In The
Supreme Court of Tennessee
Eastern Division

NO. E2012-02392-SC-R11-CV

ANNE PAYNE
Widow of Winston Payne, deceased,

Appellee,

v.

CSX TRANSPORTATION, INC.,

Appellant.

ON APPEAL FROM THE CIRCUIT COURT OF KNOX COUNTY, NO. 2-231-07
COURT OF APPEALS, EASTERN DISTRICT, NO. E2012-02392-COA-R3-CV

APPENDIX OF APPELLEE

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TABLE OF CONTENTS

IN THE CIRCUIT COURT FOR KNOX COUNTY, TENNESSEE

WINSTON PAYNE,

Plaintiff,

v. No. 2-231-07

CSX TRANSPORTATION, INC.,

Defendant.

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MOTIONS

September 30, 2009

Hon. Harold Wimberly, Judge

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(Proceedings began at 10:12 a.m.)

THE COURT: Okay. What are we going to talk about today?

MR. BAKER: First, I want to first introduce Mr. Shapiro.

THE COURT: Good morning.

MR. SHAPIRO: Nice to see you, Judge.

MR. BAKER: Judge, you already met Mr. Jordan the last time we were here. This is Karen Young, who is his partner.

MS. YOUNG: Good morning, Judge.

MR. BAKER: She is also here today on behalf of CSX.

THE COURT: I see this stuff here. Some of it I opened and most it I don't understand anyway.

MR. BAKER: Your Honor, if I may be heard first, it might make sense to argue the CSX motion in limine to exclude expert testimony, and the reason I say that is that Mr. Jordan is going to provide an overview of the case with a lot of the facts, and when the Court hears these facts we won't have to re-recite, regurgitate the facts

those contributed to causing Mr. Payne's lung cancer. Of course, he smoked cigarettes for 30 years as well.

Now, for this motion, Your Honor, we can forget about cigarette smoking because we don't need to talk about that and for this motion we can assume, although we will certainly contest this before the jury, we can assume general causation exists with respect to radiation, asbestos, and diesel exposure, and by that I mean the Court can assume that we can all assume that enough radiation exposure can cause lung cancer, enough asbestos exposure can cause lung cancer, and enough diesel exposure can cause lung cancer.

Again, we will contest that at trial but for purposes of this motion we can assume that.

Your Honor, we have taken a number of depositions, we've taken discovery depositions of the plaintiff's experts in this case and all of the plaintiff's experts have agreed that there is a dose-response phenomena that exists between each of those

They are questioning today specific causation. They are questioning the fact that the cancer specialist, Dr. Frank, that the occupational medicine doctor, Dr. Stewart, who is just like Dr. Nassetta in the Wilson case, and that the oncologist whose name I didn't mention yet, Dr. Kearns, who is local, they are questioning their specific medical opinion that these things contributed to cause lung cancer in the plaintiff. And they are here today asking the Court to strike all of the medical opinions in this case, and they are here saying to the Court the plaintiffs don't have dosage or quantification evidence, throw this case out.

Now, contrary to what Mr. Jordan said at the beginning of the motion, he says this is a motion in limine, it's not a motion for summary judgment. I beg to differ, Mr. Jordan. When you are moving to strike all the plaintiff's evidence where we concede that we can't put on a case, that's a motion for summary judgment whether you call it that or not.

THE COURT: We are back here today after meeting a week ago today and had an extended presentation of various motions, and the Court asked for some extra time to review things that were still coming in at that time and waded through all kinds of stuff that has been submitted to me which is good, I guess, and turns out that what I got to say today is mostly -- rather than a ruling on what we talked about last week, I think it's more advisory than anything else. So let's go over briefly some of the things that we talked about last week.

We started out with a motion by the defendant to exclude expert testimony after discovery depositions had been taken of experts proposed by the plaintiff in this case. It's difficult to exclude totally the testimony of such witnesses. For example, that Tennessee opinion involving CSX railroad that both sides talked about some last week can be understood, if nothing else, as saying that such experts are normally admitted and permitted to testify. What they will say at the trial, you know,

we don't really know yet as evidenced by the fact that we had this additional affidavit submitted after last week's hearing, and then this morning we had the opposition to that affidavit. I suppose it's good to bring these things out now, but in the Court's opinion I can't make any definitive ruling about any of these people at this time.

And one thing that bringing it out now does do is allow them to correct and add to testimony, and of course the trial is not set until March. We may have occasion to talk about this some more later on, much closer to the trial date, but right now the Court is not prepared to make any definitive ruling about these things other than to say that probably all these people will be certainly permitted to testify. You know, what exactly they say is subject to objection, I suppose, right before trial and also during trial.

The position advocated by the defendant that you all can just go ahead and exclude such evidence if it doesn't prove a

Page 5

case already, a lot of experts.
THE COURT: What are you talking about --
MR. BAKER: Well, this gentleman's name is Dr. David Coker and in response to our multiple discovery requests, the lawyers representing Mr. Payne produced a study by Dr. Coker and in that study he addresses exposures, potential exposures to cesium, it's a byproduct of uranium at -- close to Y-12 and throughout this case they have been contending that this man was exposed to this stuff in that place.
So back in July of 2009, we put this man on our witness list and filed it and they knew that he was on our witness list.
In August of 2009, they asked us to outline and provide them information about our witnesses and we sent a letter and we told them that Dr. Coker would be testifying about cesium contaminations at or near CSX tracks near Scarboro Road, and we referred them to the study that was conducted by Dr. Coker back in 1990, so they had this

Page 6

information. They didn't ask for his deposition for the past year and a half. Dr. Coker had studied cesium there right outside of Y-12 where this man says that he would deliver railroad cars and in his deposition they had him testify to being in these places where he was so exposed to these things on these various tracks, and so Dr. Coker's study had generalized where -- the amount of exposure a person would have, and so what he did for us was simply relate it to Mr. Payne himself, and we provided his analysis of that to plaintiff's counsel on September the 10th and invited him to take the deposition of Dr. Coker and in fact told him that Dr. Coker was available for a deposition tomorrow, two months before trial, and we feel that there's nothing late about this.
They have -- we have in this case reconstructed the dose, performed a dose reconstruction by Dr. David Dooley and he's the subject of -- that is a subject of a motion that we filed, and throughout since the last continuance, Dr. Mantooth, their

Page 7

expert, has criticized Dr. Dooley's dose reconstruction. Dr. Frank has criticized the dose reconstruction and in his deposition for proof, he says that the man was exposed to above background levels of radiation at Oak Ridge, so all we did was have Dr. Coker analyze that in order to come up with more preciseness in the dose reconstruction.
We needed someone to address what they were contending happened to this man out in Oak Ridge, and Dr. Coker has done that.
In fact, I don't understand why they are complaining so much. Dr. Coker's analysis suggests more exposure to radiation out there than Dr. Dooley found, so what we've done is we have a witness who now analyzes Oak Ridge and he ends up with more exposure to radiation. I don't know why they are complaining about this because we feel that we have a duty and obligation to the Court and most particularly to the jury that if we are going to do a dose reconstruction that it be a good dose

Page 8

reconstruction, that it tells the jury exactly what this man was exposed to from his first day to his last day. He was only out there for one month. But we needed someone to address Oak Ridge, and Dr. Coker has done that and they never asked that we -- to take Dr. Coker's deposition.
And also throughout the summer and since the last continuance, we've gotten affidavits and we've gotten all kinds of testimony against us on the issue of plutonium. Plutonium is a man-made by-product enriched uranium and they have been after us all summer and all spring about plutonium, so we felt like we needed someone to address plutonium and Dr. Coker has addressed plutonium in such a way that he's got the unique ability to make people understand what he's saying. He's a scientist but he's very good at articulating things on the issue of plutonium and we have a motion on plutonium and if the Court allows the jury to hear about plutonium, which we say they should not, then Dr. Coker would be there to address that issue.

Page 17

Is this a video thing?
MR. SHAPIRO: Yes, sir.
THE COURT: Okay. You can fix it by then.
MR. BAKER: Page 29, Lines 14 through 18 on the ground that Mr. Payne is not qualified to render an opinion on the subject matter of the testimony and also that it's a leading question.
But my main objection is that's not his place to say.
MR. SHAPIRO: I'll withdraw it, Your Honor.
THE COURT: Okay. That's pretty obvious that that's why we are here, that they believe that -- it is correct that that will not be appropriate.
So Page 38 is next.
MR. BAKER: All right. Now, Your Honor, this one --
MR. GILREATH: It would be nice if we made these objections before he died and then we would fix it.
THE COURT: It says objection right there.

Page 18

Next one you are giving me is Page 38.
MR. BAKER: What I have done here, Your Honor, this becomes a little complicated.
From Page 38 through Page 53, Mr. Payne is questioned on his activities as a worker and the goal here is for Mr. Payne to testify about whether he was around a product that may or may not have contained asbestos fiber, and what I've done here is we had filed a motion dealing with this issue. We say that a lay person needs some scientific basis upon which to training or some knowledge about whether a product contains asbestos or does not contain asbestos.
For example, in this swath of testimony, the plaintiff says that he would go to the bathroom at the bathroom located at the little yard -- yard over here, the West Knox Yard, at the yard office, and in that bathroom there would be a pipe about yeah thick, about an inch and a half in diameter, and that pipe -- one single pipe

Page 19

led to the sink, all right, and he believes that that pipe was wrapped in some sort of tape that was white, and he says, well, that has to be asbestos containing without anywhere on it saying asbestos at all, only thing is that the tape was white and it led to a cold water and a hot water pipe.
Now, we say that he should not be able -- be allowed to testify that that pipe that was covered with tape and the tape had asbestos in it.
You have been through this many times.
Here in the world of -- in the asbestos world, their quest to convince this jury that this man was exposed to copious amounts of asbestos is just simply not true. It's the most minimal case you'll ever run into in terms of the asbestos world.
We should not be allowed to say that that pipe had asbestos in it.
He then says that back in 1962 or 1963, early '60s he said, he would stay over at the YMCA hotel in Corbin, Kentucky, and he -- when he would be in that room, he

Page 20

would be sleeping or getting ready to go to bed and it had high ceilings and when he got in bed and he looked up in the air, he saw pipes like -- see this little pipe right here, this is a water pipe, and he says that those -- that one pipe that went across the ceiling up there was wrapped in some sort of white tape and he says in his deposition that the tape contained asbestos. How do he know? You know, how in the world could he be allowed to say that that tape contained asbestos, much less that somehow or the other fibers escaped and made their way into his lungs.
Now, we don't mind him saying that he was in a room at the YMCA back in early 1960's and he looked up in the sky and he saw a pipe that had -- wrapped in white tape and we don't mind him testifying that he was in a bathroom and there was this little bitty pipe and it was wrapped in white tape. We do mind him saying that it's asbestos containing.
We do mind him suggesting to this jury that somehow or the other in the world

Page 21

the little fibers escaped and got into his lungs somehow or the other when he was in there for the few minutes that he was in there.

They have an industrial hygienist by the name of Vance who is going to address those issues.

It's just not for him to say and we filed a motion in this case to keep lay people from coming in the courtroom and testifying about this and that containing asbestos unless they are qualified to make that statement, unless on the product there was the word "asbestos containing" or something that would give them reason to be able to say that, something other than hearsay.

This is not the methodology that the plaintiff should be allowed to use to introduce his exposure to all this asbestos.

And what I did was --

MR. SHAPIRO: Mr. Baker, I don't want to cut you off because I agree with you in part on your argument, so I would like you to address other areas besides those

Page 22

buildings, your position on roundhouses, engines --

MR. BAKER: So you agree with me about the bathroom and the --

MR. SHAPIRO: We'll agree and I'll explain why when it's my turn.

MR. BAKER: Okay. Well, I was just using those as an example, Your Honor.

They also say -- and by way of explanation -- may I approach the Court for a second?

THE COURT: Yes, sure.

MR. BAKER: Do you have our designation -- we had filed objections and I looked at this paragraph on Page 38, Line 6 through 25, through Page 53, Lines 1 through 6, and what I realized was I was being disingenuous unintentionally about something and that is, throughout this testimony, there were portions of it which should come in, because he should be allowed to say that he was in that room and he did go into the roundhouse and he was in a caboose and those sort of things, he just should not be allowed to come in and say that these things

Page 23

contained asbestos and he breathed asbestos fibers.

So what I did was for Mr. Shapiro, I made a new designation, I sent him a letter that he and I talked about leaving out only his testimony dealing with goodness gracious, it contained asbestos.

For example, he says that ten to fifteen minutes in the morning it was his custom and practice or habit to go to the little bitty roundhouse that we used to have down here and he would be in there to check on the engine or engines for some reason. We don't -- I don't see any reason for him to do that because he was what is known as a switchman and they didn't do that sort of thing. But nevertheless he said it. He went in there and he says that when he was in there he noticed that there were pipes and some of those pipes were wrapped in white, so once again, he believes that if a pipe is wrapped in white that somehow or the other that pipe contains asbestos as opposed to fiberglass or just being a wrapping.

MR. SHAPIRO: It might just save a

Page 24

little time, Jay, I don't want to -- fail to let you address all the issues.

MR. BAKER: Thank you.

MR. SHAPIRO: If I state what we agree on --

MR. BAKER: We don't agree --

THE COURT: We are about to agree on some of this. So go ahead and tell us.

MR. SHAPIRO: Okay. Your Honor, there are -- what Mr. Baker didn't talk about were the engine areas.

Mr. Payne in that passage from 38 to 53 talks about roundhouses, he talks about engines that he worked on and he talks about cabooses and brake shoes.

Now, Mr. Baker's point is a lay person shouldn't be able to willy-nilly walk in and say that white thing over there is asbestos. And I looked at some of the cases since he brought this up to me and many cases agree with him.

However, if the plaintiff has corroboration of the testimony, then normally the lay person testimony comes in.

So what do we have in this case.

