

ANTONIA TOLBERT, et al.

V.

MONSANTO COMPANY, et al.

CRAIG BRANCHFIELD, VOL. II

July 22, 2003

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Page 1 1 IN THE UNITED STATES DISTRICT COURT FOR 2 THE NORTHERN DISTRICT OF ALABAMA 3 SOUTHERN DIVISION 4 ANTONIA TOLBERT, et al., 5 Plaintiffs, CIVIL ACTION NO. 6 vs. CV-01-C-1407-S 7 MONSANTO COMPANY; 8 PHARMACIA, INC., and 9 SOLUTIA, INC., 10 Defendants. 11 * * * * * 12 DEPOSITION OF CRAIG BRANCHFIELD 13 VOLUME II, 14 taken pursuant to notice and stipulation 15 on behalf of the Plaintiffs Antonia 16 Tolbert, et al., in the Law Offices of 17 Lightfoot, Franklin & White, The Clark 18 Building, 400 20th Street North, 19 Birmingham, Alabama, before Angela Abbott 20 Blankenship, Certified Shorthand Reporter 21 and Notary Public in and for the State of 22 Alabama at Large, on July 22, 2003, 23 commencing at 10:00 a.m.	Page 3 1 STIPULATIONS 2 It is stipulated and agreed by 3 and between counsel representing the 4 parties that the deposition of CRAIG 5 BRANCHFIELD may be taken before Angela 6 Abbott Blankenship, Certified Shorthand 7 Reporter and Notary Public in and for the 8 State of Alabama at Large, without the 9 formality of a commission; and all 10 formality with respect to other 11 procedural requirements is waived; that 12 objections to questions, other than 13 objections as to the form of the question 14 need not be made at this time, but may be 15 reserved for a ruling at such time as the 16 deposition may be offered in evidence or 17 used for any other purpose by either 18 party as provided by the Federal Rules of 19 Civil Procedure. 20 It is further stipulated and 21 agreed by and between the parties hereto 22 and the witness, that the signature of 23 the witness to this deposition is hereby
Page 2 1 APPEARANCES 2 3 FOR THE PLAINTIFF: 4 FRANK DAVIS, ESQUIRE 5 DAVIS & NORRIS 6 One Highland Place 7 2151 Highland Avenue, Suite 100 8 Birmingham, Alabama 35205 9 ROBERT B. RODEN, ESQUIRE 10 Shelby, Roden & Cartee 11 2956 Rhodes Circle 12 Birmingham, Alabama 35205 13 FOR THE DEFENDANTS: 14 JACKSON R. SHARMAN, III, ESQUIRE 15 Lightfoot, Franklin & White, L.L.C 16 The Clark Building 17 400 20th Street North 18 Birmingham, Alabama 35203-3200 19 WILLIAM J. CURTIS, ESQUIRE 20 Husch & Eppenberger, LLC 21 190 Carondelet Plaza, Suite 600 22 St. Louis, Missouri 63105-3441 23 * * * * *	Page 4 1 waived. 2 * * * * * 3 INDEX 4 5 EXAMINATION PAGE 6 By Mr. Davis 5 7 8 (No exhibits were marked or offered to 9 this deposition.) 10 * * * * * 11 CRAIG BRANCHFIELD, of lawful 12 age, having first been duly sworn, 13 testified as follows: 14 EXAMINATION 15 BY MR. DAVIS: 16 Q. Mr. Branchfield, we have taken your 17 deposition before in this case and this 18 is a continuation of that deposition on 19 certain subjects related to a 30(b)(6) 20 notice and there have been some -- I've 21 gotten some CDs that have been produced 22 by the defendants that I will just hand 23 across the table to you and ask you if,

