pre-fire samples we
18 analyzed were 1262.

19 Q. They're these 28. Correct?

20 A. Yes, I believe that's true.
21 That's definitely true for the ones on
22 the bottom.

23 Q. And these were pre-fire,
24 this is before any fire occurred.

1 Correct?

2 A. Yes, sir.

3 Q. And the only PCBs that they
4 found were Aroclor 1262. Is that
5 correct?

6 A. That's correct, yes.

7 Q. Where did the Aroclor 1262
8 come from?

9 A. I don't know. As I
10 testified earlier, I considered it
11 background just like we did in the other
12 buildings where there was no known
13 source.

14 Q. But you have in this
15 instance a known source of Aroclor 1262
16 in the building, do you not?

17 A. Meaning the ductboard?

18 Q. That's right.

19 A. Yes, that's correct.

20 Q. So that the only known
21 source of Aroclor 1262, the defining
22 source in the Transportation and Safety
23 Building is 1262?

24 A. Yes, that's correct.

1 Q. Then would it be logical,
2 then, to assume that the 1262 came from
3 the only known source in that building
4 which was the adhesive in the ductboard?

5 A. No, not at all.

6 Q. And have you done -- you say
7 no, not at all, why?

8 A. Because for the reasons I
9 mentioned before in talking about
10 vaporization and so forth, there is no
11 evidence that PCBs would have vaporized
12 from the glue at all. It's bound into a
13 solid material. Science is telling me
14 that there is no PCB leaving the
15 ductboard. So from a scientific point of
16 view, to make that connection, it doesn't
17 make any sense.

18 Q. Well, Mr. Woodyard, there is
19 no article that you have found that
20 analyzes whether the PCBs can be bound in
21 a glue matrix and not escape. There's no
22 literature, is there?

23 A. There's good science that
24 tells you the material in a solid

1 material has to find its way out of that
2 solid and the PCBs just aren't going to
3 do that.

4 Q. Is there anything that you
5 can refer us to, either in a textbook, a
6 reference book or literature that says
7 when you have PCBs in a glue matrix, they
8 will not volatilize?

9 A. No. Again, that's basic
10 science and common sense.

11 Q. You keep saying basic
12 science. Is there any chemistry book,
13 any physics book, any book at all that
14 says once you have a glue matrix, your
15 PCBs cannot volatilize?

16 A. No, of course not. There is
17 Mr. Kominsky's testimony, if you recall,
18 he talked about a number of scientific
19 principles. Things like diffusion as
20 affecting this whole process. A
21 diffusion as he described it was smelling
22 somebody across the room by their perfume
23 or because they were smoking a cigarette.
24 And his analogy was an airborne movement

1 of these odors or these chemicals. By
2 doing that, by talking about airborne
3 transport, he was grossly oversimplifying
4 the process because in a solid, you've
5 got molecules that are bound to each
6 other. They don't diffuse at the same
7 rate that perfume diffuses across the
8 room.

9 So that science says to you,
10 if it takes this long for PCBs to move
11 from this end of the courtroom to the
12 other one, it's going to take thousands,
13 millions of times as long for that
14 molecule of PCB to work its way out of
15 that solid material. It's a very, very
16 different -- same principle, but a very,
17 very different speed and a very, very
18 different process.

19 Q. And there are factors which
20 impact the rate of vaporization.
21 Correct?

22 A. In a pure material, yes,
23 that's true.

24 Q. In a solid. In any

1 material. There are factors which impact
2 the rate of vaporization?

3 A. Yes, temperature in
4 particular.

5 Q. Temperature is one. And we
6 had a temperature according to Mr.
7 Kominsky of 250 degrees from the heating
8 iron. Is that correct?

9 A. Yes, as applied for several
10 seconds to the tape that we're talking
11 about.

12 Q. Well, you never actually did
13 the test so you don't know how many
14 seconds it was applied, do you?

15 A. No, I explained my rationale
16 before and I think it makes good sense.

17 Q. And that is from the
18 experience of ironing on patches on your
19 daughter's uniform?

20 A. Or extending that experience
21 to a piece of ductboard, to applying a
22 piece of tape to a ductboard.

23 Q. So we do have temperature of
24 250 degrees being applied. Is that

1 correct?

2 A. Yes, for a very brief time.

3 Q. And another factor that
4 impacts vaporization is air velocity.
5 Correct?

6 A. I don't think so. In what
7 context are you talking about?

8 Q. I'm talking about the
9 context of increasing the rate of
10 vaporization, whether it be of PCBs or
11 any other chemical. One of the factors
12 that impacts the rate of vaporization is
13 air velocity?

14 A. Could you point me to a
15 reference that would show that?

16 Q. You're familiar with the --
17 incidentally, there are, are there not,
18 methods for performing what we heard
19 called the small chamber test? Is that
20 correct?

21 A. Yes, the American Society
22 for Testing Materials has a standard
23 method that is used for testing of
24 off-gassing from different products at

1 room temperature.

2 MR. GOUTMAN: Mr. Neal, this
3 isn't the complete --

4 MR. GOUTMAN: Your Honor, I
5 object to the use of an incomplete
6 document. This is not the
7 complete ASTM guideline.

8 THE COURT: As soon as I get
9 it, I'll rule on the objection.

10 MR. NEAL: If Your Honor,
11 please, if we take a short break,
12 I'm going to attempt to get the
13 entire document.

14 THE COURT: We'll take a
15 short recess.

16 - - -

17 (A recess was taken.)

18 - - -

19 THE COURT: I had written --
20 I had been assigned to argument
21 week in Harrisburg the week of
22 April 11. Monday is the 10th.
23 And that means that on Tuesday we
24 would have judicial conference.

1 On Thursday I'm assigned the 12
2 cases of oral argument and that
3 means being there. To make
4 matters more interesting, I've
5 been assigned duty week in
6 Harrisburg the week of April 17th,
7 which I think runs from Monday to
8 Thursday, because Friday if I'm
9 not mistaken would be Good Friday.
10 Now, those are two weeks.

11 I've written to the
12 President Judge before I brought
13 this to your attention to let
14 him -- advise him that we're
15 moving along and, if possible, I
16 would like to be detached from
17 these assignments not so that I
18 could go to Bermuda, but that I
19 can continue with DGS. Because of
20 limitations in our court system
21 and availability of other judges,
22 he has declined, so I'm assigned.
23 And I thought that was essential
24 that you know in scheduling your

1 cases.
2 MR. GOUTMAN: Why don't we
3 all just rent a Winnebago and we
4 can transfer the trial to
5 Harrisburg.

6 THE COURT: I would have
7 days in Harrisburg that I could
8 use it.

9 MR. EDGE: Mr. Neal had
10 paid vacation that week.

11 THE COURT: You wanted off.

12 MR. NEAL: I wasn't going to
13 ask for it off.

14 MR. GOUTMAN: It's your
15 lucky day.

16 MR. NEAL: It's St.
17 Patrick's Day.

18 MR. GOUTMAN: He had a
19 prepaid vacation for that week.
20 Things might work out, Mr. Neal.

21 MR. NEAL: Might save my
22 35-year-old marriage.

23 THE COURT: It's worth
24 preserving.

1 MR. NEAL: She's put up with
2 me 35 years.

3 THE COURT: Pretty hard to
4 find somebody this stage of the
5 ballgame.

6 MR. HENDERSON: When would
7 we have court, if at all, that
8 week?

9 THE COURT: On the week of
10 the 10th, I'll be out there
11 Tuesday through Thursday. I would
12 have to check to see whether that
13 is a morning session or an
14 afternoon session. If it's an
15 afternoon session, it might be too
16 late to warrant driving back.