Page 25

Well, on the roundhouses, the engines, the cabooses and the brake shoes, the CSX company representative who is himself an industrial hygienist admits in his deposition that asbestos was in all of those areas, and I went and got the page and line references yesterday to their corporate rep who we are offering in our case in chief, it's a video deposition, it's not a matter of will it possibly come up. It's in his testimony and we are offering it.

He says there was asbestos in roundhouses, there was asbestos in engines, on brake shoes from '66 to 1976. A second industrial hygienist with CSX says the same thing, his name is Mark Badders. They say that they abated asbestos from engines, they say that they found asbestos on EMD engines, they found it around the air duct, they found it in the pipes leading to the cab heaters and the crew cab.

They also admit that they had asbestos on cabooses and I mentioned the brake shoes.

So because there's corroboration in

Page 26

all those areas, I do not agree that Mr. Payne is incapable of saying that he believed it was asbestos. It's corroborated by their own witnesses.

Now, I agree with Mr. Baker that on any testimony where he was in a yard office bathroom or in the YMCA, I don't have direct corroboration on that, so I think we need to take out his reference that it was asbestos.

We do have corroboration that they abated asbestos from a lot of buildings in the Knoxville area but I can't find where it really is on the same area that he is talking about. So that's our position and if Your Honor agrees with us, we would just redact that passage to take out the references to asbestos at offices and the YMCA.

MR. BAKER: May I be heard, Your Honor.

THE COURT: Yes.

MR. BAKER: Well, we don't agree with that.

We don't agree that the testimony of an industrial hygienist for CSX or for

Page 27

that matter anyone that in certain places on certain engines in certain territories, there was in some locomotives and in some cabooses, some asbestos-containing products.

I don't think that that gets them to where they want to be on this concept of corroboration.

In my view, this man simply is not qualified under the law, he does not possess the requisite scientific expertise to be able to say that when he sat in a caboose that in that particular caboose that they did away with in the early '80s that there was a heat shield next to the stove and that in that heat shield there was asbestos as opposed to fiberglass, for example, and what they are doing here is they're making Mr. Payne himself a person who is capable of giving an opinion pursuant to Tennessee Rules of Evidence, is it 701, I think it is, and that rule is very precise. It has to be -- a lay opinion has to be rationally based on the perception of the witness, helpful to a clear understanding of testimony or a fact in issue.

Page 28

And we say that this man saying these things based on in many cases hearsay and his belief that if anything was wrapped in white it had to be asbestos containing does not conform with the case law of this state and all of the other states virtually or with this circuit's practice, as I understand it.

People just can't come in and say this contains asbestos and this does not contain asbestos without any support.

THE COURT: Well, he says on that first page, "I knew what asbestos looked like."

MR. BAKER: He does say that. I say that that is not enough. He says if a pipe is wrapped or covered with white tape, it must be asbestos. That what's he bases that on. I know what asbestos looks like. So I questioned him on that. He said, well, I know what it looks like because if it's white, if it's a white tape, it must be asbestos.

May I approach, Your Honor?

THE COURT: Okay.

Page 29

MR. BAKER: Here it is where I addressed that.
THE COURT: Okay.
MR. BAKER: Now, how in the world can he say that when he walked into the roundhouse -- are you giving up on the roundhouse?
MR. SHAPIRO: Yes.
MR. BAKER: Okay. When he walks in the roundhouse that the pipes were covered with asbestos? Or asbestos containing? How can he say that?
MR. SHAPIRO: Well, Your Honor, Mr. Baker is making it seem that the plaintiff is saying not only he knew something or thought something was asbestos but that that asbestos caused my cancer. He isn't saying that. He's describing his understanding of what that insulating material was and nothing more and he in various places gives his understanding of why he believes it was asbestos, he said it was the only type of insulating material he knew a name of at that time in some of the instances and there again I don't need to

Page 30

reiterate what I said, Your Honor.
Their own industrial hygienist has corroborated -- if there wasn't solid multiple witness corroboration on asbestos in the engines, cabooses, brake shoes, then I think Mr. Baker would have a better argument also.
THE COURT: Okay. As I said, he does say that he knew what asbestos looked like. Some of these other things where he said that this witness Vance told him about certain things, that should be --
MR. SHAPIRO: I think we've taken that out.
MR. BAKER: No, we didn't.
MR. SHAPIRO: Which part was that, Mr. Baker?
THE COURT: For example, Page 43 it says, has it ever come to your attention, later that CSX may have removed asbestos, how did that come to your attention, I spoke with Dr. Vance and he was telling me.
Did you read any depositions of any workers, and any workers testify about removing asbestos, and I read the

Page 31

depositions of the men over in Huntington -- they worked at a place where they were taking the asbestos out of the engines, I learned after I worked there, so forth, those things probably don't need to be there either.
MR. SHAPIRO: All right, Your Honor. What page --
THE COURT: Anything like that.
MR. SHAPIRO: What page and line did that start?
THE COURT: That was on Page 43, ending on Page 44.
MR. BAKER: Okay. I got that, that would be Pages 43, Lines 2 through 25 and Page 44, lines 1 through 5?
THE COURT: I wasn't trying to be all inclusive there, I was just saying things like that don't need to be in there.
We've already said that anything other than they agree on anything other than engines, cabooses and brake shoes, although I know there's one reference to brake shoes that he found out about brake shoes because somebody told him about brake shoes.

Page 32

MR. BAKER: For example, on Page 47 it says, "Did you ever see workers, you know, handling asbestos or replacing it?"
And he says, Answer: "Well, they were handling brake shoes and they were -- they were handling brake shoes."
And then he asked him, "Let me ask you about brake shoes. Did brake shoes have asbestos in them while you were working for the railroad?"
Answer: "Yes."
That would have to be based on hearsay.
THE COURT: He says on examination --
MR. SHAPIRO: But he says how he knew.
THE COURT: "How do you know that the brakes had asbestos?"
Answer: "The carman said they were asbestos."
MR. BAKER: That's out.
What about this statement about --
MR. SHAPIRO: Wait a second. You mean that's okay.

Page 33

MR. BAKER: On Page 48 --
THE COURT: He doesn't need to tell him what somebody told him about it.
MR. SHAPIRO: But isn't that -- I mean, that's an agent of CSX.
MR. BAKER: A carman?
MR. SHAPIRO: A carman is an agent of CSX that works for the railroad. Doesn't matter that he's not a supervisor.
MR. BAKER: Your Honor, first let me just give you -- this is another example of the real world that we are dealing with in this case --
THE COURT: Well, you are going to establish brake shoes some other way anyway so that's not important.
What is the next thing you started to mention?
MR. BAKER: Are we excluding this hearsay statement?
THE COURT: Yes.
MR. BAKER: Okay. Let me reground myself right here.
Page 49, Lines 13 through 20, we say would require expert industrial hygiene

Page 34

support to establish that asbestos fiber from brake shoes on the train somehow or the other made its way into the caboose.
MR. SHAPIRO: Don't agree with that, Your Honor, he is just merely describing that brake shoe dust --
THE COURT: He said when they're going down the mountain when they put the brakes on, the dust comes in there.
MR. BAKER: What kind of dust? I don't mind him saying dust comes in there. Obviously, he can say dust comes in there. How in the world could he say that the dust that came in there was respirable dust and the dust contained asbestos fiber from a brake shoe?
THE COURT: His answer was smoking dust from brake shoes would come into the cab -- caboose.
MR. BAKER: Well, how in the world would he know that?
THE COURT: I guess he was there.
MR. BAKER: So did he go out and look at the brake shoes and establish that there was dust emanating from the brake

Page 35

shoes that somehow or the other made their way into the cab of the caboose?
THE COURT: I don't guess a train is any different from any other kind of vehicle when you put the brakes on and leave them on for a long time, you tend to know it.
Whether it's asbestos or not, that's something else. He doesn't even mention that there. He just says smoke and dust came in there when they put the brakes on coming down the mountain.
MR. BAKER: Okay. On page 49, Your Honor, Lines 13, the rest of that page and then the next page, he's asking about dust in the air, and he is describing, as he should be able to describe, the fact that he's in the caboose and he sees -- detects dust coming in.
What we object to is his saying that the brake shoes contained asbestos. What does asbestos brake shoes have to do with you riding in a caboose, if anything?
It seems to me that they have the duty to prove to the jury that the brake

Page 36

shoe that was on the train actually had asbestos in it. Some did and some did not for a short period of time.
And when friction is created between the wheel, the metal wheel and the brake shoe material, it creates intense heat and it creates something called "forsterite" which is a non-pathological type of substance that is not asbestos anymore, and if there's dust that comes from the brake shoe that somehow or the other --
THE COURT: As I pointed out, he didn't use the word "asbestos." Take the word "asbestos" out of the question and we'll be good to go.
MR. SHAPIRO: So on Page 40 --
THE COURT: 49 --
MR. SHAPIRO: 49 you talked about brake shoes?
THE COURT: Right.
MR. BAKER: Just take the word "asbestos" out.
THE COURT: What does brake shoes have to do with you riding in a caboose.
MR. BAKER: Okay, Page -- let me

Page 37

look at this real fast.
This may be one we already agreed on.
MR. SHAPIRO: He talks in the end about asbestos in the train cars also, Mr. Baker, I don't know if you raised that.
I'm not sure of all of your designations.
MR. BAKER: On Page 51, we've already agreed to take that out. That's already been ruled upon and by your agreement.
MR. SHAPIRO: Yes. Where he talks about the cars.
MR. BAKER: And on Page 60 --
MR. SHAPIRO: What about on Page 51 and 52, he talks about asbestos riding in open cars, did you not object to that?
MR. BAKER: Yes, we did.
MR. SHAPIRO: I'm reminding you about your own objections.
MR. BAKER: Thank you very much.
MR. SHAPIRO: Let me just start this way, Your Honor. The reason we think it's admissible is there are government

Page 38

regulator documents that confirm that there was asbestos piping in scrap metal brought to the Witherspoon scrapyard and the government regulator memos state that they actually came out there, required the contractor to remove some asbestos from Witherspoon so it's corroborating that Mr. Payne, he also, I believe, I'm not sure it's in this passage, a bunch of the workers knew about this because of the contractors coming out there with space suits and stuff.
MR. BAKER: It's at Page 51, Lines 19 through 25 and Page 52, Lines 1 through 25.
And what this relates to is it's their contention that this gentleman would ride in open gondola cars containing metal, metal, and that he would do that from the West Knox Yard for a distance of about a mile and a half to the Witherspoon facility. He's a little bitty guy about 5'6". And how he did that I'll never know, but he says he did and that's their proof.
Witherspoon, the proof from Witherspoon is that about five percent of

Page 39

their business, five percent of their business involved low grade -- handling of low grade radioactive scrap, five percent. And they would bring in these gondola cars all kinds of stuff and what he is endeavoring to say is that the stuff in there, if it was wrapped in anything, had to contain asbestos.
So once again here we are, we got him saying that it contained asbestos when he didn't know if it contained asbestos or fiberglass or whatever and we are just talking about a few pipes, apparently in the scheme of things, if any, and --
THE COURT: Look on Page 52, says, "They just jerked out the pipes and still left them wrapped in all that. They still had the wrapping on them and it was asbestos."
MR. BAKER: Right.
THE COURT: Well, why can't he say that?
MR. BAKER: How do he know?
THE COURT: That's what cross-examination is about. I mean, if he

Page 40

came in court and if he were able to come to court and he testified from the witness stand, I saw these things and they were asbestos --
MR. BAKER: Once again, I go back to the fact that in order to be able to say that that you have to have some knowledge about asbestos and in order to be able to say something contained asbestos or not.
That pipe up there, well, it's wrapped in -- it's painted this color. Well, I think that's asbestos paint. Now, should I be allowed to say that if I was a witness? And that would be okay?
THE COURT: If you say that you know about that sort of thing and that is the sort of thing that a lay witness can know about.
MR. BAKER: Don't they have to prove how do they know?
THE COURT: That's why we have cross-examination. I assume you went in some detail later on about that.
MR. BAKER: I haven't memorized the rest of it.

or before.

And now Mr. Shapiro may say well that necessarily means that it was higher in '85 than it was in 2007, but his expert didn't say that, Your Honor. And there was remediation, extensive remediation done, soil brought in, soil taken out.

What happened in 2007 is no indication of what Mr. Payne was exposed to before 1985.

THE COURT: Okay. What else do we need to talk about?

MR. SHAPIRO: They raised OSHA again, and our side would be you had already ruled on this two hearings ago --

MS. YOUNG: Can I just interrupt you just a moment?

MR. SHAPIRO: Yes.

MS. YOUNG: Your Honor, we just want to make a motion here today, very briefly, for the same reasons that we asked that the Court rule out any reference to evidence or the argument of plutonium, we also ask the Court to do that regarding cesium.

There is some indication that there was some cesium, which is another ionizing radiation on some tracks over near Y-12. The plaintiff has no evidence by expert or otherwise that Mr. Payne was exposed to that or that it was -- again, he has no expert testimony that cesium was found in an area where Mr. Payne worked.

So I won't belabor it, but for the same reasons that the plutonium should stay out, the cesium should as well.

MR. SHAPIRO: The response, since this has not come up before, Your Honor, is Mr. Payne did work for about a year of his career doing work for CSX over near Oak Ridge. There's a spur over there. I think we barely ever talked about this. So that's a very small part of his career.

He talked about it in his video deposition and even marked a map showing where he had worked over there.

Well --

MR. BAKER: So what?

MR. SHAPIRO: Mr. Baker says so what. Here's the so what, Mr. Baker.

Mr. Badders, your industrial hygienist, was asked in his deposition if CSX was aware that radioactive contamination was over at the Oak Ridge spur and that there was some remediation of the tracks done, and that's your industrial hygienist. So we have evidence of contamination over there. And I believe that the word cesium, I will have to look back at Mr. Badder's deposition, I think it was discussed in there.

MS. YOUNG: It was. And what Mr. Badders testified to is that there was some cesium well off the track -- let me say it was 50 feet or so away from any track that Mr. Payne was ever on. And that is Mr. Badders' testimony.