Page 5 1 in general, you can identify what those 2 photographs are. We're going to go 3 through them in a moment, but in general, 4 do you know that there have been some 5 photographs sent by your side of the case 6 to my side of the case? 7 A. Yes. 8 Q. All right, and can you tell me, in 9 general, what those photographs relate 10 to? 11 A. In general, those photographs relate 12 to remediation work that we've done in 13 the Anniston and Oxford areas, 14 specifically areas where we've found 15 indications of waste materials that may 16 have come from sources other than 17 Monsanto. 18 MR. SHARMAN: Let me get this 19 on the record: I know Mr. 20 Branchfield was deposed as 21 an individual before. 22 This deposition is a 23 30(b)(6) pursuant to your	Page 7 1 greater than ten parts per million in 2 some portion of the soils in that yard 3 and under the terms of the AOC, we 4 agreed, and with the permission of this 5 property owner, of course, we have agreed 6 to come in and remove that material. 7 Q. And do all the properties we're 8 going to see on these CDs, did all of 9 them have over ten parts? 10 A. Residential properties, yes. 11 Q. So any time we see a residential 12 property on here, it would be a piece of 13 property that was tested and found to 14 have more than ten parts per million 15 PCBs? 16 A. Yes, assuming -- if the residential 17 properties on these does match what's on 18 here, that would be correct, yes. 19 Q. Right. We were at the, I guess, the 20 first one that appears on this CD. We've 21 got a little backhoe out here and who are 22 these folks out here doing the work? 23 A. These are contractors that are
Page 6 1 notice. If he has an 2 opinion about something, I 3 don't mind you asking him, 4 but this is a corporate 5 deposition and Mr. 6 Branchfield is a 7 corporate representative. 8 Q. I tell you what I would like to do 9 first, let's just look at some of the 10 photographs because maybe you can help me 11 identify them. Can you tell me what's 12 going on at this house, and we're going 13 to have a hard time identifying the 14 pictures, but the best we can do, I 15 suppose, is there is a date on the bottom 16 right-hand portion of April 21, 2003 and 17 it appears to be a brick and frame house 18 with kind of brownish brick on it. 19 A. Right. This is a home that we would 20 have conducted a removal action under our 21 administrative order on consent that we 22 have signed with the EPA. Specifically, 23 this property would have contained	Page 8 1 working for Solutia conducting the 2 removal. 3 Q. Are you using the same group of 4 contractors on all of the removal sites? 5 A. To date, yes. 6 Q. Okay, and who is that? 7 A. Two companies primarily. One is 8 called Allen Hall Excavation and the 9 other company's name, I believe, is SEA. 10 Q. And where are they out of? 11 A. Well, Allen Hall is out of the 12 Anniston area. I believe SEA is also out 13 of the Anniston area, but I know they do 14 a lot of work in the southern portion of 15 Alabama so they may also have an office 16 down there. 17 Q. Is there any distinction between 18 when you use one company and when you use 19 the other? 20 A. No, it's simply a matter of workload 21 that we have. If things are relatively 22 slow, we'll use Allen Hall. If we have a 23 lot of work going on, we may need to

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1 bring SEA to help supplement our 2 resources in the field. 3 Q. All right, and do you remember 4 anything in particular about this house 5 with regard to what the levels of PCBs 6 were? 7 A. Nothing specific other than they 8 would have been greater than ten parts 9 per million. 10 Q. Is there anything in that picture 11 that relates to fill materials or foundry 12 sand or anything like that? 13 A. Based on looking at the picture, 14 there's two things that would -- well, at 15 least two things and maybe some others 16 will come to mind. First of all, this 17 property is located down in Oxford and 18 it's located in an area that is well 19 outside the area that we believe could 20 have potentially received waste materials 21 from Monsanto's prior historical 22 manufacturing operations. 23 More specifically, it's outside	1 front of me, I can only be so specific, 2 but the other properties in the vicinity 3 of this one, and when I say in the 4 vicinity, next-door neighbor or across 5 the street, they did not contain levels 6 of PCBs in their yards greater than ten 7 parts per million. If something like 8 this was due to an air deposition 9 pathway, you wouldn't expect it to just 10 land on one property. You would expect 11 it to be fairly consistent over generally 12 a wide area. 13 And then the third thing with 14 respect to the air pathway on this 15 property is this property is about five 16 miles away from the current Solutia 17 facility, the former Monsanto facility 18 and is not in the direction of prevailing 19 winds. In fact, it's on the other side 20 of a mountain, so the possibility of PCBs 21 being on this property due to an air 22 pathway, to me, there is no possibility. 23 Q. What's this in the background back
Page 10	Page 12
1 the flood plain of Snow Creek. This 2 particular property sits high up on a 3 hill. It's probably at least a quarter 4 of a mile away from the creek and is well 5 outside the flood plain of the creek so 6 that, to us, is a very strong indication 7 that the material on this property, the 8 PCBs on this property were not a result 9 of discharges from Monsanto's facility. 10 Somebody had to physically take this 11 material and put it on this property. It 12 didn't get there by flooding. Now, the 13 other indication I have -- 14 Q. That's because you don't believe in 15 airborne PCBs? 16 A. No, I believe in airborne PCBs. I 17 do not believe that there are PCBs in the 18 air that are resulting in any significant 19 deposition on the property, certainly not 20 at the levels which we're doing any 21 cleanup. 22 And more specifically, on this 23 property, and without having the data in	1 here? 2 A. Are you talking about that kind of 3 light colored? 4 Q. Yes. 5 A. I couldn't tell you for sure. It 6 may be Highway 78 which is a main road 7 that runs through there. That would be 8 in at that direction, but it's not a 9 waterway. 10 Q. Is it along Highway 78, this piece 11 of property? 12 A. This neighborhood is bordered by 13 Highway 78 to the north. 14 Q. How far from Snow Creek is it? 15 A. This property, probably, I would 16 estimate, about a quarter of a mile from 17 Snow Creek. Snow Creek would lie to the 18 west of this property. 19 And the other thing, if I could 20 finish answering your initial question 21 about the indications of foundry material 22 on this property was the color of the 23 soil. You would note from that photo