17 MR. NEAL: I agree, Your
18 Honor.

19 THE COURT: It would only be
20 one day, the 14th.

21 MS. MEYERS: I move we give
22 that day to Mr. Neal.

23 THE COURT: We weren't
24 wasting time, we were

1 accommodating in time, but I think
2 that you have to continue a life.
3 Because they keep asking me at
4 court when this thing is going to
5 be over and they can't understand
6 that I don't know. We have a
7 juror that has a paid vacation.

8 MS. MEYERS: May 22, Your
9 Honor.

10 THE COURT: I know it was
11 the Middle East.

12 Okay, I thought I would give
13 you as much advance notice as I
14 could.

15 - - -

16 MR. EDGE: Court is in
17 session, you may be seated.

18 MR. NEAL: May I proceed,
19 Your Honor?

20 THE COURT: Yes.

21 MR. NEAL: Your Honor, I do
22 not have the complete copy of the
23 exhibit. So in fairness, I am not
24 going to use it.

1 BY MR. NEAL:

2 Q. Mr. Woodyard, just following
3 up, and I'm going to be through in a
4 minute, we find 1262 in all 28 samples
5 pre-fire in accordance with the results
6 that you got from your lab. Is that
7 correct?

8 A. Yes, sir.

9 Q. We don't find in there any
10 other PCBs other than Aroclor 1262.
11 Correct?

12 A. No, that's correct. In the
13 samples we analyzed we just found 1262.

14 Q. And in the Transportation
15 and Safety Building we have the ductboard
16 as the known source and the only known
17 source of 1262 in that building. Is that
18 correct?

19 A. Yes, that's correct.

20 Q. And I asked you before, is
21 it not logical then to assume when you
22 have a defined source of 1262 and you
23 have 1262 found in there pre-fire, that
24 isn't it logical to assume that it came

1 from the adhesive in the ductboard?
 2 A. No. As I said before,
 3 that's not logical if you look at the
 4 science associated with that assumption
 5 and dismiss it.
 6 Q. Which you did and you can't
 7 refer me to anything in the science, can
 8 you, as far as glue matrix, adhesive,
 9 ever being tested other than Mr. Ewing,
 10 there is nothing that you can find in the
 11 literature that tells you that it doesn't
 12 off gas?
 13 A. Well, Mr. Ewing's test isn't
 14 a particularly good test.
 15 Q. You didn't do one, did you?
 16 A. No. But as I pointed out
 17 before, I didn't feel the need to do that
 18 based on what I knew about the physical
 19 property of PCBs and the fact that it was
 20 mixed up and solidified into this glue.
 21 Q. So Mr. Ewing is the only one
 22 that did a small chamber test. Correct?
 23 A. Yes. Albeit flawed, he did.
 24 He tried.

1 Q. Well, you sat back there and
 2 you said it's flawed, but you didn't do
 3 it yourself. Am I correct in that?
 4 A. No, that's correct. I
 5 didn't see the need to.
 6 Q. And the 1262s, where did
 7 they come from? If they didn't come from
 8 the adhesive which is the only known
 9 source of Aroclor 1262 in the building,
 10 where did they come from?
 11 A. I don't know. That's why we
 12 refer to them as background just as we
 13 did in other buildings where there were
 14 no known source either.
 15 Q. And how did they get there?
 16 A. I don't know.
 17 Q. Incidentally, we talked
 18 about Mr. Kominsky testified about the
 19 use of the heat sealing iron and he said
 20 it got up to 250 degrees. Is that
 21 correct?
 22 A. Yes. I think his testimony
 23 was that it would get the adhesive up to
 24 250 degrees.

1 Q. Referring you to DCT 11,
 2 which you should have, do you have the
 3 Gustin-Bacon --
 4 A. Yes, I think I have a copy
 5 of my report on that.
 6 Q. DCT-11, the one that has
 7 this.
 8 A. Okay.
 9 Q. Would you look at the last
 10 page on that, would be marked in the
 11 right-hand side CT 00083?
 12 A. Yes, sir.
 13 Q. You see under design
 14 considerations?
 15 A. Yes.
 16 Q. This is the Gustin-Bacon
 17 duct. Correct? The duct we're talking
 18 about here in the Transportation and
 19 Safety Building. Correct?
 20 A. Yes.
 21 Q. Standard design
 22 considerations it says number five. Air
 23 temperature within G-B duct should not be
 24 in excess of 250 degrees. Do you see

1 that?
 2 A. Yes. That's correct.
 3 Q. Do you know why they put
 4 that in there?
 5 A. No. I assumed when I saw
 6 that, that was what they felt was a safe
 7 operating temperature to keep the duct
 8 from deteriorating.
 9 Q. Did you ever find out
 10 whether they put that in there to prevent
 11 the volatilization of PCBs?
 12 A. No, I have no reason to
 13 believe that that is the case.
 14 Q. But you didn't ask?
 15 A. Well, this document --
 16 Q. You didn't ask, though, did
 17 you, sir?
 18 A. No, I didn't feel the need
 19 to ask that question.
 20 MR. NEAL: I have no further
 21 questions, Your Honor.
 22 - - -
 23 RE-DIRECT EXAMINATION
 24 - - -

1 MR. GOUTMAN: Good morning.
 2 THE JURORS: Good morning.
 3 MR. GOUTMAN: Happy St.
 4 Patrick's Day. I forgot to wear
 5 my green tie.
 6 BY MR. GOUTMAN:
 7 Q. Good morning, Mr. Woodyard.
 8 A. Good morning.
 9 Q. My first question is how far
 10 do you have Temple going in the office
 11 pool?
 12 A. To the finals. However,
 13 today Illinois, my alma mater, will beat
 14 Penn.
 15 Q. You're not supposed to say
 16 that.
 17 A. Hence I was torn what colors
 18 to wear today, green or orange or blue,
 19 and I chose none of the above.
 20 Q. Mr. Neal was asking you
 21 about volatilization or evaporation from
 22 solids. Is that correct? Do you recall
 23 that?
 24 A. Yes, sir.

1 Q. And as a simple example,
 2 let's take this jury rail. Is this a
 3 solid?
 4 A. Yes, it is.
 5 Q. Do you expect this jury rail
 6 to evaporate any time soon?
 7 A. No, of course not.
 8 Q. Where were the PCBs in the
 9 glue? What was the glue, is that a solid
 10 or a liquid? What was it?
 11 A. The glue was a solid.
 12 Q. How long would you have to
 13 stand here looking at this jury rail
 14 before you would see it evaporate?
 15 A. Who knows. Thousands,
 16 perhaps millions of years.
 17 Q. You mentioned in response to
 18 one of Mr. Neal's question comparison
 19 between the evaporation rates of PCBs
 20 versus water. Do you recall that?
 21 A. Yes, sir.
 22 Q. And what is the difference,
 23 sir?
 24 A. The difference is

1 approximately between ten and a hundred
 2 million to one. PCBs evaporate almost a
 3 hundred million times slower than water
 4 does.
 5 Q. You have a cup of water, say
 6 it takes a day, two days to evaporate.
 7 How long will a cup of Aroclor 1262 take?
 8 A. A hundred million times
 9 that. A hundred million days.
 10 Q. A hundred million days. In
 11 the T&S Building, were there any cups of
 12 PCBs to your knowledge?
 13 A. No. Not to my knowledge.
 14 Q. Where were the PCBs in the
 15 ductboard?
 16 A. The PCBs were in the glue.
 17 They were locked in the glue.
 18 Q. Would that hasten or make
 19 more slow any evaporation of PCBs?
 20 A. It would slow it down
 21 dramatically.
 22 Q. Why is that?
 23 A. Because the PCBs that are
 24 validated as glue would have to make