There is no other testimony from -- or report or any document which evidences from the plaintiff's burden that Mr. Payne was exposed to cesium. There's not even an expert opinion in the case that cesium that's 50 feet off of a railroad track, you know, somehow, you know, affected Mr. Payne. And that's, in our opinion, Your Honor, what he has to have to be able to talk about

is not evidence, we'll have to see what the actual evidence, whether that's proved or not. Sometimes that's a better and a more satisfying thing to do with the jury rather than just have them sit and wonder about things that we don't talk about.

The Hunley document I don't think we should mention in opening statement. I'm still not sure about that or even how it comes in.

And these other things, the Court is not inclined to make any ruling now, if you have any objections to be made the Court's basic response to those in the opening statement would be as I've instructed you, these opening statements are not evidence and we'll have to see from the actual evidence whether that or anything else is proved or is not proved or is mentioned or not mentioned. So that's where we are on that.

MR. BAKER: May I ask a clarifying question?

THE COURT: Yes, go ahead.

MR. BAKER: This plutonium, there's

no evidence that it was where he was, there's very little --

THE COURT: That's true. And there again, if they want to say there was plutonium all over the place and the evidence doesn't support that, that's maybe a way to try the case better than just never mentioning it at all. If they want to --

MR. BAKER: Well, they've got the evidence about the uranium and the different isotopes of uranium, but the plutonium is such a -- the reason we are really objecting to it has to do, I understand why you are objecting to it. I'm not sure I see it's that prejudicial myself, but -- so we'll just see what happens. And like I say, if they want to mention there was plutonium and everything else out there and you want to stand up and say I object, it will not be the proof, then the Court will say, again, these statements are not proof, we'll have to see what the actual proof is. And see what happens after that. That will be true of a lot of things with the exception of that Hunley piece of paper. I don't want to

A. Can I look at my notes?
Q. Yes.
A. He began it on November the 8th of '05.
Q. And so how long did he take chemo?
A. He finished that first round on April 25th of 2006.
Q. All right. Overall, how long did he have to go through chemo?
A. He went through four years of chemo.
He had 43 chemo treatments and then 44 radiation treatments, and then 39 more chemo treatments by a pill that he took every day.
Q. Let me show you what's been marked as Exhibit 41. This is a chart that kind of outlines his chemo treatments through the years.
Is that --
A. I think so, yes.
Q. And the chart shows the chemo treatments in '05, '06, '07, '08, and '09, and so we are talking these three years, right?
A. Uh-huh.
Q. Here's a chart we can look at.
So the red marks are what?

A. This one has less effects on me. My legs and feet are the things that it -- most people have trouble with.

Q. How does it affect you?

A. I can't keep my legs still at night which keeps me from -- prevents me from going right to sleep. And my feet sometimes just feel like they're not there.

Q. Did Dr. Kerns give you any medicines for those type symptoms?

A. No, it's just one of the -- it's just one of the symptoms of the chemo.

Q. When you retired in 2003, were there any health conditions that were preventing you from doing anything you wanted to do?

A. No.

Q. Had you already had some treatment for some skin lesions by 2002, 2003?

A. Yes.

Q. Were you seeing a dermatologist for that?

A. Yes.

Q. Did that limit you in any way in your daily activities?

A. No.

Q. I want to talk about in general terms your medical expenses. Are you claiming the medical expenses in this case that relate to your cancer treatment?

A. Yes, I am.

Q. Are you claiming those medical expenses from when? When are you claiming them, from when --

A. From October 25th --

Q. 2005?

A. -- 2005.

Q. Okay.

A. Until present and future.

Q. Are you claiming your prescription medications that were prescribed for cancer?

A. Yes.

Q. What about medical expenses after now that are for your cancer, are you claiming those?

A. Yes, I am.

Q. Let me ask you some questions that are a little different instead of medical expense here. Have you suffered pain as a result of the cancer?

A. Oh, yes, quite a bit of pain.

Q. Well, what type of pain?
A. Bones aching and headaches, vision problems.
Q. Have you suffered fatigue?
A. Oh, yes.
Q. How so?
A. I just don't feel like doing anything, just too tired to do anything.
Q. How many chemotherapy sessions have you had up to this time?
A. Forty-three.
Q. How do you know the number?
A. I counted them up the other day.
Q. Has food had the same taste for you?
A. No.
Q. Has suffering from the cancer and all the treatment had any effect on your sexual relationship with your wife?
A. Yes.
Q. I don't want the gory details, but how has it affected your relationship?
A. Well, first of all, I'm just too tired. And second of all, I don't have the urge.
Q. Has your cancer affected your

ability to interact with your grandchildren?
A. Yes.
Q. I mean you still get to see them, don't you?
A. I see them if they're not sick. If they have anything at all, I do not get around them.
Q. Why?
A. Because my immune system is so low.
Q. Have you still been undergoing the treatment watching your thyroid? I mean have you gone for follow-up thyroid aspirations?
A. Just the PET scans is all they look at.
Q. Have you still been going to have those looked at?
A. Yes, I have a PET scan every four months.
Q. I want to talk to you about your interaction with your wife at home now, okay. Can you help out with the household chores the way that you did before you were diagnosed with the cancer in October 2005?
A. No.
Q. Tell me some of the ways that this cancer and treatment has affected that.

A. Well, first of all, I used to help clean the house, I like to cook, and I did a lot of cooking, and I always liked to work landscaping in the back of our condominium.

And now I don't do any of that. I used to keep my cars all cleaned up, waxed all three of them, and now I have it done. We have a bonus room above our garage, and I can't go up there without having to sit down and rest if I ever make it up the steps, so I don't even go up in the bonus room.

Q. How do you keep a positive attitude about the future?

A. Because of God's grace.

MR. SHAPIRO: Let's take a break right now, okay. We're going to take a quick break.

THE COURT: Why don't we stop it right there. We will take our morning break and come back for about 15 minutes, then we'll come back.

(Off the record at 10:27 a.m.)

(On the record at 10:48 a.m.)

THE COURT: Okay. Turn the machine back on then.

to observe?

A. Yes.

Q. Did you have to look out the window or just basically keep an eye along the window?

A. No, you looked out the bay window.

Q. Okay. Were those cabooses air conditioned?

A. No.

Q. When you worked a caboose, would it sometimes be on a fairly long train?

A. Yes.

Q. And did you work on trains that left Knoxville and went toward, where did you say, Etowah or Corbin?

A. Etowah to Corbin, Knoxville to Corbin.

Q. Okay. Did any of those trains -- well, let me ask it this way. You talked about brake shoes. What does brake shoes have to do with you riding in a caboose, anything?

A. Well, when we came off the mountain, the engineer had to have the brakes on probably fifty percent of the time, so the smoke and dust from the brake shoes would come right into the caboose.

Q. So from the car immediately ahead of the caboose brake shoes?
A. The whole train would be smoking, the wheels, yes.
Q. Was there enough smoke that you could see it?
A. Yes.
Q. Would the dust get inside the caboose?
A. Yes.
Q. How do you know?
A. Well, you could see it, especially when -- sunlight, bright sunlight.
Q. How do you know that smoke or dust was from brake shoes?
A. Because there was no other ground dust or anything unless it was the ballast, which is white.
Q. Would that dust land on you?
A. I'm sure it did.
Q. Did you ever observe it on your clothing?
A. No, I didn't.
Q. Could you see it in the air?
A. Yes, you could see it in the air.

Q. Why didn't you complain?
A. It didn't do any good for one thing, and the next -- didn't even know that asbestos was dangerous until fifteen or twenty years later.
Q. All right, sir. I want to turn your attention now to radiation or radioactive substances. Do you believe you were exposed to any radioactive substances while you worked for the railroad?
A. Yes.
Q. Did the Louisville and Nashville Railroad, the L&N, have an exclusive relationship with Oak Ridge nuclear facility?
A. Yes, they did.
Q. Were they the only railroad that moved their scrap or cargo by railroad out of that facility at Y-12?
A. I don't know whether the Southern was in there or not. Southern was close by. I don't know whether they handle scrap or not.
Q. Did CSX have a small spur track in the little yard area right beside Oak Ridge to handle the cargo?
A. Yes.

Q. Was that called the CSX spur?
A. (Witness shakes head negatively).
Q. What did you all call it?
A. Oak Ridge spur.
Q. Oak Ridge spur.
A. Yeah.
Q. Did you handle cargo from Oak Ridge to the West Knoxville yard for some period of time?
A. Yes.
Q. And what decade was that in?
A. The '80's.
Q. So we talked about this earlier in this case. Was it about one year that you actually worked the job called the Oak Ridge job?
A. Yes.
Q. How many days a week did you work that job typically?
A. Typically, Monday, Wednesday, and Friday, three days a week.
Q. Okay.
MR. BAKER: Can we go off the record for a second?
MR. SHAPIRO: Sure.
(COLLOQUY OFF THE RECORD)

BY MR. SHAPIRO:

Q. We were talking about the Oak Ridge facility and your work there, sir. And I wanted to show you a sketch here and ask you if you can identify generally what that's showing.

A. Yes, it's showing our main line coming from the CSX yard --

Q. Okay.

A. -- up to the crossing.

Q. Why don't you put a little arrow where this little crossing is or where you said there's a security guard, just put a little line so everyone knows there's a line across there.

A. (Witness complies with request).

Q. Okay. There's a little line. And then does that show a siding where you would leave cars near the Y-12 plant?

A. Yes. All this here, we may go to the left or whichever track is clear.

Q. Why don't you put a circle all the way around the railroad tracks that you're calling the siding, just circle that whole area, please.

A. (Witness complies with request).

Q. Okay. Why don't you put a little "A" below it so we know that that circle has got the

"A" on it.

A. (Witness complies with request).

Q. Okay. Did you also work on any other tracks shown in that sketch?

A. Yes.

Q. And what do you call that other set of tracks that runs, I guess the other direction?

A. The team track, industrial team track.

Q. Okay. Is that to call on Oak Ridge industries that were beyond the Y-12 plant?

A. Yes, it had tracks, cars to unload.

Q. Why don't you put a circle around that whole set of tracks and we'll put a "B" next to that.

A. (Witness complies with request).

Q. Okay. There's a track that comes toward the top of the page here and it cuts off. Can you give us -- where does that track go as it would leave toward the top of the page in this sketch; where does that go?

A. Back to the CSX yard and to the main line.

Q. Why don't you just put an arrow and put "to CSX yard."

A. (Witness complies with request).
Q. Okay. Now, this sketch has got the number thirty-one on it. Let me ask you this, Mr. Payne. These circled areas here during that year that you worked there, did you travel on those tracks each of the days that you would go there?
A. Yes.
Q. Did you walk along the ground to do your work?
A. Yes.
Q. Why would you be on the ground level doing your work?
A. We would have to bring the train in and I would have to cut the cars off and put the hand brakes on them, and then go back around the other way and pick up the cars that they have coming out and do the same thing, couple up the air, let hand brakes off and then couple the train up.
Q. I'm going to mark a few of these pictures so we keep these organized and mark them with an exhibit sticker later. And I'm going to mark the pictures of the locomotive first with a small number on the bottom right.
MR. BAKER: How are you marking those, just sequentially? Are you making

those exhibits?

MR. SHAPIRO: Yes. I'm marking them one through -- I'll call it out as soon as we get it done here. I marked these pictures of these various exemplary engines and cabooses as one through seven. There's a small number on the bottom.

(EXHIBIT NOS. 1 THROUGH 7 MARKED AT THE DEPOSITION)

MR. SHAPIRO: I'm going to mark this sketch of the Oak Ridge area as number eight at the bottom right. Give me one second here.

(EXHIBIT NO. 8 MARKED AT THE DEPOSITION)

Q. (BY MR. SHAPIRO) When you moved shipments and cargo out of the Oak Ridge area, what type of materials did you move, what type of cargo?

A. When I worked the local?

Q. Yeah, when you worked out of Oak Ridge that year?

A. Okay. Mostly box cars and helium cars.

Q. And was there any scrap metal that was moved?

A. No.
Q. Were there any specially marked cars that you would move in or out of Oak Ridge? Were there any specially protected cars?
A. Protected cars, yes.
Q. How were they protected?
A. By Oak Ridge security guards.
Q. As a transportation worker, how close were you to these special cars, what did you have to do with them?
A. Just couple the air to them and let the hand brake off and on.
Q. Were these guards armed?
A. I have no idea.
Q. Where did you move the cars from Oak Ridge to?
A. From the spur to West Knoxville yard.
Q. Were any of the cars or the cargo marked with radioactive symbols?
A. No.
Q. Were you as a worker advised of what was -- whether any of the cargo was hazardous or radioactive?
A. No.

Q. Now, let me turn your attention to the other parts of your forty year career besides the one year that you called on Oak Ridge. When you called -- when you worked out of the West Knoxville yard, other parts of your career, did you handle cars that were being moved out of Oak Ridge?

A. Yes.

Q. How did you know that it was a car that was from Oak Ridge?

A. It would show on our switch list that it was the local, what track he was in and that we had to switch it up.

Q. And then when you got those cars and you made them part of your train, did you call on this Witherspoon Scrap Yard during a part of your career?

A. Yes, I did.

Q. And you worked for the railroad from the early '60's through to 2003. During what part of your career did you from time to time call on the Witherspoon Scrap Yard?

A. All of it except the eight years I was on the road, and up until they closed Witherspoon down.

Q. And was Witherspoon Scrap Yard

closed down in 1993?

A. Yes, it was.

Q. And did you learn why it was closed down?

A. Yes.

Q. Well, when you would work for the railroad taking cargo from West Knox yard to Witherspoon, did you have to cross a railroad bridge over the Tennessee River?

A. Yes.

Q. Let me show you two pictures here and ask if you can identify what those aerial pictures show.

A. Yes, that's the river bridge.

MR. SHAPIRO: I'm going to mark these, they're just slightly different, as number nine and ten in the bottom right corner.

(EXHIBIT NOS. 9 AND 10 MARKED AT THE DEPOSITION)

Q. (BY MR. SHAPIRO) And let me ask you if you can identify this.

MR. SHAPIRO: I'm going to mark for identification these as number eleven and number twelve in the bottom right.

(EXHIBIT NOS. 11 AND 12 MARKED AT THE DEPOSITION)

Q. (BY MR. SHAPIRO) What do these two pictures show, sir?

These are what we call Meagons (sic).

Q. Is that a type of car that you ever worked with in your career with the railroad?

A. Yes.

Q. And is it also called an open top gondola car?

A. Yes.

Q. Were gondola cars used for scrap, for example?

A. Yes.

Q. Were they used also for other types of things like --

A. Logs, wooden logs and --

Q. What about metal drums occasionally?

A. Oh, yes.

Q. During your career, did you switch cars like these cars, open top gondola cars, with cargo from Witherspoon -- from Oak Ridge that was going to be transported to Witherspoon Scrap Yard?

A. Yes, I did.
Q. And I guess -- I want to tie in why I asked you about this railroad bridge and these cars. What was the significance of the railroad bridge here across the Tennessee River and these open gondola cars with relation to scrap going to Witherspoon?
A. That was what we would have to ride in in order to go over -- protect the rear of the train and go over to Vestal.
Q. So let me make sure I understand what you're saying. A worker would have to ride inside those cars?
A. Yes.
Q. I still don't understand. Why did they have to have a worker inside the cars as opposed to somewhere else?
A. So I could look out for the rear of the train that was being shoved.
MR. BAKER: Being shoved.
MR. SHAPIRO: I'm making sure the jury understands. Mr. Payne, has told me already. I want people to understand. I happen to understand.
MR. BAKER: That's nice to know.

MR. SHAPIRO: Okay.

Q. (BY MR. SHAPIRO) So, Mr. Payne, are you talking about every time that you had to take a train south toward the Witherspoon Scrap Yard, if you were working the train, did you have to ride inside this car?

A. Yes.

Q. When you rode inside these cars, were there ever metal drums from Oak Ridge for Witherspoon?

A. Yes.

Q. Were any of the drums ever plaquered or marked in any particular way?

A. Yes.

Q. And did any of them have a radioactive symbol?

A. Yes.

Q. Was this once, was this a lot of times, what are we talking about?

A. A lot of times. When I first started work in 1962 and '63.

Q. So particularly at the beginning of your career?

A. Yes.

Q. And how close would you be to these

drums?

A. I'd be right next to them, inside with them.

MR. SHAPIRO: Mr. Videographer, can you quickly -- let's see here.

Q. (BY MR. SHAPIRO) It's kind of low tech, but is that an example of an open Meagon car?

A. Yes, it is.

Q. And would you be situated inside the car across that bridge?

A. Yes. If this was the rear, I would be right here (indicating).

Q. And what does this show, sir?

A. That shows a radioactive drum.

Q. Is this the type of appearance of a drum that you would ride inside the car with?

A. Yes.

Q. When you did that job, did anyone from CSX or L&N, I guess in the '60's, give you any type of special instructions on handling this type of cargo?

A. No, they did not. It was just another car.

MR. SHAPIRO: I'm going to mark

this barrel exemplary picture as number thirteen.

(EXHIBIT NO. 13 MARKED AT THE DEPOSITION)

Q. (BY MR. SHAPIRO) How many miles -- is that -- how long would you have to stay in the car time-wise from getting in it, riding across the bridge to getting out of it?

A. Well, sometimes we wouldn't even be able to get across the bridge because of another train, so you would stand there in the car until the train got by, then you would go over to Vestal, which is about three miles total, two to three miles total.

Q. How long would you be situated in a car?

A. Well, it was according to whether or not you had to wait on trains or wait on a track man.

Q. Give us a range of time.

A. Thirty minutes.

Q. Then at some point you would be able to drop down out of that car?

A. Yes.

Q. Where would you ride after that?

When you get to -- you wait until you got to the industry and then you dropped down?

A. Yes. If we were just going to work Witherspoon, I would stay in the car until we got all the way up to the crossing, to the Candora Crossing.

Q. Were there any other types of materials inside the gondola cars that you rode in besides drums, for example?

A. Yes.

Q. What other types of things were in the open gondola cars?

A. Scrap metal.

Q. Did you know whether that metal was from Oak Ridge for Witherspoon?

A. Yes.

Q. What did Witherspoon do with metal?

A. They cut it up, they crushed it, they chopped it up, baled it, and then would sell it.

Q. Did you ride in cars with scrap metal?

A. Yes.

Q. Did you know whether it was

radioactive scrap metal?

A. No.

Q. Did you know whether Witherspoon had a license to handle radioactive metal from Oak Ridge?

A. I have no idea.

Q. Was that one of the main things they did, handle the scrap metal at Witherspoon?

A. Yes.

Q. Well, once they handled the metal and crushed it or whatever the things that they did there you described, did you ever have to take that scrap metal in the cars out of Witherspoon somewhere else?

A. Yes, back to West Knoxville yard.

Q. Was that routine or a rare event?

A. Routine.

Q. Did they have a smelting area at the yard at Witherspoon where they smelted metal?

A. Where they melted it like melt?

Q. Yes.

A. No.

Q. What about smelting it? Do you know what smelting is?

A. Well, you just said, isn't it

melting the metal down?

Q. I'm not going to put words in your mouth. You're just not sure about whether it was a smelting process or not?

A. They cut it, they crushed it, they baled it.

Q. Okay. Let me show you a few diagrams here. Let me show you a little site layout and ask you if you can identify that, sir.

A. Yes.

Q. Is this the Witherspoon scrap yard area?

A. Yes.

Q. Can you -- well, we haven't really gotten there yet. Tell us what you did -- when you would work for the railroad and you would take cars to Witherspoon, explain generally what you did and what your work was to go in and out of there before we mark anything. Just tell what you did there.

A. Okay. We would shove, shove all the way up to Candora Road, then we would unlock the gate, and then we'd go in -- well, we would stay there until the foreman -- if I was foreman, I'd walk back and see if I could find the yard boss.

Q. A Witherspoon yard boss?

A. Yes. And see what he wanted, where he wanted the cars. If I was the field -- what they call the field man, I'd walk with the foreman back, because I had to do the work. If I was the engine man, I'd still be on the engine.

Q. Typically, because of the size of the Witherspoon area that can receive cars, what was the number of cars that you would take in to drop there?

What was the range of number of cars?

A. The whole area will hold fifteen cars, but five cars underneath the shed, underneath the magnetic house shed.

Q. And was there a -- so did that define the maximum number you would move out of Witherspoon if they had work for you to take scrap out of there?

A. If the track was completely full, yes, we'd have fifteen cars.

Q. So you would have to get on the ground if that was your particular duty and find their foreman to determine the scope of what you would do that day?

A. Yes.

Q. And what would you have to find out, how many cars you were pulling out of there?
A. Yes. If he wanted them on the rear of what was in there now or what.
Q. On that sketch, before we get into marking it as an exhibit, explain for the jury what type of process they had there, or did they have any work ongoing in the area where you would drop the cars?
A. Oh, yes, they continued work.
Q. What type of work and what type of machinery did they have?
A. There were welders up there cutting heavy stuff, there were -- the magnet was going across the track picking up scrap out of cars, throwing it over on the bank or picking it up and throwing it into a baler or a crusher.
Q. Let me show you this picture and ask if you can identify this aerial picture.
A. Yes.
Q. What does that show?
A. It shows the track going into what they're calling the magnet house.
MR. BAKER: May I see which photograph we're using there?

MR. SHAPIRO: Yes, certainly.

MR. BAKER: Okay. Thank you.

Q. (BY MR. SHAPIRO) Mr. Payne, I want you to take that black magic marker and circle or with a rectangle put a black line around the entire area that you would work on. I realize this is an aerial. It's not necessarily a great view.

A. Yeah. (Witness complies with request).

MR. SHAPIRO: Let me go ahead and make this the next exhibit. Make this exhibit, I think we're up to fourteen. And, Mr. Videographer, maybe you can zoom in on that some.

(EXHIBIT NO. 14 MARKED AT THE DEPOSITION)

Q. (BY MR. SHAPIRO) You put the black line around this area here, sir?

A. Yes, I did.

Q. I don't know if the videographer can get anything on this, but there's a -- you can see a rust color, sort of a roof of some kind here. And did you come in from this direction when you came to Witherspoon from Knoxville?

A. Yes.

Q. I think in the background you can actually see some of the buildings in Knoxville here.

A. Yes.

Q. So you bring the train over the bridge, down through here, and then -- so is this where the tracks were, the area you've circled?

A. Yes, the track was in between the circle.

Q. Which side of this big circle was the gate at that you described when you would enter?

A. This end here.

Q. So the end closest to Knoxville proper?

A. Yes.

Q. You described a magnet, and it took me awhile to understand what you were talking about. There's two big metal girders over here. What do you mean when you describe the magnet? What did it do and how did it work?

A. That's what the magnet ran on was the rails. Those are rails right here. He could come all the way back here to do work.

Q. So a crane operator could move a big magnet along those girders back and forth --

A. Yes.
Q. -- over top of the cars?
A. Yes. He was in a control box up above, and he ran backwards and forwards.
Q. So the magnet would go down over the cars, pick up metal, and then it would have a crane that could move it off to the side of the track?
A. The magnet would move it, set it over beside of the track up on the bank.
Q. When you went in there and you walked the track, were they doing that work while you were there?
A. Yes.
Q. Were there heaps of metal to the side of the tracks that you would walk along?
A. Yes.
Q. You described a process where they crush scrap metal. What did they do; if they crushed it into a bale? How did they get it back into a car?
A. With the overhead crane.
Q. And so where did they set off the cars for you to pick up, were they still right on the same track here, or were there two tracks?

A. No, there was only one track. We switched. There's a little spur track right here that they stored old engine in for a long time.

Q. When you called on this particular industry on a particular day, what's the range of time that you would be in there working?

A. At least one hour.

Q. Were there times that you were there more than an hour?

A. Oh, yes.

Q. Were there times that you were there less than forty-five minutes?

A. No, I doubt that.

Q. Did you ever see dust in the air when you were there?

A. All the time.

Q. Now, did you call on Witherspoon up until the time they closed?

A. Yes, except for the time that I was on the road.

Q. Right. So from the period, except for the eight years in there, you worked from the '60's through to the, I guess till early '90's?

A. Yes. I was in there hundreds of times.

Q. When you were there, did you ever observe any metal barrels marked with any radioactive symbols on the ground?
A. Yes.
Q. How long were those barrels there? Were they there a few days, a few weeks, what are you talking about?
A. They were there when I left the railroad.
Q. Over how long a period of time were those barrels setting on the ground at the Witherspoon area?
A. From 1962 until 1993.
Q. Forty years?
A. (Witness nods head affirmatively).
Q. Why would the barrels sit on the ground next to the track for forty years?
A. I do not know.
Q. How many are we talking about?
A. I don't know.
Q. Less than twenty, more than twenty?
A. Around twenty or thirty. I don't know. I never counted them.
Q. Why do you remember them?
A. Because I took them over there, and

you just say, man, I brought these over there forty years ago, thirty years ago.

Q. You never learned from anybody over at Witherspoon why they sat there all that time?

A. No one told me why they were sitting there, no.

Q. In the entire time you worked there, did L&N or CSX ever give you any training about the handling of any radioactive waste that you were handling or transporting?

A. They never said one thing to me about radioactivity, asbestos or any hazard, any chemical hazard.

Q. Well, did you ever complain about the conditions at that yard ever?

A. Yes. Yes, I did.

Q. What type of complaint did you make?

A. About the dust and the dirt and the mud and the water.

Q. Did you know -- as you're walking there beside these barrels, did you know whether you got radioactive exposure on any particular moment you were working there?

A. No, I wouldn't know. I was never

given any test or anything, so I didn't know what radioactivity amount was or whatever. But the bottoms of the drums started rusting out, and you could see the rust ring around the bottom of the drums.

Q. The ones you're referring to that sat there all those years?

A. Yes, sir.

Q. Let me show you one more sketch here. Actually, we didn't mark this first sketch because we got to talking about other things. Please circle the area on that sketch that encompassed the areas that you would work during all your times there.

A. (Witness complies with request).

Q. Can you put a line out to it and just put "A" so we know that circle is what you're marking.

A. (Witness complies with request).

Q. Okay. You mentioned to me there were some other industries that you had to travel to near Witherspoon; is that true?

A. Yes.

Q. And the track that you just marked, did you have to go through there to go to those

industries also?

A. Yes, I did. You had to go all the way back, open another gate, and then back to the warehouse.

MR. SHAPIRO: I'm going to mark this as number fifteen. And let me show you what I'm going to premark as number sixteen which is another sort of plat like thing here.

(EXHIBIT NOS. 15 AND 16 MARKED AT THE DEPOSITION)

Q. (BY MR. SHAPIRO) Can you generally tell us whether that shows this area next to Candora Road also?

A. Yes.

Q. Can you put a big rectangle around the general area that's the Witherspoon area on there?

A. (Witness complies with request).

Q. Try to make it with some squiggly lines so it doesn't get mixed up with what's already there.

A. Yeah.

Q. Put a line out a little distance from it and put an "A", okay?

A. An "A" or a "B"?
Q. Or "B", whatever.
A. (Witness complies with request).
Q. Let me show you another group of pictures just to ask you if you can identify these pictures and what is --
MR. SHAPIRO: I'm going to mark these seventeen through twenty because they're all aerials.
Q. (BY MR. SHAPIRO) And can you tell us whether these are all different views of that Witherspoon area you've been talking about?
A. Yes, they are.
Q. Now, you didn't take those pictures, did you?
A. No, I did not.
Q. You're not sure who took them, are you?
A. No.
Q. But you can tell that's the Witherspoon yard; right?
A. Yes, it is.
Q. And you're not sure what year those were taken, are you?
A. No.