1 their way out of that solid material to
 2 get to the surface in order to evaporate.
 3 That's an incredibly slow process.
 4 Q. I'm going back to some
 5 questions that Mr. McClain was asking you
 6 some time ago on cross-examination. He
 7 started his cross-examination, I believe,
 8 by asking you about the cost of cleaning
 9 up the PCBs from the T&S Building. Do
 10 you recall that?
 11 A. Yes, sir.
 12 Q. How much did the complete
 13 abatement of the Transportation and
 14 Safety Building cost?
 15 A. You're talking about
 16 abatement for PCBs and asbestos?
 17 Q. Soup to nuts.
 18 A. A little over \$12 million.
 19 Q. How do you know that?
 20 A. From the bid information
 21 from the contractor they selected to do
 22 the work.
 23 Q. Were there any documents
 24 that you reviewed?

1 A. Yes, there were.

2 Q. And where were those
3 documents from?

4 A. They were the bid that the
5 contractor submitted to the State along
6 with the bills that the contractor
7 submitted to the State as they did the
8 work.

9 Q. And who were those bills
10 submitted to?

11 A. To the State. They may have
12 gone through the contractor who did the
13 demolition work, CRSS.

14 Q. It cost a total of how much
15 to clean up the building?

16 A. For PCBs and asbestos?

17 Q. Yes.

18 A. About 12.1, I believe.
19 \$12.1 million is the number.

20 Q. In reviewing the actual
21 documents submitted by PDG, the cleanup
22 contractor, were you able to determine or
23 did those documents set forth how much
24 was related to PCBs?

1 A. Yes, they did. The bid
2 information that was provided by the
3 contractor included a long list of
4 specific -- what I would call patent
5 items, a term commonly used in
6 contracting, and it sets forth how much
7 they're going to get paid for each thing
8 they do. And as they go through the
9 work, they can bill all of that or part
10 of that depending on whether the manager
11 says they're done. So that basic
12 document was a starting point for all
13 their invoices.

14 Q. Total was 12 million?

15 A. About 12 million. That's
16 correct.

17 Q. How much for PCBs?

18 A. According to those
19 documents, about \$868,000.

20 Q. Those are documents
21 submitted by whom?

22 A. Documents submitted by the
23 contractor.

24 Q. PDG?

1 A. PDG.

2 Q. How much was related to
3 asbestos?

4 A. About \$10 million.

5 Q. How much was related to
6 removal of the exterior caulk from the
7 building?

8 A. Almost a million.

9 Q. In your opinion, sir, was
10 the removal of that caulk necessary or
11 required?

12 A. No, it wasn't.

13 Q. How much, then, sir, how
14 much did it actually cost to clean up the
15 building of PCBs?

16 A. \$868,000.

17 Q. You were asked some
18 questions about PCBs and asbestos. Do
19 you recall those?

20 A. Yes, sir.

21 Q. Did you have asbestos taken
22 from the building before the fire?

23 A. Yes. I received or my lab
24 received samples of asbestos taken before

1 the fire.

2 Q. Those were samples provided
3 by Mr. McClain's office to me that I sent
4 to your laboratory?

5 MR. MCCLAIN: Your Honor,
6 he's testifying now.

7 MR. GOUTMAN: It's not a
8 fact in dispute.

9 MR. MCCLAIN: I don't know
10 what the witness knows compared to
11 what Mr. Goutman is now talking
12 about.

13 THE COURT: Overruled.
14 There's been testimony to that
15 effect. The credibility is for
16 the jury to determine and the
17 court is not advising the jury as
18 to how to determine -- who is
19 credible or who is not. That is
20 their responsibility and they'll
21 get to it when they begin to
22 deliberate.

23 MR. MCCLAIN: That's fine,
24 Your Honor.

1 BY MR. GOUTMAN:

2 Q. These were samples provided
3 by Mr. McClain's office to me that I sent
4 to the laboratory. Is that correct?

5 A. Yes, that's my
6 understanding.

7 Q. And you also had some test
8 data of asbestos taken from the building
9 after the fire?

10 A. Yes, sir.

11 Q. Now, with respect to the
12 tests of the asbestos taken before the
13 fire but tested after the fire, did those
14 levels of PCBs in that asbestos require
15 that the asbestos be removed?

16 A. No, not at all.

17 Q. Is there one law or
18 regulation in America that would have
19 required the removal of that asbestos
20 because of the pre-fire PCB levels in
21 that building and the asbestos?

22 A. No, there is no law like
23 that.

24 Q. What were those levels

1 versus the EPA low contact standard, were
2 they higher or lower?

3 A. Kind of hard to say. We're
4 talking about the fireproofing results?

5 Q. Yes.

6 A. Well, the pre-fire average
7 was about three parts per million based
8 on that table that was up there a little
9 while ago. And for a cleanup, probably
10 the closest analogy is for soil, the PCBs
11 standards is --

12 MR. MCCLAIN: I object.

13 This is not about soil. We're not
14 talking about a cleanup standard
15 for soil. Unless there is such a
16 cleanup standard for
17 concentrations in bulk material, I
18 object. I don't know what
19 relevance soil has.

20 MR. GOUTMAN: It's a
21 speaking objection, Your Honor.
22 In fact, he was asked about soil
23 before and this is a -- I'm sorry.

24 THE COURT: Overruled. We

1 had reference to soil.

2 BY MR. GOUTMAN:

3 Q. You were saying?

4 A. I was saying that there is
5 no law that would require the
6 fireproofing to come out because of the
7 asbestos. The closest similar standard
8 is for soil in high contact locations,
9 and that's ten parts per million. And so
10 clearly the fireproofing results, if he
11 can draw that analogy to soil, it's a
12 little loose, is the fireproofing was
13 much lower.

14 Q. Is there a 50 part per
15 billion bulk regulation?

16 A. Well, there is a standard
17 often cited of 50 parts per million.

18 Q. Excuse me, million. I
19 misspoke.

20 A. That's okay. I caught you.
21 The 50 parts per million standard doesn't
22 really apply to cleanup as much as it
23 applies to disposal. It's the kind of
24 number that a disposal company would want

1 to know if you were taking material to
2 their landfill, for example, or their
3 incinerator.

4 Q. Did the presence of PCBs,
5 either before or after the fire, require
6 the removal of the asbestos?

7 A. In a sense because it was
8 the result of a release or a spill, if
9 you want to call it that, it would have
10 required some removal because some of the
11 levels were above at least this 50 parts
12 per million standard that we just talked
13 about. So there might have been limited
14 fireproofing removal required.

15 Q. What did Mr. Kominsky find
16 with respect to the levels found after
17 the fire?

18 A. He found that the -- well,
19 based on my comparison, he found that
20 they were significantly higher than the
21 pre-fire samples and pre-fire analysis
22 that I did.

23 Q. What did he find with
24 respect to whether there were any samples

1 above 50 parts per million?

2 A. He only found one in that
3 eleventh floor sample that I was talking
4 about before.

5 Q. Only one?

6 A. I believe so.

7 Q. Sir, you were asked some
8 questions by Mr. McClain about whether
9 the EPA safe standard applies to the T&S
10 Building. Do you recall that?