Q. As a matter of fact, you can tell that this must be subsequent to the time that they closed it down; right?
A. Yes.
Q. And you can tell that, why, because none of the operations are going on?
A. You can't even see the track because it's grown over.
Q. But there's a rusty sort of roof area and some girders there. Is that that magnet house area you were talking about?
A. Yes, it is.
Q. Did you call it the magnet house or --
A. No.
Q. What did you guys call it?
A. The shed.
MR. SHAPIRO: I'm marking these seventeen through twenty.
(EXHIBIT NOS. 17 THROUGH 20 MARKED AT THE DEPOSITION)
MR. SHAPIRO: I have a few more here, a different set of pictures, they're smaller. I marked them twenty-one through twenty-three.

(EXHIBIT NOS. 21 THROUGH 23 MARKED AT THE DEPOSITION)

Q. (BY MR. SHAPIRO) Can you tell us what generally is being shown in those pictures, sir? You don't have to -- I just -- can you tell whether that's the area near Witherspoon?

A. Yes. This is the main -- our CSX main line, and over here sets Witherspoon.

Q. Is that the shed or --

A. Yes, that's the same shed.

Q. So the track you see there is actually the main, not the one that goes right under the shed; right?

A. That's correct.

Q. And that's referring to twenty-two.

Is twenty-one -- well, in twenty-one here there's four pictures. Up here there's a gate in the top right of the four pictures. Do you have any idea whether that's a gate going into Witherspoon or not?

A. I do not. I don't know.

Q. What on these four pictures are you sure about? I mean are you sure that --

A. I'm sure that this is the shed. I'm sure that this is the main line. Right here,

I'm sure that this is the Witherspoon track, and there's the engine I talked about that was stored.

Q. That's the bottom right picture on twenty-one, there's just an engine that was stored there?

A. Yes.

Q. Did it stay there for years or was it just --

A. Witherspoon had bought that engine.

Q. I see. Okay. And then in twenty-three can you tell if that aerial is the Witherspoon area taken at some time?

A. Yes, I can.

Q. Do you know when this was taken?

A. No, I do not.

Q. At anytime you worked at Witherspoon up until '93, were you aware of whether anyone with the railroad did any tests for radioactive levels there?

A. I never saw one test or didn't hear of anyone doing a test.

Q. Did any supervisor ever say to you, you need to work one place or another because of any hazard at that site?

A. No, they did not.

A. Yes.
Q. In this type of engine, was this called a switcher engine, or what do you --
A. Yeah, a switch engine.
Q. When you would be in the engine moving in this direction I'm pointing, would the fumes trail -- where would the fumes trail?
A. Into the cab.
Q. It's hard to tell in this picture, but is this the cab here?
A. This is the cab, yes.
Q. Where were the windows?
A. The side windows was here and over here, and this was glass, but stable glass.
Q. Okay. Did any of those engines at any time have air conditioning?
A. No, they did not.
Q. Did you leave the windows open when it was hot?
A. Yes.
Q. Did the fumes trail into the engine cab at any time?
A. Yes, they did.
Q. How do you know?
A. You could see, smell, feel, taste.

Q. Did the fumes only come in through the side windows?

A. No, on the other side of the engine is the door that we came in and out of when we was going to the front of the engine. And the door always -- in the summertime, we would even have the door open too.

Q. Just because of the heat?

A. Yes.

Q. And even when the door was closed, did you notice whether fumes would get in through the door?

A. Oh, yes. None of the doors fit tight.

Q. Could you smell the fumes?

A. Yes, you could smell them.

Q. Could you see them?

A. You could see the fumes, especially in the bright sunlight.

Q. Well, did you work on this type of engine over a course of twenty years or so?

A. I'd say so, around twenty.

Q. Did the time that you would spend inside the cab of the engine vary depending upon your job?

A. Yes.
Q. Did the fumes ever get in your nose or did you ever notice it?
A. Oh, yeah. Yeah, your nose would always -- if you blew your nose, it was always black.
Q. During that period of time, did you ever complain to a supervisor, I'm in an engine that's got all these fumes coming in? Did you ever do that?
A. One time when we walked out of the yard office to get our engine, which was setting right in front of the yard office, it was so bad -- it was in the wintertime, and it was so bad that you could just see it laying over -- laying over in the engine, smoke and stuff was just laying over on the engine, and we just refused to work with it. That's the only time I ever said anything about it.
Q. Well, if it was like this on these engines all the time, why didn't you complain and register some sort of formal written complaint?
A. I didn't even know that diesel fumes was bad, that it, you know, was a hazard.
Q. While you worked out there for your entire forty-year career, did the railroad ever

offer you any training about diesel fumes?
A. No, they did not.
Q. Did they ever offer you a respirator or a mask to wear if you were uncomfortable about the level of diesel fumes in the cab?
A. Never.
Q. Let's talk about some of these other ones. Actually, is there something that you noticed about number four and number five of any significance?
A. They're the same engine number.
Q. So this is an L&N engine here?
A. Uh-huh (Affirmative).
Q. And then this 1147 appears to be the same engine marked with CSX?
A. Yes.
Q. About when did CSX take over L&N?
A. I don't remember the date, no.
Q. You were working for L&N for a long time, and then you said it was, what, Seaboard?
A. SCL&N.
Q. Seaboard Coastline --
A. Seaboard Coastline N.
Q. And then from there, did it go

talking about the way that it's headed?

Q. I'm just talking about the way that this particular engine is operated?

A. Oh, yeah, it reversed back and forth, yeah.

Q. So depending upon which way the engine is run, does it have an affect on the fumes and which way they go?

A. Sure it does.

Q. Here's a different L&N engine type here. Is this a general type of engine that you also ran during your career?

A. Yes, that's a jeeb.

Q. I notice there's black smoke here. Did you ever see black smoke like that coming out of an engine?

A. I sure have, yes.

Q. Were they all that bad?

A. Not all that bad. That's definitely a fuel line stopped up or something.

Q. In this picture, was the stack fumes when it ran in the normal direction, was the stack forward of where you were in the cab, this stack? In other words, was this engine -- which -- point and show us which engine that --

A. At West Knoxville. This engine here was always headed this way, north.
Q. Is that called long hood forward?
A. Yes.
Q. Now, were there other engines that were run short hood forward normally?
A. Yes.
Q. Is that an example of one?
A. Right, jeebs.
Q. What about this one?
A. Yes.
Q. You said you ran to Corbin, Kentucky. Over how long in your career did you do that run? Was that a road job?
A. Probably eight years.
Q. About eight years?
A. Yes.
Q. Were there any tunnels on the way to Corbin or back?
A. Oh, yes.
Q. When you worked inside a tunnel taking a train, how were the fumes when you would work through a long tunnel?
A. Terrible. If you had -- if you stopped to have trouble, if you had any trouble.

I've even worked in the tunnel with a wrecker.

Q. What does that mean?

A. Well, that means we had had a derailment, and we had a wrecker in there straightening up, fixing the cars, and you would have to be in there in the tunnel with them.

Q. When that would happen, how long would you be in the tunnel?

A. Well, we would try to rotate in and out because of the fumes.

Q. So were the fumes dense enough that you could see them?

A. It was so dark you couldn't see them.

Q. Dark from what, from the fumes or from the lighting?

A. From no lights. No lights in the tunnel.

Q. Was it hard to breathe when you were working in a tunnel like that?

A. Sure.

Q. During anytime that you worked up until the end of your career, did any of the locomotives that you regularly worked on have air conditioning?

A. No, sir.
Q. Let me talk about the '60's when you worked on these engines.
A. Okay.
Q. Was there ever a day that you worked inside an engine that you didn't notice diesel fumes while you were inside the engine cab?
A. No.
Q. What about the '70's, the same question. When you worked inside the cab, was there ever a cab you worked in where you didn't smell diesel fumes?
A. No.
Q. The '80's?
A. No.
Q. The '90's?
A. No.
Q. Did any railroad company official ever come inside an engine that you ever worked on in your forty years and say, Mr. Payne, we're going to check the air level inside this cab for diesel fumes?
A. No, they did not.
Q. During your entire career, did you ever while you worked out there learn from another

picture. This is an open top gondola car.

A. Uh-huh (Affirmative).

Q. Do you believe you were ever exposed to radioactive substances when you were inside the open gondola cars working for CSX?

A. Yes.

Q. What is it you are claiming the railroad should have done to protect you from radioactive substances? You just described where you believe you were exposed. What do you think CSX should have done?

A. I think they should have given me training of what to do in case we were handling or being close to radiation or asbestos or diesel fumes. They should have offered protective clothing, respirators, whatever it took to protect a man's health.

Q. Let me show you this document that I never identified earlier. It's a summary here. Does this summarize some of the medical procedures and diagnostic testing you had between October of 2005 and at least up through the spring of 2008?

A. Yes, it does.

Q. Are you also claiming any of your cancer related care and procedures since that time

A. Yeah, I'm sure they knew, yes.
Q. Did you ever ride inside gondola cars with scrap metal?
A. Yes.
Q. Let me show you a couple of these pictures.
Is that a picture of a gondola car?
A. Yes, sir.
Q. Is this a typical type of car or --
A. The ones we took to Witherspoon weren't that big, they were much smaller, sit lower and --
Q. Were the sides lower?
A. Yes, top to bottom they were lower, yes.
Q. Okay.
A. That's a high side. Generally, we didn't take that many high sides over there.
Q. Okay. So a low side would be about how many feet up would you estimate?
A. Well, some of them would be four, three and a half, four feet, on up to five or six feet.
Q. So if you were one of the men who was protecting that shove, what do you do, just

climb up in the car?
A. You climb up, climb over and find something to stand on and back him up.
Q. So that means this car is sort of the front end of the train and the engine is all the way at the back?
A. It's the rear of your shove. The engine is north of you and you are on the south car.
Q. Let me ask you to look at this artist's rendering here.
Do it this way.
Can you identify what that is -- what that rendering is attempting to show?
A. It's showing a shoving movement of a gondola with scrap metal in it.
Q. And see where that little human figure is there?
A. Yes, sir.
Q. Is that similar to the place that a worker may ride?
A. That's basically, yes, sir, you might have scrap in there, you might be sitting on top of that scrap but that's basically where you would ride.
Q. When you worked in the 70's, did

you take scrap destined for Witherspoon yourself?
A. Yes.
Q. Were you on crews with Mr. Payne from time to time?
A. Yes, I was.
Q. Did you guys ever get any official papers that said anything about whether the scrap was radioactive?
A. I never seen any, no, sir.
Q. Did any supervisors tell you anything, hey, you know, this stuff is low level radioactive or any -- anything whatsoever about the nature of the cargo?
A. Not when we first started, no.
Q. Well, how do you know that Witherspoon was handling radioactive cargo? How did you find out?
A. Well, this -- a lot of that junk was coming out of Oak Ridge and he was licensed to handle radioactive -- one of the few around I think that was licensed to handle that stuff.
Q. Sometime during the 80's did you hear anything about a question of health or a hazard from dealing with radioactive scrap there?
A. Yes, it came up. It was pretty --

quite a bit of it, yes, sir.
Q. Let me fast-forward you. Okay?
Were you still working at the time -- at a time that you learned that CSX was going to stop letting workers like yourself and Mr. Payne take cars inside the Witherspoon Scrapyard at all?
A. We worked right on up until they closed it. They never told us anything about when they were going to shut down.
Q. At one point in your discovery deposition, did Mr. Baker here ask you if you had stopped calling there as of 1985?
A. He did.
Q. And what did you tell him?
A. I told him I thought it was later, much later in the years than '85.
Q. What did you tell him -- what was your recollection as best you could recall?
A. Best I can recall, we were still going in there.
Q. Until what, until it closed up?
A. Until it was closed. And then they shipped cars out of there after they closed it to get them out of there.

it up.

Q. Let me show you a picture and ask you, Mr. Carringer, if you can identify where this is?

Can you hold that so the jury can see it?

A. Yes, sir, that's -- that's the mainline there, that's right before you go under the shed at Witherspoon, that's one of our tracks right there going in.

Q. You don't know when this picture was taken, do you? I mean --

A. It could have been taken any time. It sat like that for years.

Q. Okay. Thank you, sir.

One second.

At any time when you worked, say, riding in the cars into Witherspoon -- I didn't ask you this but did you take cars out of Witherspoon?

A. Yes.

Q. When you called there, did you guys have to figure out how many would be brought in and how many would be removed?

A. They would usually tell our yardmasters if they had a load or two to be brought

in and if they have an empty to be taken out or whatever, yes, sir.

Q. Did you take loaded cargo out of there from time to time?

A. Occasionally, yes, we did.

Q. Okay. At any time during your career, did you have any radiation protection training from the railroad?

A. No.

Q. Did you ever have a hazardous material training that touched on radioactive stuff also?

A. No, not that I remember, no, sir.

Q. Did any of the supervisors know that the Witherspoon yard was handling radioactive metal?

MR. BAKER: Objection, Your Honor, as to what someone else would know.

THE COURT: Sustain the objection as asked.

Q. (BY MR. SHAPIRO) Let me go back and ask this a different way, Mr. Carringer.

You told the jury that you found out at some point that there were some radiation issues at Witherspoon. Right?

for seven and a half years.

Q. Well, you've briefly covered where you were on the faculty.

Did you hold a position of authority at those faculties and what was -- were you a chair?

A. Well, I would like to think that any faculty member has some authority. Students are supposed to behave appropriately with us. But when I went to the University of Kentucky, I became chair of the Department of Preventive Medicine and Environmental Health. I then moved onto the University of Texas, where I was vice-president for Medical Education and Professor of Occupational and Environmental Medicine. And here at Drexel, I'm Professor of Public Health and chair of the Department of Environmental and Occupational Health here at Drexel.

I also hold an appointment as a Professor of Medicine in the pulmonary division of the Department of Internal Medicine, and that's where I see the patients that I still see. I don't see as many as I had used to. I've been a clinician all my career. I've been seeing patients, still do clinical research and still see a few patients, even

though my major appointment is here at the School of Public Health.

Q. Well, in those positions you just outlined, did you train medical students at those schools?

A. I trained medical students. I trained residents. I've directed residency programs and been part of residency programs. I've trained masters students. Here I'm training masters in public health students and helping the doctoral training as well. I also have taught graduate physicians. We do continuing medical education. I teach the pulmonary fellows here quite regularly, the medical students. So, teaching is part of what an academic physician, like myself, does during his career.

Q. Let me go back to what is called a board certification.

Can you tell the Jury how a doctor becomes board certified?

A. Board certification means one is considered a specialist in that field. Board certification comes from being a resident in an approved residency program, having the director of the program certify that you've successfully

completed the program and then successfully taking the board certification exam, which I've discussed already. So, I am now board certified in both internal medicine and in the field of occupational medicine.

Q. Have you actually submitted questions for the certification exams for the National Board of Medical Examiners?

A. I have written any number of questions for the National Board of Medical Examiners. I wrote questions for the certification exam for specialists in occupational medicine, and for seven years I also wrote questions for medical students as they were trying to obtain medical licenses in various states. There's a licensure set of exams that they go through. And out of, I don't know, 850,000 doctors in the United States, something like that, somewhere around 500 of us get asked to write questions to certify and license new physicians.

Q. Have you served on the Board of Directors of the American College of Preventive Medicine?

A. I've served on the Board of Directors. I've been the occupational medicine

both the materials that I read and speaking with Mr. Payne at some point in the past before he passed away.

Q. In your professional career have you previously been involved in a study of asbestos and occupational exposure to asbestos?

A. I have. As I mentioned earlier, I trained with Dr. Irving Selikoff. He was already in 1968 a world authority. I have published about 170 items that you'll find in my resume, and about half of them have something to do with asbestos. There is no area that I've done more independent research and original research in and published in than the area of asbestos.

Q. In your professional career, have you had occasion to study the issue of radioactive substances and the effect of radiation?

A. I have, and I've written about that to a limited extent as well.

Q. Have you had occasion to study the occupational effects of diesel exhaust fumes in the past?

A. Yes, sir. It's, again, a very common kind of exposure. It's what one runs into. In fact, in the very class that we're teaching now

to our first year students, one of the papers that we gave them was a paper on the hazards of diesel fumes and the development of lung cancer thereafter.

Q. In the scientific community, are there journals of medicine and science that serve as a basis for continuing education for students and for physicians?

A. Yes. I mean, one of the ways as a physician that I keep up with new developments in my field is to read widely, but I also have served on a number of editorial boards and as a reviewer of articles before they are published to see if they are fit to be published.

Virtually all of my articles, a few not, but almost all of them have been reviewed by others. We call that a peer-review process, where other scientists, my peers, review my work and decide if it's worth publishing. And I have done that for virtually all of my career, and have been on the editorial board and served as a reviewer for more than a dozen scientific journals.

Q. Can you mention the ones that have something to do with occupational medicine or cancers?

A. I've been on the board of the

of individuals, both as part of clinical activities and research studies. And while I don't see all that many patients anymore, I still see a few here at the university and I still do clinical research. But I've seen, you know, hundreds, if not thousands of individuals exposed to things like asbestos, exposed to diesel, a few exposed to radiation.

Q. Let me turn your attention to the topic of the radiation exposure, okay?

A. Yes, sir.

Q. Is meaningful exposure to radioactive substances, or isotopes, I guess technically, known to medicine to be a cause of lung cancer and how is it known?

A. Well, first of all, radiation causes a wide variety of cancers. I've already mentioned thyroid cancer, it causes blood cancers, blood-related cancers. But also exposure to radiation can cause lung cancer, that you inhale radioactive materials and they get into the lung and that can cause lung cancer. So, certainly they can do it.

And the second part of your question was?

Q. How is it known or what type of

research?

A. The relationship between exposure to radiation and cancer has been known for more than a hundred years. When Dr. Rankin described the x-ray machine, which is a form of radiation like radioactive isotopes, one of his technicians died of skin cancer who was demonstrating that.

Marie Curie, who won the Nobel Prise for extracting radium, a radioactive substance, died of a cancer. So, cancers and its relationship to radiation exposure have been known for a very, very long time.

There was extensive research done in the United States in the so-called Colorado Plateau, where miners of uranium, who were inhaling radioactive dust, not very different from what Mr. Payne would have inhaled over his career as well, were shown to get an excess of lung cancer. And that work goes back to the 1940's and 50's. So, this has been around as a subject that has been well documented for a long time.

Q. What about in enriched uranium, enriched uranium, if inhaled -- well, let me start it this way. Is enriched uranium a part of nuclear weapons production?

A. It is. One of the projects that I'm working on right now is working with workers at a plant that works with nuclear weapons. So, I'm well aware of the exposures that people get.

Enriched uranium is what shows up in nuclear weapons, and that's the big issue right now as we deal with the strange country of Iran, for example. They are enriching uranium, making it more potent so it can be used for things. And certainly that's the kind of work that was done at Oak Ridge.

Q. Is plutonium-239 a radioactive isotope that is known to be connected with cancer and lung cancer?

A. Yes, sir.

Q. Based on the history you obtained from Mr. Payne, the materials you reviewed, including the deposition testimony, what information did you feel was significant with regard to Mr. Payne's potential exposure to radioactive substances?

A. What was unusual about Mr. Payne, because as I've said, I've dealt with lots of railroad workers, he worked with the railroad in a setting where it brought him in and out of a particular facility. It was called the Witherspoon

property, where the train would come in and pick up materials at that facility, pick up scrap or move materials around that were known to be radioactive. And in that setting, Mr. Payne had exposure to radioactive materials above whatever you and I would be exposed to as part of the background that we all live in.

MR. JORDAN: Your Honor, I'm going to object to that testimony. Lack of foundation.

A. And so it was at that facility that he had additional exposures to radioactive materials of the type that can cause lung cancer.

Q. Well, have you studied what the effects of radiation can be on human cells, or in other words, is there any kind of simple explanation you can give on how these radioactive isotopes adversely affect cells?

A. They can adversely affect them in many ways. If it's powerful enough, it can literally kill the cell. That's why we use radiotherapy to treat cancer. You can actually kill cells.

But at a level that won't kill cells, the power of the radioactive material, the

emanations from the material will cause an alteration of the DNA, the nuclear material, the genetic material each of us have in our cells, and it is, in fact, this alteration of the DNA that gives rise to cancer.

So, one of the exposures that Mr. Payne had was exposure to radioactive material. This material is known to affect cells in such a way as to cause cancer to arise.

Q. How do we know how much of those radioactive isotopes it takes to show up as a cancer years later in someone like Mr. Payne?

A. Well, we don't. There's no one number. What we do know, and it applies to every cancer causing agent, be it radioisotopes, be it asbestos, be it polycyclic aromatic hydrocarbons, the cancer causing agents in diesel fumes or in cigarettes, for example, that there is no safe level of any material.

The best studies on radioactive materials have come -- I did mention the Colorado Plateau here in the United States. But after the atomic bombs were used in Japan, there were studies -- they are still ongoing 60 years later -- of what the effects of radioactive materials are. And it

Q. Now, same question with regard to diesel fumes.

Did Mr. Payne indicate whether he had any personal equipment for diesel fumes?

A. He did not.

Q. In evaluating issues relating to cancers that may be connected to occupational sources like this, is this type of lung cancer a preventable cancer?

A. Absolutely. This specific kind of lung cancer, which I believe had four causative factors in his case, was preventable from all four possible causes.

Q. Well, at this point let me ask you about your first report that you drafted and you sent out dated August 2008. Based upon everything that you reviewed and based on your history of Mr. Payne and reviewing his deposition, did you arrive at an opinion to reasonable degree of medical probability as to whether these -- as to what caused Mr. Payne's lung cancer?

MR. JORDAN: Objection, Your Honor, lack of foundation.

A. Yes. I'll read from my report. "Based upon my review of the materials sent me and

my discussions with Mr. Payne, it is my opinion, held with a reasonable degree of medical certainty, that there was three contributing causes from Mr. Payne workplace to his lung cancer. His cigarette smoking would have played a role as well. However, it would be my opinion that his exposures to asbestos, diesel fumes and to radiation were all significant contributing causes to his developing the lung cancer for which he has been treated these many years." And that now, unfortunately, has killed him.

Q. (BY MR. SHAPIRO) What about the contribution of cigarette smoking; could you rule that out as a contributing cause?

A. I could not. I would have to say that that was a cause, for the reasons that I explained earlier, and that it was a carcinogenic exposure that he had along with three others that he got at his workplace.

Q. Now, let me switch gears to your second report. Did you issue that report in June of 2009?

A. I did.

Q. And by the time you wrote the second report, had you reviewed a bunch of reports

of a specific worker and exposures that I thought were related to their cancer. I've certainly seen measurements done at workplaces, but they weren't done specific to that worker or necessarily at the time that that worker was working and was exposed.

So, we do know something about exposures, but you don't have exposure histories that come with numbers on workers from any setting.

Q. Were the occupational exposures that Mr. Payne had to radioactive substances, to asbestos and to diesel substantial or chronic?

MR. JORDAN: Same objection, Your Honor.

A. Well, they were both substantial and they were chronic, and I believe they were causative of his cancer.

Q. (BY MR. SHAPIRO) Does it affect your ability to render the opinion today, or in your reports, that you don't have the precise dose or exposure records?

A. Of course not. With cancer-causing agents we know that any level of exposure above background for any cancer-causing agent can give rise to cancer. So, what I have to do is be able to sit here, as you've asked me already, you know, with

dozen of them were litigated cases. So they had an understanding that workers were being injured by their diesel exhaust exposures at that time.

Q. Based on your review of all of the materials in this case, was Mr. Payne exposed to any unsafe levels of diesel exhaust fumes?

MR. JORDAN: Objection, Your Honor. Complete lack of foundation.

THE COURT: Okay. Same rule. He may ask the question. The jury will be able to decide the value of that answer.

Go ahead.

A. It's my opinion that he was exposed to injurious levels of diesel exhaust. He said in his deposition, and he said to me when I talked to him, that every day that he went to work he was exposed to diesel exhaust.

The amount of diesel exhaust that he was exposed to could have been significantly lessened if the railroad had utilized appropriate control technology. But just in terms of was he exposed, the answer to that question is yes, and he testified to it in his deposition and he said it to me.

Q. (BY MR. SHAPIRO) Were there

Q. And L&N, of course, as a railroad would be paid for every load of cargo that it brought to a customer; right?

A. Yes, sir.

Q. In -- let me see which exhibit this is. At the very back of the radiation exhibits there's an exhibit -- I think these two exhibits are numbered 40 and 41. And if you want to take a look at those, sir. I just put up something from Exhibit -- give me a moment there. From Exhibit 41. Okay?

A. Uh-huh.

Q. This particular exhibit was taken from some records of the Tennessee Department of Radiological Health, and it talks about -- it's a little hard to see here, but there were railroad shipments 79,400 pounds labeled contaminated radioactive material. And this is in 1971, talking about the Witherspoon property. Did you see those documents?

A. This is the first time I've seen these documents here today.

Q. Okay. Well, again, it's cutting off -- it's cutting off part of this here. But in the Tennessee records from 1971, they mention that there were incoming shipments by rail, and this is

in 1969, of a few different shipments, one has 884,000 pounds, Union Carbide. Did you learn that Union Carbide was involved in the Oak Ridge operation?

A. I learned that they were a -- a contractor on the site.

Q. And they mentioned one million pounds in June of '69 was a shipment from Union Carbide. Do you see that?

A. Yes, sir, I see that.

Q. Did you also look into -- it -- it has below that, not highlighted, Babcock and Wilcox, Stearns and Rogers. Do you know if Babcock and Wilcox was in Lynchburg, Virginia?

A. I'm familiar with that company because they make boilers. I'm not sure where their operations are.

Q. Okay. In -- in looking into this information, you're not surprised by the fact that there were thousands of tons of metals shipped into Witherspoon, 901 Maryville Park; are you?

A. I'm -- I'm not surprised, no, sir.

Q. Okay. I want to turn your attention, now -- I'm -- I'm done with that first document. I might refer to this again.

coveralls and that they be taken off when our employees exited the site and disposed of.

Q. Well, one of the reasons he recommended that was because that was an EPA requirement at the time in 1991, wasn't it, once you find this type of contamination in the soil?

A. Well, it -- it -- it's not an EPA requirement, per se, as I understand it. But when -- when a site goes under a Superfund action, that they have to write a site safety plan and then everybody that enters that site has to follow that particular plan. And -- and each plan could be dif -- different, depending on what the contamination is, whether it's liquid contamination, soil. But it would be a site specific safety plan required under that EPA regulation for Superfund sites.

Q. And this is the first time we really hit this point, but that Witherspoon property became an official Superfund cleanup site by about 1991, didn't it?

MS. YOUNG: Your Honor, I object for the reasons previously stated.

THE COURT: All right.

A. Sometime in that time frame. I'm not real clear on the exact date.

Q. And one of the reasons it became a Superfund site, among others, was radioactive contamination on the property?

A. Well, there were -- there were different sites that had different sources of contamination, and I'm not sure if -- if the spur was brought under that Superfund umbrella because it had the barrels of waste soil or contaminated soil from another Witherspoon site located there or if it was something on that, as you mentioned, the Candora triangle area, itself.

Q. Well, the Candora triangle, so the jury understands, that's the area where the railroad tracks came in the corner of the scrapyard; right?

A. Yes, sir.

Q. And you're -- you're just not positive who owns that triangle?

A. I -- I thought Witherspoon owned it.

Q. Well, in any case, let me move you forward from here. Okay?

A. Okay.

Q. I want to show you -- actually you've already pointed it out. We put aside Exhibit 51, right there. Is that it, or have I got the

wrong number? I'm sorry.