11 A. Yes, sir.

12 Q. Sir, how many years have you
13 been doing PCB cleanup work?

14 A. A little more than twenty.

15 Q. In how many states have you
16 done PCB cleanup work?

17 A. I suspect most of them. I
18 don't know exactly how many.

19 Q. Have you done PCB cleanup
20 work in foreign countries?

21 A. Yes, sir. We discussed that
22 before.

23 Q. Have you lectured on the
24 subject of PCBs and the EPA spill policy?

1 A. Yes, quite frequently as a
2 matter of fact.

3 Q. You had mentioned that you
4 were invited by the City of Philadelphia
5 recently to address them?

6 A. Yes. They wanted to put on
7 a PCB class and asked the EPA who they
8 should bring in, and they recommended me.

9 Q. The EPA recommended you?

10 A. Yes, that's correct.

11 Q. For how many years have you
12 been dealing with the Environmental
13 Protection Agency in relation to the
14 spill policy and PCBs?

15 A. On the issue of PCBs, pretty
16 much my whole career. 20 plus years on
17 the spill policy. At least 13. It's
18 been in place since about 1987.

19 Q. And how frequently do you
20 have occasion to interact with the EPA on
21 issues concerning PCBs?

22 A. All the time. Probably
23 weekly.

24 Q. Sir, does the spill policy

1 with its 10 milligram and 100 microgram
2 safe standard, does it apply to the T&S
3 Building?

4 A. Yes, absolutely.

5 Q. How do you know that?

6 A. Well, the 20 plus years of
7 experience in cleaning up. 13 years of
8 experience in dealing with the policy.
9 You may recall from my earlier testimony
10 that the spill policy was set up as
11 essentially a do-it-yourself cookbook by
12 EPA for people who owned PCB transformers
13 and capacitors so that for every little
14 spill they had, they wouldn't have to
15 call EPA and get their permission and
16 advice.

17 So there are a lot of spills
18 that have been cleaned up using that
19 policy. As a consultant and an expert in
20 this area, I don't typically get called
21 to help people with those little spills.
22 They don't need my help. They get me
23 involved in the more complicated
24 cleanups, the ones that require more

1 planning and thought and more knowledge
2 of the regulations and the technology.

3 So almost all the -- I think
4 I mentioned I probably worked on a
5 hundred or more PCB cleanups. I can't
6 remember one that actually was subject to
7 the spill policy. They're all bigger,
8 they're all different than what EPA had
9 in mind in that little do-it-yourself
10 cookbook.

11 Q. In those hundred plus
12 projects that you worked on, what
13 standard is applied? What cleanup
14 standard is applied?

15 A. The same standard is applied
16 regardless of how big the cleanup is. It
17 doesn't matter. Those are the EPA safe
18 standards we've been talking about for
19 the T&S Building.

20 Q. Does the EPA have a
21 different standard depending upon how big
22 the building is? Is there one standard
23 for a 100,000 square foot building and
24 another standard for a 300,000 square

1 foot building and another standard for a
2 500,000 square foot building?

3 A. No, absolutely not. The
4 standards are the same. They have
5 nothing to do with the size of the
6 cleanup.

7 Q. Does it have anything to do
8 with the size of the spill or release?
9 In other words, if you have an itty-bitty
10 spill, there's one standard. If you have
11 a whole big spill and release, there's
12 another standard?

13 A. No, it doesn't make any
14 difference.

15 Q. How did the EPA come up with
16 their 10 microgram standard for high
17 contact areas and 100 microgram standard
18 for low contact areas, did they just come
19 up with those numbers?

20 A. No.

21 Q. Pull them out of the air?

22 A. No. They performed risk
23 assessments.

24 Q. You had, in

1 cleanup?

2 A. That's correct.

3 Q. 95 percent?

4 A. Yes, that's based on my
5 calculations from the data.

6 Q. Now, you had mentioned in
7 cross-examination and the jury heard this
8 phrase before, Mega Rule. Could you
9 remind the Court, the jury and me what
10 the Mega Rule is?

11 A. As I think I said during
12 that discussion, the PCB regulations have
13 been in place since beginning around
14 1978. So it's been a long time. In
15 1991, after a number of years of trying
16 to apply regulations, EPA proposed a wide
17 variety of changes to the regulations
18 based on all that experience that they
19 had for years in regulating PCBs. That
20 was essentially the birth of the Mega
21 Rule in '91 when it was proposed. It was
22 finalized in around I guess mid 1998.

23 Q. Does the Mega Rule have a
24 cleanup standard?

1 cross-examination, referred to the EPA
2 standard as stringent. What did you mean
3 by that?

4 A. Oh, it's stringent in the
5 sense that to develop the risk
6 assessment, since there is no evidence of
7 PCBs being a cancer agent in humans, they
8 had to use animal studies. So they
9 basically built the risk assessment on
10 animal data as opposed to human data for
11 which there is none. If they simply used
12 human data, there would be no risk and
13 there would be no standard.

14 Q. Did the Transportation and
15 Safety Building, even before they paid
16 \$12 million to clean it up, did the T&S
17 Building comply or not comply with the
18 EPA safe standard?

19 A. It was pretty much in
20 compliance I believe. 95 percent of the
21 samples, surface wipe samples in the
22 building were in compliance with that
23 standard.

24 Q. Even before they did any

1 A. Yes, it does.

2 Q. And what is that standard?

3 A. The standards in the Mega
4 Rule are the same as in the spill policy.

5 Q. And how did they come up
6 with those standards in the Mega Rule?

7 A. Through risk assessment
8 again.

9 Q. And, sir, in the Mega Rule,
10 does it set forth what kinds of
11 facilities the EPA safe standard applies
12 to?

13 A. It sets forth some examples.
14 It's very specific in identifying certain
15 types of facilities to which each of the
16 standards applies.

17 Q. And what examples are given?

18 A. Well, examples for this what
19 they call a high occupancy standard which
20 is their way of saying full time.

21 Q. 24 hours a day?

22 A. Yes, 24 hours a day, seven
23 days a week. They include by name things
24 like residences, day care centers,

1 hospitals, cafeterias, work stations like
2 at your office or place of business.
3 Those are considered high occupancy
4 locations.

5 Q. The EPA safe standard
6 according to the EPA applies to what,
7 day care centers?

8 A. Right. It applies to just
9 about any facility that you can imagine
10 where there's full-time occupancy.

11 Q. And they mention
12 specifically what facilities?

13 MR. MCCLAIN: Your Honor,
14 this is repetitive. He's already
15 said it.

16 MR. GOUTMAN: I don't know
17 if it was clear, Your Honor.

18 MR. MCCLAIN: I thought it
19 was very clear. We've heard it
20 three times.

21 THE COURT: Overruled.

22 THE WITNESS: Again, we're
23 talking about homes, residences.

24 We're talking about day care

1 question, Your Honor.

2 THE COURT: You may rephrase
3 the question.

4 MR. GOUTMAN: Thank you,
5 Your Honor.

6 BY MR. GOUTMAN:

7 Q. With respect to the spill
8 policy, you were asked by Mr. McClain
9 whether the word "safe" ever appears in
10 that regulation. Do you recall that?