A. 40.

Q. 40. You can take a look at that. That's a DOE memo I want to ask you about. Okay? Now, this DOE memo in December of 1991, we obtained either from the State of Tennessee records or from a Freedom of Information Act. And they said, the DOE, that, "Three sites at Oak Ridge began collecting scrap metal in the early 50's and continue even to the present having radioactive contamination. The metal was accumulated at a common accumulation area now known as the White Wing Yard." That's in the first couple of paragraphs of the memo; correct?

A. Correct. But -- but let me step back.

Q. Yes, sir.

A. It says started collecting in the 50's and through the 60's, and I think you said even through today.

Q. Okay. I'm sorry. But, anyway, that's at the White Wing Yard, that's not at Witherspoon yet. They're just talking about the background; right?

A. Yes, sir.

Q. Okay. So then in No. 4 here, it

says, "Beginning in the '63 time frame, the contractor Witherspoon and AEC initiated a series of contracts and contract extensions for prospective companies to come into the site," that's the Oak Ridge site, "and take ownership of the scrap metal." That was outlined there; right?

A. Yes, sir.

Q. "In '63 or thereabout a solicitation was issued and awarded to Witherspoon. It's numbered 717, then modified to 719, then modified to 749."

A. Right.

Q. And it says, "Supplemented -- Supplement No. 7 added scrap metal from a portion of the White Wing Yard and some additional scrap from a different scrapyard. The scrap metal was advertised as potentially contaminated with plutonium.

MS. YOUNG: Your Honor, I have an objection on the grounds previously stated.

THE COURT: All right.

Q. (BY MR. SHAPIRO) The agent was responsible for monitoring and allowing release of the scrap falling within the range of permissible contamination levels." Is that what that said?

A. Yes, sir.

Q. Are you familiar at all with the physical agent or the substance known as plutonium?

A. Yes, I know it's a naturally occurring min -- mineral.

Q. And have you been familiar with there's at least one book calling it the world's most dangerous element?

A. No, sir, I'm not familiar with that book.

Q. Okay. It says also in the memo that, "The contract 749 was extended on several occasions through September of 1970 and then Witherspoon received a contract from us including a sale in June 1972, numbered 2100." Do you see that?

A. Yes, sir.

Q. So, there were sales up until at least '72 it indicates here; right?

A. Yes, sir.

Q. Okay. I've got to figure a way to do this. Okay. The total amount of advertised contaminated metal received by Witherspoon between '63 and '72 was in excess of 4,000 gross tons; correct?

A. Yes.

Q. And it said that they -- they

attached a memo that said the purchaser, and I'm assuming this would be any purchaser of their scrap, including Witherspoon, should emphatically be made aware of the fact that the material he is contracting to handle does contain a plutonium potential and we cannot guarantee a specific level below which all the material will read. Is that true?

MS. YOUNG: Same objection as previously made.

THE COURT: All right.

A. Is that on this same letter or an attached letter?

Q. (BY MR. SHAPIRO) I think it's on an attachment dated 1969.

A. (Perusing documents.)

Q. I'm sorry, I might not have had that attachment. We -- okay. It was produced but -- okay, sorry.

I want to ask you some questions, here. Well, I jumped the gun. I've got to show you something else. Hold on one second.

I want to ask you about a few other reports here. Okay. And I showed you these earlier. And can you look at Exhibits 14 and 15?

It's Section 2.3.

A. I'm there.

Q. It -- it outlines a bunch of the buildings that were on the site, the main building, then it says the metal office building, the magnet house, various other places on the property; right?

A. Correct.

Q. Now, the magnet house, we can agree, is this open structure that had the crane on it that basically, you know, would get the metal and scrap out of train cars; right?

A. That's correct.

Q. And it says here, "The magnet house had operations that would separate ferrous and nonferrous metals," right, under magnet house?

A. That's correct, it does say that.

Q. And there was a baling house; right? If you look at the next page, Page 9. Baling house, obviously, was to bale some group of metal; correct?

A. Correct.

Q. Does it say here the baling house was radiologically contaminated?

A. Yes, it does.

Q. Go down the page a little bit more

-- I'm sorry, excuse me. Go to the next -- the next actual page, Page 13. As of the time this report was done, which was 2007, they outlined that the project will cost $15.3 million; correct?

A. Yes, sir, it does.

Q. Take a look at No. 15, please, the next report that I wanted to -- the SAIC report.

A. Okay.

Q. It's right there on the top. Okay. Now, this was called a human health risk assessment for David Witherspoon, 901 site, dated January 2007?

A. That's correct.

Q. And obviously as of January 2007, there was still a cleanup operation going on at David Witherspoon at 901; right?

A. Well, I can't tell that from the title of this document.

Q. Okay. Well, let's -- let's flip to the executive summary. Okay? Just take a look at the executive summary and tell me if it's pretty clear that some remediation was still ongoing as of the time this report was done.

A. (Perusing documents.)

Q. Does it refer to any dates, there?

A. No, not that I see.

I asked you about some of the industrial hygiene principles of a control program earlier, you told me that monitoring was one of the principles of industrial hygiene; correct?

A. That's correct, yes.

Q. My question is, prior to 1985, based on your study of the records and study to present yourself today, did you find whether CSX or Seaboard, its earlier railroad, or any of the earlier railroads that Mr. Payne was working for did any monitoring of train cars that may have been calling in or out of Witherspoon?

A. Again, I think the -- the -- the answer to the question is we didn't, but at the same time we didn't think there was a concern. We had no evidence based on information we were provided from the shipper that we needed to be looking into radiation exposure of our workers.

Q. Prior to 1985, you know, Mr. Payne was working for 20 some years by that time, CSX was aware that Mr. Witherspoon was a licensed radioactive scrapyard, wasn't it?

A. Yes, we were aware of that.

Q. Did CSX prior to 1985 ever do any monitoring, like once a car was brought into

Q. Well, in the third paragraph it says, "Glove bag and wet removal procedures were implemented"; right?

A. Yes, sir, glove bag.

Q. That's sort of protect -- that's -- that's over the material, itself. But it says, "The area was isolated from all unauthorized personnel by erecting a perimeter of red asbestos barrier tape 25 feet around each locomotive." Do you see that on the second paragraph of the executive summary?

A. Uh-huh. That is correct. All of these activities were mandated by changing the OSHA asbestos standard in the mid 90's where they implemented different class activities and controls based on the class of a type activity irregardless of airborne concentration. So the glove bag work is small removal of thermal system insulation or gaskets require a glove bag and it requires you to rope the area off.

Q. These were -- again, these were SD and GP engines, right, manufactured by GE or EMD?

A. Yes, sir.

Q. And CSX, as of the early 90's owned -- owned SD engines, didn't they?

A. Yes, we did.

Q. I don't know about the exact classes, but you definitely had a bunch of them. I mean, SD is a common class of diesel locomotive, isn't it?

A. Yes, sir, that's correct.

Q. And GP is a fairly common class of engine that was made by EMD; right?

A. Correct.

Q. Anyway, this particular outfit checked those two engines. And if you look on Page 5, they talk about moving -- removing asbestos from the SD9. And they -- they said that they found 19 linear feet of TSI. What does TSI stand forward?

A. Thermal system insulation.

Q. Okay. On the radiator compartment they found two linear feet in a different radiator compartment, they found ten linear feet under the cab or in the cab heater lines. And it says, "This included all debris located on the six-foot by ten-foot metal floor"; right?

A. Yes.

Q. Is that the metal floor inside the engine?

A. It's in that heater compartment.

Q. Okay.

A. Or the compartment, I call it a hydraulic compartment underneath the locomotive cab itself.

Q. Okay. And they removed 13 linear feet inside the panels under the locomotive walkway; right?

A. Yes, sir.

Q. An estimated 26 linear feet inside the panel's -- I guess a different area of the locomotive walkway; right?

A. That's correct.

Q. And then on the other GR engine, they removed 30 linear feet in the radiator compartment; right?

A. Correct.

Q. Ten linear feet in the cab heater pipes?

A. Right.

Q. And 60 linear feet located under the catwalk on the fuel and old heater pipes; right?

A. Yes. CSX did a very similar study to this in the same time frame.

Q. Uh-huh.

A. And the -- the mechanical department, based on the results of that study,

wanted to train our inhouse machinists or -- or a group of machinists to do the work and then let -- pretty much after Mr. Badders commissioned all that training, they -- they made the decision they were going to use third-party outside contractors. So our people never did end up exercising our own inhouse abatement activities. And we went to doing similar control work at -- at about two of our yards following these OSHA protocols.

(END OF VOLUME VI)

Q. Is plutonium a naturally occurring radioisotope that would normally be found in the ground?

A. No, sir.

Q. Why not?

A. Plutonium is made through the process of a nuclear reaction, and that's the only way you can obtain plutonium with the exception -- it can also be made in an accelerator, but it is not found naturally, through natural causes.

Q. Is plutonium a highly dangerous radioisotope?

A. When taken in the body, yes, sir.

Q. Is inhalation one of the known health hazards that plutonium can cause?

A. Yes, among others. It's the primary hazard from plutonium, actually.

Q. As a health physicist do we know exactly how much plutonium needs to be inhaled before a person can have injury or death or develop cancer?

A. As far as I know, there's been no safe level for plutonium intake.

Q. What about enriched uranium, is enriched uranium a dangerous radioisotope?

A. In sufficient quantities, yes.
Q. Is inhalation one of the health hazards that's known to health physicists?
A. Yes.
Q. Is it known whether enriched uranium is a cancer causing agent?
A. Yes, it is.
Q. Are there basic attributes of a radiation protection program that you as a professional working with other companies that deal with nuclear things would feel are the basics of such a program?
A. I think I listed several in my report. But without referring to that I would say one of the underlying basics of a radiation protection program is training. You have to train your personnel on what the hazards are, how to avoid them, and how to work with these materials.
There's also protective clothing or other protective devices like respirators or protective clothing that you would dawn.
A critical piece of radiation protection is monitoring, because you don't know what the hazard is unless you do adequate monitoring, and that would include both the external

through the 70's, the 1980's, and this period from like '91 or '90, '91 through 2007.

Now, in '90 or '91 was there something that took place at the Witherspoon Scrapyard that was significant as far as regulation?

A. Well, yes, it came part of the Superfund.

Q. Okay. And did you review a number of reports and documents in that time frame once it was under scrutiny to become regulated?

A. From '91 forward.

Q. Tell the jury what if anything in these records of surveys and inspections that you found was relevant as far as whether there was radiation contamination at that site?

A. There was actually three reports. The key one was done by the SAIC company. It was done in 2007, and this is long after the metal has been taken out, there's been remediation of the soil and everything else, but still they found detectable levels of uranium and plutonium on the site. It was a health hazard study, I believe.

In the late 90's there were two reports --

Q. Slow down a second.

What did the SAIC report find as to plutonium?

A. They found -- well, plutonium they basically in the surface soil, they found they had established what they called a level that above that level it was a contaminant of concern, which means they were going to analyze that for health impacts. And there were several samples in soil -- and memory fails, maybe even some of the groundwater that had levels of plutonium above that contaminant of concern threshold.

Q. You told us earlier, would that be found naturally there?

A. No, absolutely not.

Q. What about enriched uranium, what did the SAIC report in 2007 report find about enriched uranium?

A. They found levels of uranium isotopes which includes 238, 234, 235 all above what you would call background levels.

Q. Now, when they detected those levels in the soil or water, was this during the cleanup or was this after the cleanup had started in 1991?

A. It's my understanding that it was

well after the cleanup.

Q. Is there anything as a health physicist that you can derive from finding plutonium in the soil on that ten acre site?

A. Well, it didn't -- as we've already discussed, it didn't get there naturally so it had to have been brought there.

The only people that I know of that deal with plutonium on a regular basis is the DOE or its predecessor, the AEC, so it had to have been brought there from one of those sites.

Q. What about enriched uranium?

A. I would make the same statement about enriched uranium.

Q. Okay. Was there anything else in that time frame, in that cleanup time frame that you want to tell the jury about?

A. Well, there were two other reports. They were called remedial investigation feasibility study reports where essentially they look at all the data that's been taken and offer the feasibility of remediating a site and look at different alternatives.

The thing that I was particularly interested in was their tables of analytical

through the 70's, the 1980's, and this period from like '91 or '90, '91 through 2007.

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The thing that I was particularly interested in was their tables of analytical

results, and they also recorded detectable measures of plutonium and uranium on the site.

Q. What years were those done?

A. There were two. There was one in 1996 and then another in 1999.

Q. Okay.

A. I think it was two different subcontractors.

Q. All right. Does that cover that time frame, that last time frame now?

A. Yeah, I think so.

Q. All right. What about -- what was in the Tennessee regulator records from any time in the 60's through the 1970's that you felt was relevant to tell this jury about?

A. Well, again, the thing that impressed me was the sheer mass of contaminated metal that was shipped. I did a quick calculation just from Oak Ridge. There was like nearly 3,000 gross tons of contaminated metal.

Q. Let me stop you. How did you know it was contaminated?

A. Because it said at the top of the page, contaminated metal. I mean, on the records that I reviewed it was an inventory metal shipped

contamination?

A. Well, it's pretty self-explanatory. Surface contamination is contamination that is fixed to the surface of a piece of equipment, a piece of metal, something like that. It can be rubbed off. It's not integral to the metal -- it's not -- you know, short story is that surface contamination can be released into the air, it can be transferred to your hands and then to your mouth if you don't have the proper controls.

Q. Okay. Anything else in the -- what about any specific Tennessee regulator tests out there in the 60's or 70's, were there any that you noted in your records?

A. Yes, there were several that I noted.

There was an inspection -- the Tennessee regulators got wind that there was some stuff coming from a plant up in Lynchburg, Virginia, so they went out. They found readings as high as 25 millirem per hour, which I don't know if you guys have been educated on that, but basically background -- background levels for exposure, for gamma, the natural background is something like a thousand times less than that, okay? So just to

went back to the SAIC report and I added up their results and did --

Q. That's the report after the cleanup?

A. That's the report after the cleanup.

Q. Okay. I'm sorry, go ahead.

A. And basically added up the uranium isotopes and divided it into the plutonium isotopes, and the percentage of plutonium based on the SAIC report was much higher. So it was about a hundred times higher than what Dr. Dooley has used in his assessment.