11 A. Yes, I recall the question.

12 Q. Mr. Woodyard, could you see
13 that?

14 A. Yes, I can.

15 Q. Can you read that for the
16 jury?

17 THE COURT: What is that
18 document?

19 BY MR. GOUTMAN:

20 Q. What is this document that
21 we're looking at?

22 MR. MCCLAIN: I'll
23 stipulate, it's the spill policy.

24 THE WITNESS: It's the final

1 centers, hospitals as well as
2 office type facilities.

3 BY MR. GOUTMAN:

4 Q. You say we're talking about.
5 Whose talking about that?

6 A. EPA. EPA is listing those
7 as types of facilities that are subject
8 to that standard.

9 Q. And where are they listing
10 those?

11 A. In the regulation.

12 Q. Now, you were asked some
13 questions about whether the word "safe"
14 appears in the Mega Rule. Do you recall
15 that?

16 A. Yes, I believe so.

17 MR. MCCLAIN: No, Your
18 Honor, that was never asked. I'd
19 like a reference to the transcript
20 where that was said. I referred
21 to the spill policy when I asked
22 that question, not the Mega Rule.

23 MR. GOUTMAN: I misstated
24 it. I'm sorry. I'll rephrase the

1 PCB spill policy rule from 1987.

2 BY MR. GOUTMAN:

3 Q. Now, what does the EPA say
4 about their spill policy?

5 A. The sentence says, PCB
6 spills will be cleaned to levels that do
7 not pose an unreasonable risk of injury
8 to human health or the environment.

9 Q. How did the EPA determine
10 that the levels they put forth in 1987
11 and again in 1998 did not pose an
12 unreasonable risk of injury to human
13 health or the environment?

14 A. They determined that through
15 risk assessment.

16 MR. MCCLAIN: I object.
17 This is repetitive. We've had
18 that four times this morning on
19 risk assessment. It's cumulative.

20 THE COURT: That may be, but
21 -- I assume it's an objection,
22 it's overruled.

23 BY MR. GOUTMAN:

24 Q. To your knowledge, has the

1 EPA, the Environmental Protection Agency
2 of the United States of America, ever put
3 forth a cleanup level that they had
4 concluded was unsafe?

5 A. No. Of course not.

6 Q. Now, with respect to whether
7 this EPA safe standard applies to the T&S
8 Building, do you recall the 1995 letter
9 from Mr. Echt of NIOSH to DGS? Do you
10 recall seeing that?

11 A. Yes, sir.

12 Q. Sir, how many references --
13 excuse me. Does the letter discuss the
14 EPA spill policy?

15 A. Yes, it referred the State
16 to the EPA spill policy standards.

17 Q. And how many times does it
18 reference the EPA safe levels and the
19 spill policy?

20 A. I don't know the number of
21 times. A number of times. In the
22 tables, in the text.

23 Q. What conclusion did you draw
24 from that as to the applicability of the

1 collect data, they continued to show
2 levels that were higher than the NIOSH
3 level, lower than the EPA level and
4 continued to assure the employees that
5 the building was safe.

6 Q. In fact, when they did, two
7 and a half years after the fire, three
8 years after the fire, actually four years
9 after the fire, when they did actually
10 get around to cleaning up the building,
11 what cleanup level did they use, the
12 NIOSH level or the EPA level?

13 A. No, again, they used the EPA
14 level to finally clean up the building
15 before they demolished it.

16 Q. So what then did the State
17 actually do with the NIOSH level?

18 A. As a practical matter, they
19 didn't use it. They simply accepted it
20 as the recommendation.

21 Q. Did they ever actually apply
22 it?

23 A. No, not to my knowledge.

24 Q. Now, the NIOSH level that

1 PCB safe levels to the Transportation and
2 Safety Building?

3 A. Well, clearly NIOSH was
4 recommending that the State consider the
5 spill policy levels. They did it in
6 almost exactly those words throughout the
7 document.

8 Q. Now, you had been asked
9 about the Pennsylvania Department of
10 Health's recommendation. Do you recall
11 that?

12 A. Yes, sir.

13 Q. What did they recommend?

14 A. They ultimately recommended
15 the use of the NIOSH guideline.

16 Q. To your knowledge, was the
17 NIOSH guideline ever actually followed?

18 A. No, it wasn't. Not to my
19 knowledge based on my reading.

20 Q. How did you conclude that?

21 A. We talked earlier about how
22 the building was essentially already
23 clean at the point at which it was
24 reoccupied. The State continued to

1 we've been talking about, that's the one
2 microgram per 100 centimeters square on
3 surfaces. Is that correct?

4 A. Yes, that's correct.

5 Q. Is that an actual policy
6 officially adopted by NIOSH?

7 A. No. No, not to my
8 knowledge.

9 Q. What PCB guideline has NIOSH
10 actually formally adopted?

11 A. PCB guideline?

12 Q. Yes.

13 A. Certainly not for surfaces.

14 Q. How about the air guideline?

15 A. I think they've adopted the
16 air guideline, but it's never been
17 accepted by OSHA or anybody else as a
18 standard.

19 Q. How about the EPA guideline
20 for surface, has that ever been accepted
21 by OSHA?

22 A. For surfaces, I don't think
23 OSHA has formally adopted it, per se.

24 Q. Has NIOSH's air guideline

1 ever been adopted by OSHA?

2 A. No.

3 Q. How many years has it been
4 since NIOSH recommended it?

5 A. I don't know. Probably 10
6 or 15 years.

7 Q. The NIOSH guideline is based
8 on what? Is it based on a risk
9 assessment?

10 A. No. The NIOSH guidelines
11 both for air and surface is based on what
12 they call lowest feasible level
13 considering background. So in other
14 words, it's a standard that says clean it
15 all up until you reasonably can't clean
16 it up any more.

17 Q. Has NIOSH changed its policy
18 at all since they originally proposed
19 that standard or guideline that has never
20 been adopted by OSHA?

21 A. I understand that --

22 MR. MCCLAIN: I'd like some
23 more foundation on this subject.
24 He says he understands, that

1 Q. How so?

2 A. They, as I described before,
3 they've never used risk based standards
4 for cleanups or recommended them. But I
5 think it was in 1995, they actually
6 changed their policy to begin to allow
7 risk based standards to be used or
8 recommended for their own particular use,
9 NIOSH's use.

10 Q. Mr. Neal asked you about
11 your not doing any further tests in the
12 building. Do you recall that?

13 A. Yes, sir.

14 Q. How many tests had been done
15 at that building by the time you arrived
16 at the scene?

17 A. PCB samples? Thousands.
18 Perhaps as many as 10,000.

19 Q. Did you see any need to add
20 to that pile of tests?

21 A. No. As I said before, I
22 didn't see the need to take more samples.

23 MR. GOUTMAN: With the
24 Court's permission, I want to get

1 raises a question in my mind.
2 From whom?

3 THE COURT: The question, I
4 believe the question relates to
5 whether or not your belief
6 represents a scientific evaluation
7 or whether it is a supposition on
8 your part.

9 MR. GOUTMAN: Let me
10 rephrase it.

11 THE COURT: So to that
12 extent, the objection is
13 sustained, you may rephrase the
14 question.

15 MR. GOUTMAN: Thank you,
16 Your Honor.

17 BY MR. GOUTMAN:

18 Q. You had dealings with NIOSH
19 over the years?

20 A. Yes, I have.

21 Q. Sir, has NIOSH policy
22 changed with respect to the lowest
23 feasible level?

24 A. Yes, it has.

1 some exhibits from the back of the
2 courtroom.

3 THE COURT: Yes.

4 MR. GOUTMAN: I apologize to
5 the jury, I should have done this
6 during the break.

7 BY MR. GOUTMAN:

8 Q. Mr. Neal asked you about
9 smoke being distributed throughout the
10 building and you mentioned Mr. Mancuso's
11 testimony. Is that correct?

12 A. Yes, sir.

13 MR. GOUTMAN: Your Honor,
14 this has already been read to the
15 jury.

16 BY MR. GOUTMAN:

17 Q. Is this the testimony you
18 were referring to?

19 A. Yes, it is.

20 Q. Deposition of Joseph
21 Mancuso, division chief, engineering
22 design DGS. Question: Can you describe
23 for me your background in management and
24 asbestos removals in buildings?

1 Answer: I'm the division
 2 chief for the engineering design division
 3 for DGS. Under me, I have mechanical
 4 engineering, civil, structural and
 5 electrical. And on projects that we are
 6 assigned to complete for various
 7 agencies, asbestos removal does come up
 8 as part of the scope of those projects
 9 and my engineers under me do those
 10 projects and I'm the supervising
 11 engineer. Question: Did you go into the
 12 building on Tuesday after the fire?
 13 Answer: The Tuesday after
 14 the fire? I couldn't say for certain. I
 15 know probably I'm pretty sure I was in
 16 Monday. I don't remember about Tuesday.
 17 Question: Do you remember
 18 going into the building with Mr. Intieri
 19 and one or two of the other people to
 20 tour the nonfire damaged portions of the
 21 building?
 22 Answer: Yes. Yes.
 23 Question: Was that sometime
 24 about within a week after the fire?

1 Answer: I would say it was
 2 within a week, yes.
 3 Question: What was the
 4 purpose of the inspection?
 5 Answer: Just a general walk
 6 through to just assess advisable damage
 7 on those floors other than 4 through 7.
 8 Question: What did you see
 9 with respect to damage to the building on
 10 that tour?
 11 Answer: Just a lot of soot
 12 and smoke damage. Every square inch that
 13 you could see or touch was covered with
 14 soot and of course the odor was terrible.
 15 Question: Was that pretty
 16 much throughout the building?
 17 Answer: Absolutely.
 18 Was that the testimony
 19 you're referring to?
 20 A. Yes, sir.
 21 Q. Now, sir, you were asked
 22 questions about your conclusion that the
 23 PCBs that were found on building surfaces
 24 came from the fire. Do you recall those

1 questions, sir?
 2 A. Yes.
 3 Q. Sir, I want to turn to an
 4 exhibit that we used in your direct. It
 5 is DM 3151. Perhaps it would be easier
 6 for you to come down with the Court's
 7 permission?
 8 THE COURT: You may step
 9 down.
 10 MR. GOUTMAN: Can you see
 11 it, Your Honor?
 12 THE COURT: I can see it.
 13 BY MR. GOUTMAN:
 14 Q. Now, is this an exhibit that
 15 you helped prepare?
 16 A. Yes.
 17 Q. What does it explain?
 18 A. It explains the logic that I
 19 used to conclude that PCBs in the T&S
 20 Building came from the fire.
 21 Q. Keep your voice up, please.
 22 And what was that logic, sir?
 23 A. I'll walk through it
 24 step-wise.

1 Q. You're the witness.
 2 A. Fine. Point number one,
 3 building products containing PCBs were
 4 burned in the fire.
 5 Q. Time out now. What burned
 6 in the fire?
 7 A. The ductboard containing the
 8 Aroclor 1262 we've been talking about and
 9 some light fixtures contained Aroclor
 10 1242.
 11 Q. How do you know that?
 12 A. Because I saw it. I've seen
 13 pictures of it. I've heard testimony
 14 about it.
 15 Q. Was it depicted at all on
 16 any videotape?
 17 A. Yes.
 18 MR. MCCLAIN: Your Honor,
 19 it's leading.
 20 MR. GOUTMAN: I'm asking
 21 whether --
 22 THE COURT: Sustained.
 23 BY MR. GOUTMAN:
 24 Q. What else did you review,

1 sir?

2 A. As I said, photographs,
3 deposition testimony, the video that's
4 referred to that the jury saw.

5 Q. What did all of those things
6 show?

7 A. That ductboard and light
8 fixtures were burned up in the fire.

9 Q. Go ahead.

10 A. The second point, the same
11 photographs, videos and testimony shows
12 that the fire spread smoke throughout the
13 building. That's clear. Onto every
14 floor.

15 Q. And what, in your opinion,
16 did the smoke contain as a result of the
17 burning of those products that you just
18 mentioned?

19 A. The smoke contained PCBs
20 that were incinerated along with the
21 building products.

22 Q. Go ahead.

23 A. Number three, after the
24 fire, those same PCBs were found

1 throughout the building. By those PCBs,
2 we're talking about the types of PCBs
3 that were burned up in those building
4 products.

5 Q. Do you think that was just a
6 coincidence?

7 A. No, absolutely not.

8 Q. What does that say to you?

9 A. That the PCBs that were
10 found and that were cleaned up were the
11 result of the fire incident itself.

12 Q. Go ahead.

13 A. Number four, asbestos
14 fireproofing after the fire had over five
15 times the amount of PCBs as before the
16 fire.

17 Q. Let me just stop you there.
18 Referring to Exhibit 3156, what does this
19 show, sir?

20 A. This exhibit which I used
21 sometime earlier shows what is called the
22 bar graph. On the left side, the height
23 of the graph is three milligrams per
24 kilogram or parts per million.

1 Q. What are all these numbers?

2 A. The chart shows, you know,
3 going from bottom to top shows how high
4 the concentrations were. The two bars
5 here represent the average concentration
6 before the fire and after the fire. And
7 it shows that the average concentration
8 in the pre-fire asbestos samples, the 28
9 samples that you've seen that we
10 analyzed, was three parts per million and
11 that the same result from Mr. Kominsky's
12 outer sample results was 17.7 parts per
13 million. In other words, five times
14 higher than pre-fire samples.

15 Q. What does that tell you?

16 A. It tells me that almost all
17 of that PCB was deposited by the fire.

18 Q. And where did this come
19 from, 3.0?

20 A. 3.0 is the average of the --
21 I believe, the 28 samples that we
22 analyzed that were taken from before the
23 fire.

24 Q. Where did those PCB samples

1 come from?

2 A. In the T&S Building of
3 course.

4 Q. Where did they come from?

5 MR. MCCLAIN: Your Honor, I
6 object. This is not proper
7 redirect. Every one of these
8 points was gone over on direct.
9 It's not redirect. Every board
10 we've seen, it's all been done.

11 MR. GOUTMAN: This is a
12 speaking objection, Your Honor,
13 which I know this court does not
14 like. If counsel wants to make
15 such an objection, we should go to
16 side-bar.

17 THE COURT: The objection
18 has been made unless there is
19 anything further, the objection is
20 overruled.

21 MR. MCCLAIN: Just so I
22 don't interrupt again, I would
23 have the same objection on every
24 single board he's going to show

1 and as long as I can just preserve
2 that objection, I won't interrupt
3 again unless the Court would
4 change its mind.

5 THE COURT: To this, you
6 have a continuing objection.

7 MR. MCCLAIN: Thank you,
8 Your Honor.

9 BY MR. GOUTMAN:

10 Q. What is the source of the
11 3.0?

12 A. The source of the 3.0 is the
13 testing of the 28 samples from the T&S
14 Building before the fire.

15 Q. Sir, I want to show you
16 another exhibit. You were asked, were
17 you not, on cross-examination about
18 background sampling? Is that correct?