The other issue I had is Dr. Dooley made an assumption that all the metal was released at an acceptable contamination level for the day, for free release to the public.

Q. What does that mean?

A. Well, I'm not really sure because the reference that he used, where he got his number from, I think we asked for that and we never got it and I've never heard of I it. It's an old AEC manual.

But at any rate, he said 25,000 D rem for some area. That's what if it was below that

Q. Could they have put a car not at the front of the train that had contaminated scrap in it?

A. Yeah, or you know --

Q. Yeah. This 10 millirem or 10 rem, I really don't know what it means, I'm not sure anyone here does, but let me ask you this, one trace of plutonium that came off one piece of scrap at the Witherspoon site, was that enough to be a health hazard?

A. It may be low but it could be enough and I'm glad you brought that up. The 10 rem, I'll be short, the 10 rem essentially is a level where we have clearly demonstrated health effects. The below, the 5 rem piece is -- it doesn't mean there's not a hazard or there's no effects, it just means you can't tell them, we are talking about cancer, you can't tell it from what happens naturally. Doesn't mean it doesn't happen, so, I mean, each of us sitting here have a 30 percent chance of getting cancer about and maybe a 16 percent chance of dying of it if we never get the first rem of radiation so when you get down into those low levels, you just don't know. You just don't know. So to answer your question, one atom I

think may be rare but one atom could cause cancer.

MR. SHAPIRO: That's all my questions.

MR. JORDAN: Nothing further. Thank you, Mr. Mantooth.

THE COURT: Thank you for being here.

If we can try to start at 8:30 again in the morning.

One little brief comment to the jury. When we were preparing to have this case, I asked them how long it was going to take and how long everybody would take. You can go ahead, Mr. Mantooth.

And we are already a day and a half behind schedule now.

I know we got Thanksgiving coming up. You all be thinking about what your wishes would be. I'm going to try to get a more accurate estimate in the meantime before tomorrow about what's left in this case. But be thinking what you would like to see happen as far as the time you spend here in court. We got a lot of options, just go on, skip days, we can come in the

A. Til 1999, yes.
Q. Let me talk to you about your training and qualifications on asbestos removal first before I get into say types of engines. First of all what were some of the earlier railroads that came together to form Conrail, just briefly?
A. It was the Old Penn Central. The Leigh Valley was one. The other one was Leigh something or another, I don't remember. There were six various railroads that came together to form Conrail.
Q. When you began work in 1976, were there a variety of types of diesel engines that you were called upon to repair?
A. Yes, sir.
Q. Okay, during this period of the first 14-15 years, were you handling diesel repairs day in and day out?
A. Yes, sir.
Q. Until 1990, had you had any type of specific training at work about asbestos?
A. No, there was no specific training.
Q. Did you handle any asbestos insulation prior to 1990?
A. Yes.

MR. SHAPIRO: And then skip to 22.

Q. Did Conrail decide to retain and bring in an outside company to formally train yourself and some other Conrail shop workers about handling asbestos removal in 1990?

A. In 1990, yes. They brought in, as I said earlier, they brought in Hartford Steam Boiler, Corporation to train us.

Q. And where did the training took place?

A. The training took place in the main office building in the Juniata Complex that was a two-day training course.

Q. Can you take a look at an exhibit that we previously marked, let me get it. I want to see if you can get out Exhibit 11, Exhibit 12, and I think that is the first couple that I would like to talk to you about.

A. Okay, I am not sure if the exhibit number are on these papers.

Q. Way down. Right here. I have them in order. There you go. That is 12, okay.

Do you want to open to those two folders there? Okay, can you identify what is Exhibit 11 is?

A. Exhibit 11 is a copy of the Hartford Steam Boiler Training Manual that was given to us when we trained in 1990.

Q. And just to go forward, what is Exhibit 12?

A. Exhibit 12, OSHA Rules and Regulations regarding Pennsylvania.

Q. Is that another training manual?

A. It is a training manual to familiarize you as part of the training in 1990, to familiarize you with OSHA Rules and Regulations and also the Environmental Safety Department.

Q. What types of persons would Hartford Steam Boiler came and trained you?

A. They were two gentlemen who were professionals in their field.

Q. And what field was it that you were training?

A. Asbestos, asbestos removal I should say.

Q. Okay, can you take a look at the table of contents there is a couple forms I want to ask you about.

A. Sure.

THE COURT: Let's move on to where

we talk about the actual trains and things.

MR. SHAPIRO: Okay.

Q. (BY MR. SHAPIRO) Let me ask you about other parts of the document.

MS. YOUNG: Location.

MR. SHAPIRO: 24, 14.

Q. One of those headings that we just covered, was there a section about air movement?

A. Yes, there was sir.

Q. And I put a red mark here on some of these parts. Did they train you about the significance of air movement, for asbestos?

MR. SHAPIRO: 25, 3.

A. I don't have it marked, the page number.

Q. Anyway, what were some of the things you learned about air movement?

THE COURT: Let's go on to what we talked about, what we talked about which is trains and locomotives.

MR. SHAPIRO: All right, Your Honor.

THE COURT: These things have already been testified about.

MS. YOUNG: 36, 18 perhaps?

MR. SHAPIRO: 35, 2.

Q. At some point in the 1090's, did you also apply for the state of Pennsylvania Asbestos Certification?

A. That was the object of the second training school in 1997. The school that we went to over in Penn Hills, Pennsylvania was an associated with the state of Pennsylvania.

Q. Okay. Let's mark that and put that one down. And did you obtain the certification?

MR. SHAPIRO: 35, 25.

A. Yes, we did. We went to Penn Hills and did a five day training course over there and then have recertification course after that until 1999 to maintain a license in the state of Pennsylvania.

Q. Can you look at Exhibit Number 20 please? This is just a blown-up copy of Exhibit Number, what number is that?

MR. SHAPIRO: I'm in the middle of 36. Line 17.

A. Exhibit Number 20, yes, this is a blown-up copy of it.

Q. Okay, now I want to turn your attention to the types of engines and locomotives

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Q. Okay, now I want to turn your attention to the types of engines and locomotives

that you did repair work on during your career, okay. Let me ask you if you can look at the stack of documents under Exhibit One. Let's see, there we go. I got them right here in my hand. Take a look at all those items under Number One and tell them what they are please.

A. These are photographs of locomotives, various classifications of locomotives that were taken off the internet.

Q. Okay, now when you say pictures were taken off the internet, did you take those off the internet?

A. Yes, sir.

Q. Did I ask you if you could outline the types of make and models of locomotive engines that you have worked on during your career at Conrail?

A. Yes, sir.

Q. And is this what you downloaded?

A. This is what I downloaded that would pertain to asbestos, yes, sir.

Q. Okay, I want to go through them kind of in a summary fashion because they are all under Exhibit Number One. Let's just go through each class. Is the first class that you marked,

there is a hand written on the top GP9, is that your handwriting?

A. Yes, sir, you can see up there.

Q. And there is a picture of an engine. Is this the class or make or model of engine that you worked on during your career?

A. Yes, sir it is a GP9.

Q. Okay, let's go to the next one. There is a bigger picture, is that a bigger picture of a typical GP9?

A. Yeah, that is a bigger picture of a GP9, yes.

Q. The next one is a GP38 title.

A. Yes, sir that is a GP38.

Q. Okay, what does the GP stand for in railroad land?

A. GP stands for General Purpose.

Q. And which company is the manufacturer of the GP38?

A. GMD which is General Motors.

Q. Is that General Motors Electric Motor Division?

A. Electric Motor Division, yes.

Q. Okay, this is another picture of typical GP38?

A. That is correct.
Q. Is that a rare or common engine used by railroads?
A. No that was one of the most common engine used locomotives we had in the 70's through the 80's.
Q. Okay, any idea when the GP38 make or model was first manufactured approximately or available on Conrail?
A. GP38 were manufactured in the 60's, when that manufactured date ended I couldn't tell you. But thy were manufactured dated ended I couldn't tell you. But they were manufactured in the 60's. In fact, all these classes of locomotives were manufactured sometime between the 60's and the early 80's.
Q. Okay, here it is kind of small print. What class was that?
A. That is a SD40 photos.
Q. Okay, what does SD stand for?
A. SD stands for special duty.
Q. All right, is this a common locomotive or a rare locomotive?
A. It is a common locomotive on the Conrail system.

Q. Okay, was a SD40 used by other railroads?

A. SD40's were used by other railroads, yes sir.

Q. Were GP38's that we just covered used by other railroads?

A. Yes, they were sir.

Q. We will go back to that. the next one you have SW12 written in here. I see the top says EMD 1200, SW 1200. What is this?

A. This is a shifter.

Q. Did you say a shifter?

A. A shifter.

Q. All right. Are they also called switchers?

A. Switchers, yes.

Q. All right.

A. Forgive me for railroad slang.

Q. Okay, and was this a common class of engine?

A. Yes, it was. They were commonly used in the yards.

Q. Were there earlier version of switchers with other numbers that were lower than 12?

A. Yes, yes there were. There were W9's, 10's.

Q. All right. And here is another class that you have marked, go ahead.

A. That's a SW15 and for the record when you see 15 or you see a 9, or you see a 30 or a 38, you are talking about horsepower.

Q. All right. This next one you have a little --- it's called GE U-boat?

A. That's what they became known as on the railroad. They were U-boat savers, they were built they are part of the early GE's built in the late 50's early 60's.

Q. All right, now then did I send you --- this is something that I did. I want to verify, I sent you what is marked as Exhibit 3, a locomotive manual for CSX, an excerpt?

A. That is correct.

Q. And did you look through the summary list of all the types of engines that in the early 90's, the railroad that CSX listed in their locomotive manual?

A. Yes, sir.

Q. Mr. Rhodes, how many manufacturers of engines were listed in the CSX locomotive manual

are there a lot?

A. No, there are two manufacturers of locomotives. It's General Electric and EMD.

Q. Okay, so on the list; I see there is a fleet of three thousand and some locomotives here. Were nearly 100% of those locomotives, one of the two manufacturers?

A. Yes.

Q. Okay, now without getting into fine detail were GP38's a class of engine that was used by CSX as of that date listing this manual?

A. Yes, as of this date on this manual, there were 167.

Q. Were there SD40's which you also said you handled repairs on?

A. Yes, they had 253 according to this manual.

Q. And what about switchers, were there switchers owned by CSX --- up on the right side sir.

A. Just --

Q. Down to the bottom, I think.

A. Okay, yes they had switchers. They had 30 SW1500 and it looks like one SW9.

MR. SHAPIRO: Skip to 42, Line 9.

Q. Okay, and did the listing include GP38, SD40's, and many other types of engines?

A. Yes, sir. I see a GP38 here and a let's see. Not having a line here, I am doing want to mess up. I am not sure from looking at this angle how many of them they had.

Q. Okay. This is a sketch that I drew that is not a Michelangelo but basically I am trying to do an overhead view of an imaginary locomotive cab, a crew cab.

A. Okay.

Q. And I want you to assume, Mr. Rhodes, that this is supposed to be a seat and this is supposed to be a seat. But I mean, this is just a crude idea there. If you are looking down at an engine I want to ask you, you were in -- well, first let me ask you this question. You were inside the crew cabs many, many locomotives during your career?

A. Oh yes, that was part of our duties.

Q. Within some estimated range, they are not all exactly the same. What would be the typical width of a crew cab in a locomotive engine?

A. You are looking at standard track size as being 4 foot 10, so the locomotive extends

insulation?

A. On all the classifications of locomotives. The asbestos was generally in the same place on EMD's. You would find it on the radiator heater pipes. You would it on the elbows and that would come off of a loop hole, what we call a loop holder that hooked the radiator heater pipes. You would find it on the feed line and the discharge line to an air compressor. You would normally find it on the discharge air line to the air compressor. You would find it on the pipes running from the governor to the load regulator. And you would find it on the cab heaters, cab heater lines that ran all the way to the sump area of the locomotives up into the cab area.

Q. Well, after 1990, what did you do if you found asbestos insulation in any of these piping areas?

A. After 1990, then we would send them up to the freight shop and we would remove it.

Q. That would be in an enclosed environment like you described earlier?

A. That would be in an enclosed environment, yes sir.

Q. Now, you did some sketches did you

not, that you sent to me?

A. Yes, some hand sketches, yes.

Q. Let me see if I can find them. Maybe you can first of all I shared these with defense counsel before the deposition and I marked these 2-A through I think G. Are all these your handwriting?

A. Yes, they are. They are my handwritings.

Q. Why did you do these?

A. I did these again when you talk about loop holder and you talk about air compressors and you talk about engines. I am quite familiar with them, but I am sure you people in this room aren't. Anyone who would be listening to this deposition would not be familiar with them.

Q. Okay, let's talk about briefly 2-a, you got --- it's a little small, I hope the videographer can get in on this. Is one a top view and one a side view or what are we looking at?

A. You would be looking down at the top of the locomotive. This is supposedly a top view and this would give you a side view.

Q. And so you --- just briefly can you tell any areas that you just recited that you

removed asbestos from on a typical engine?

A. Yes, the radiator would have sat above the air compressor compartment and over top of this area of the locomotive. The line would have run overtop of this area and hooked to each side of the loop holder.

Q. And what kind of line, is that a pipe?

A. That is a pipe, and I would say that pipe is roughly three inches.

Q. Anything else on this diagram here that you want to --

A. You have asbestos there, the air compressor feed line would be on the top of the air compressor. It rolled over and it come over like this and around. It was like an S pipe. And it hooked into what we had, I called it a temperature gauge on the loop holder rack, right behind the loop holder rack.

Q. Where is the crew in relation to this drawling?

A. The crew would be in this area up here.

Q. Okay. Well, that area that you are pointing to are nowhere near them. What is the