19 A. Yes, sir.

20 Q. What does this exhibit show?
21 For the record, Your Honor, we're showing
22 the jury 3157.

23 THE WITNESS: This exhibit
24 is set up like the one I just

1 showed. The height of that, of
2 those green bars, is an indication
3 of the relative concentration.
4 But this time instead of just
5 having the T&S Building before and
6 after the fire which is the far
7 left bar and far right bar, it
8 includes the results from two
9 other buildings that are in the
10 Harrisburg area, one is the Milton
11 Hershey School and the other is
12 the South Office Building. These
13 are fireproofing samples taken
14 from those buildings where there
15 was no fire.

16 BY MR. GOUTMAN:

17 Q. What is the significance of
18 this data?

19 A. Those data show that there
20 were also measurable PCB in that
21 fireproofing that I would again attribute
22 to being background samples, or
23 background levels. Levels we would find
24 in the Harrisburg area. And they

1 compare, in fact they're a little higher
2 than the results that we found in the T&S
3 Building.

4 Q. The 3.0 would represent what
5 then?

6 A. It would represent
7 background. It's even on the low end of
8 the background in the Harrisburg area.

9 Q. Sir, if in fact PCBs were
10 flying out of the ductboard, would you
11 expect before the fire that the asbestos
12 would have higher than background levels?

13 A. Absolutely. Absolutely.

14 Q. And did you find that?

15 A. No.

16 Q. Now, I think we were at
17 three?

18 A. We were at four.

19 Q. I'm sorry.

20 A. We were at four and we've
21 already talked through that. Number
22 five, Aroclor 1260 was found primarily on
23 the outer layer of the asbestos
24 fireproofing, and that's referring

1 specifically to Mr. Kominsky's samples
2 where he actually took an outer and inner
3 layer, the outer being the one exposed to
4 the air plenum or would have been exposed
5 to the smoke and PCBs during the fire.

6 Q. What is the significance of
7 that?

8 A. That shows that it was
9 deposited largely by the fire.

10 Q. Why?

11 A. Because it's on the outer
12 portion. It's the exposed portion of the
13 fireproofing.

14 Q. Six?

15 A. Number six, other
16 explanations are contradicted by test
17 data. I've talked a number of times
18 about the data the State was collecting,
19 particularly the air sampling results,
20 showing that there is, even when the
21 building was reoccupied and the
22 ventilation system turned on again, there
23 was no PCB off-gassing from the ductboard
24 and entering the building, the building

1 space.

2 Q. Sir, with reference to 3121,
3 is this also an exhibit that you helped
4 present?

5 A. Yes, sir.

6 THE COURT: This is number?

7 MR. GOUTMAN: 3121, Your
8 Honor.

9 BY MR. GOUTMAN:

10 Q. What other explanation were
11 you referring to in the prior exhibit
12 when you said other explanations are
13 contradicted by the test data?

14 A. Well, the other explanation
15 I was referring to is the State's theory
16 that the PCBs were coming out of the
17 ductboard adhesive and flying or
18 redistributing themselves, flying around
19 the building.

20 Q. And did you accept or reject
21 that theory?

22 A. I rejected that.

23 Q. And why?

24 A. Well, for a number of

1 reasons, and that's what this exhibit was
2 designed to show. First as we've talked
3 about over and over, this glue is a
4 solid. The Aroclor itself even without
5 the glue is extremely stable. It has
6 almost no vapor pressure. It evaporates
7 almost a hundred times slower than water.

8 Q. A hundred times?

9 A. A hundred million times.

10 Sorry. It's extremely stable. It's
11 designed to stay put.

12 Q. Air tests?

13 A. The air test data, I was
14 just referring to that. If the PCBs were
15 coming out of the ductboard as the State
16 suggests they are, even after the
17 building was reoccupied after the fire,
18 you would be able to detect 1262 in the
19 air. The State, during that time period,
20 collected over 5,000 air tests and found
21 virtually no Aroclor 1260 or 1262 which
22 is totally inconsistent with the idea
23 that it's coming out and entering the
24 work space.

1 Q. Surface test?

2 A. Surface test. Again, the
3 levels that were found when the building
4 was -- the levels that existed when the
5 building was reoccupied pretty much
6 already met the EPA safe standard. They
7 were extremely low as it is. They were
8 certainly lower than the most applicable
9 standard.

10 Q. Would you expect that if the
11 PCBs were going out of the glue, going up
12 through the ductboard, that the
13 fiberglass and releasing throughout the
14 building?

15 A. Absolutely not. They would
16 not only be hired and also in likelihood
17 be increasing, which is important, once
18 the ventilation was turned on again and
19 the building occupied two and a half
20 years during this sampling, there's no
21 evidence at all that PCB surface levels
22 or air levels were increased which is
23 pretty much contrary to what the State is
24 suggesting.

1 Q. By the way, in all of 1995
2 and '96, of the many air tests that they
3 did, how many showed PCB Aroclor 1262
4 levels above the .5 microgram level that
5 you've mentioned?

6 A. I think it was around 18,
7 something like that.

8 Q. I'm sorry, in 1995 and '96?

9 A. I'm sorry. 1995, '96, it
10 didn't show any PCB results.

11 Q. Zero?

12 A. Zero 1262 air results above
13 that .5 microgram which is half the NIOSH
14 guideline for air.

15 Q. And how does it relate to
16 the OSHA guideline?

17 A. The NIOSH guideline is about
18 a thousand times lower than the OSHA
19 standard which is the only regulatory
20 standard for air.

21 Q. If PCBs are volatilized and
22 breaking out of the glue bond, going into
23 the fiberglass and releasing through the
24 air as the government theorizes in this

1 case, would you expect zero 1262 detected
2 over .5 micrograms for all of 1995 and
3 '96?

4 A. Oh, no. You would be
5 finding it if it was coming out. These
6 are very sophisticated tests and there
7 were a lot of them.

8 Q. The next one?

9 A. The next one, number five,
10 PCBs were still in the ductboard. The
11 ductboard, all evidence indicates that
12 the ductboard was working just fine. The
13 HVC supervisor said there were no
14 problems with it, it was in good
15 condition. Nothing that I saw, either
16 myself or other people's photographs,
17 indicated that there was a problem at all
18 with the adhesive deteriorating or the
19 PCBs coming out of this ductboard. So
20 it's still there. It's still working.

21 Q. What were the PCBs doing in
22 the glue? What was their function?

23 A. Their function was as a
24 plasticizer to make the glue or the

1 material that it was attached to
2 flexible.

3 Q. If PCBs were jumping out of
4 that glue as the government has
5 theorized, what would happen to that
6 glue?

7 A. It would get stiffer
8 basically. It would not be flexible
9 anymore.

10 Q. And what would happen to
11 that ductboard?

12 A. It would break very easily
13 if you touched it or maybe even under its
14 own weight.

15 Q. Did you actually examine
16 samples of this ductboard?

17 A. Yes, I saw a number of the
18 samples and handled a number of the
19 samples that we received from the
20 ductboard and it was just fine. It was
21 flexible. Pliable. Whatever the term
22 is.

23 Q. By the way, of those samples
24 that you saw, did you detect any smoke or

1 soot?

2 A. Yeah, more than half the
3 samples were extremely what I would call
4 sooty or dirty. A black coating which if
5 you scraped away the outer layer, went
6 away. In other words, the underlying
7 portion of the fiberglass that was there
8 was clean. Almost like new.

9 Q. And the last entry, an
10 unlikely story, I don't want to get out
11 all of those boards again, but could you
12 explain what you meant by an unlikely
13 story?

14 A. Well, apart from the issues
15 that I've challenged the State or the
16 State's theory on here, in order for
17 their theory to work, a whole series of
18 extremely improbable things have to
19 happen. The PCBs have to come out of
20 this solid adhesive.

21 Q. Why is that unlikely?

22 A. Because it's locked in the
23 glue. It's a solid. It has to work its
24 way out of the glue which it's not going

1 to do any time soon.

2 Q. How readily do solids
3 evaporate?

4 A. Extremely slowly.
5 Extremely, extremely slowly. So in order
6 for the State's theory to work, the PCBs
7 would have to find their way out of the
8 glue which is improbable; then evaporate,
9 which they are not likely to do as we've
10 testified earlier at room temperature or
11 at duct temperature which was about room
12 temperature in this instance. It would
13 then have to stay a vapor and work its
14 way through the fiberglass. It doesn't
15 want to be a vapor at room temperature.
16 It wants to be a solid or a sticky liquid
17 which is -- in which case it's going to
18 condense on the fiberglass and stick to
19 it. It's going to stay there. So it's
20 extremely improper and that the PCBs are
21 going to get that far in the first place.
22 But the State's theory also goes to the
23 next step and says that PCB has to
24 somehow, once it's out of the fiberglass,

1 it has to vaporize, it has to move
2 through the ventilation system, through
3 the duct work, without condensing and
4 then enter the office space.

5 Q. What is condensation? You
6 said condensing. What is that?

7 A. Condensing is when it goes
8 from a gas to a liquid or a gas to a
9 solid. It goes from being a vapor to
10 being a particle if you will.

11 Q. How likely is it that the
12 PCBs aren't going to condense?

13 A. Well, it's unlikely they
14 would be a vapor in the first place.
15 They would be a solid if they were in the
16 duct work at all or moving through the
17 duct work at all which, as I said, they
18 couldn't be. Then it enters the work
19 space. According to the State's theory,
20 it deposits on surfaces, it flies through
21 the air and then at some point works its
22 way back up to the air plenum and
23 attaches to the fireproofing we were
24 talking about.

1 The data shows that the
2 levels were increasing when the system
3 was working. They couldn't find it in
4 the air to any appreciable extent. So
5 the data contradicts the possibility that
6 the PCBs are moving around in the air
7 space let alone going back up and
8 attaching themselves to the fireproofing.

9 Q. Now, you were asked
10 questions about this Ewing test and why
11 the chamber experiment, why you didn't do
12 a Ewing chamber test yourself. Why
13 didn't you?

14 A. Well, given my belief in all
15 this science I've been describing here, I
16 didn't see any need to do it. I've got
17 enough data on airborne contamination or
18 lack thereof to convince me that under
19 normal operating conditions, that the
20 PCBs weren't coming out of the duct work.
21 There's no reason to go back and try to
22 prove it in the lab when the building
23 itself doesn't prove it.

24 Q. Just so the jury recalls,

1 and I believe there was testimony about
2 this back in last May, the chamber test,
3 how is that set up?

4 A. The chamber test that Mr.
5 Ewing was trying to do took an
6 established test that was developed by
7 the American Society for Testing
8 Materials and it's basically taking a box
9 at room temperature, putting some
10 material in it and running air through
11 it, collecting the air and then seeing if
12 the material, whatever the material is,
13 off-gassed. And what Mr. Ewing did was
14 take pieces of the ductboard from the T&S
15 Building after the fire and propped them
16 up in this chamber and then heat the
17 chamber up to try to cause this to off
18 gas.

19 Q. What did he use to heat it
20 up?

21 A. He used a sun lamp, a
22 250-watt lamp bulb.

23 Q. To your knowledge, were
24 there any sun lamps in the duct work of

1 the T&S Building?

2 A. No. And sun lamp is an
3 extremely intense bulb. I don't know if
4 you've worked with them or used them at
5 home, but it's not the sort of thing that
6 you would use to hatch eggs in an
7 incubator if you ever dealt with that in
8 school.

9 Q. Sir, as a scientist and a
10 PCB specialist, what tells you more about
11 what happened in this building, a chamber
12 test where you heat a piece of ductboard
13 with a sun lamp, or 5,000 air tests taken
14 in the actual building itself?

15 MR. MCCLAIN: Your Honor,
16 it's leading and argumentative.

17 MR. GOUTMAN: No, it's not.

18 THE COURT: Overruled.

19 BY MR. GOUTMAN:

20 Q. What else tells you more
21 than the test in the little chamber or
22 5,000 air test in the actual building
23 itself?

24 A. No question. The building

1 itself is all I need to see and the data
2 associated with it to understand.
3 Q. When you have 5,000 -- over
4 5,000 air tests, sir, can you tell us
5 whether or not you think it is necessary
6 to put a piece of ductboard in a chamber
7 and cook it with the sun lamp?

8 MR. MCCLAIN: Your Honor,
9 it's argumentative.

10 MR. GOUTMAN: It's a
11 question.

12 THE COURT: Overruled.

13 THE WITNESS: No, there was
14 no need to do that test.

15 MR. GOUTMAN: Your Honor,
16 before I begin another subject,
17 this might be a good time to
18 break.

19 THE COURT: I think you're
20 right.

21 THE COURT: Members of the
22 jury, as indicated we are going to
23 adjourn at 12 noon. It is now 12
24 noon. Before we adjourn, the

1 THE COURT: We'll be
2 starting at 9:30.

3 MR. GOUTMAN: No, Your
4 Honor, noon to 2:30. We're going
5 to start at noon and break at 2:30
6 on Tuesday.

7 THE COURT: Tuesday we're
8 going to start at noon, this
9 coming Tuesday, we will ask you to
10 return 11:45 so you'll be ready to
11 start at noon and we will be
12 adjourning at 2:30.

13 MR. EDGE: Now I can
14 adjourn.

15 THE COURT: Now you can
16 adjourn till quarter to 12:00.

17 MR. EDGE: This court now
18 stands adjourned until Tuesday
19 morning, 11:59.

20 - - -

21 (Whereupon, the hearing was
22 adjourned at 12:00 p.m.)
23
24

1 court has advised counsel that
2 because of the additional
3 assignments that this court has,
4 that we will not be sitting in
5 April -- on the weeks of April 10
6 and the 17th. In fact, this court
7 will be in Harrisburg at that
8 time. So consequently, I wanted
9 to give you advance notice so that
10 you can properly plan your own
11 lives. We will resume on the week
12 of the 24th of April. That would
13 be a Monday and we would be
14 resuming on Tuesday the 25th.
15 I'll repeat this later on, but I
16 thought I would give you advance
17 notice now because this has just
18 been determined as of last night
19 and this morning.

20 MR. MCCLAIN: Your Honor,
21 the timing of Tuesday when we're
22 starting Tuesday.

23 MR. GOUTMAN: Our hours for
24 Tuesday.

1 CERTIFICATE

2 I hereby certify that the
3 proceedings and evidence noted are
4 contained fully and accurately in the
5 notes taken by me on the deposition of
6 the above matter, and that this is a
7 correct transcript of the same.

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Linda Rossi Rios
Dated: March 17, 2000

16 (The foregoing certification
17 of this transcript does not apply to any
18 reproduction of the same by any means,
19 unless under the direct control and/or
20 supervision of the certifying reporter.)

1 LAWYER'S NOTES

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