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1 that the soil was very, very dark.
 2 Q. Which photo, I'm sorry?
 3 A. The previous photo, I'm sorry. I
 4 was trying to finish answering your
 5 original question.
 6 Q. Sure.
 7 A. You can see that that soil is very
 8 dark. It's very dark brown, almost black
 9 material. Native soils in this area of
 10 Alabama are typically native clays.
 11 They're a much lighter brown color, once
 12 again, suggesting that this is material
 13 that was placed there and is not soils
 14 native to this area.
 15 Q. Well, do you think they went over to
 16 Mississippi and got this soil to bring
 17 there?
 18 A. I can't tell you specifically where
 19 they got it. What I can tell you is it's
 20 not native soils for this area of
 21 Alabama. It's not native Alabama red
 22 clay which is what we typically call it.
 23 Q. Typically, when people put in fill

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1 and they would separate it into ferrous
 2 materials, basically iron-based
 3 materials, and nonferrous which were
 4 metals that were not iron-based in nature
 5 and then nonmetallic materials which was
 6 generally called the fluff materials,
 7 just the stuff they had no use for.
 8 And this fluff material, when
 9 you look at different reports that were
 10 written by pilot studies done by the EPA,
 11 some studies done by a gentleman named
 12 Dr. Scrudato who did some work in this
 13 area as well as some reports we've seen
 14 written by some of the foundries in the
 15 area, what you find is that this fluff
 16 material was the consistency and had an
 17 appearance of soil and this is the type
 18 of material that would be hauled around
 19 Anniston and, in this case, Oxford and
 20 given to property owners to use as fill
 21 material in their hard.
 22 Q. Well, surely, it's possible to
 23 analyze something and tell whether it's

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1 material at a residential home, don't
 2 they typically bring it from the shortest
 3 possible distance away because of the
 4 cost of hauling?
 5 A. Sure, I wouldn't disagree with that.
 6 Q. So even if it's fill material,
 7 wouldn't it be your assumption that it
 8 came from somewhere pretty close by?
 9 A. Yes.
 10 Q. So explain to me again how it can
 11 not look like it came from close to
 12 there.
 13 A. Well, it's not necessarily -- all
 14 I'm saying is that it's not a native
 15 Alabama red clay. I'm not saying it's
 16 not a soil type material. For example,
 17 we're talking specifically about
 18 foundries. We know that the waste
 19 materials from foundries there is this
 20 material called a fluff. It was a
 21 byproduct of the shredding process.
 22 Basically, the foundries would
 23 take scrap metal, they would shred it,

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1 fluff or soils?
 2 A. I don't know if it's possible to
 3 analyze and differentiate between fluff
 4 and soil or not.
 5 Q. You don't have any idea what this is
 6 then in this yard?
 7 A. No, I couldn't tell you specifically
 8 in that yard, no. What I can tell you is
 9 it does not have the appearance of native
 10 Alabama red clay that you would find on
 11 many of these properties.
 12 Q. Isn't there a lot of different
 13 variations in soil naturally in the
 14 Anniston area other than what you would
 15 refer to as native red clay?
 16 A. No, I wouldn't say that there's a
 17 lot of variation. I mean, when you look
 18 at the geology of Anniston, typically,
 19 and I will grant that there are
 20 exceptions, but typically, the overburden
 21 or the soil layer on top of the bed rock
 22 is this red Alabama clay.
 23 Q. Foundries were located in Anniston

Page 17 1 why? 2 A. I'm sorry? 3 Q. Why were the foundries initially 4 located in Anniston? 5 A. Well, my understanding, based on 6 just looking through some or a, I should 7 say a historical document on the foundry 8 industry in the United States was that in 9 Anniston, there were significant iron ore 10 deposits. 11 Q. Does there soil vary where there are 12 iron ore deposits from where there are 13 not iron ore deposits? 14 A. I don't know. 15 Q. Is it a different color where you 16 have iron ore deposits versus where you 17 don't have iron ore deposits? 18 A. I don't know. 19 Q. Do they also locate it there because 20 they have limestone available? 21 A. I don't know whether that was a 22 reason or not for the foundries also 23 being located there.	Page 19 1 limestone for a second. In an area where 2 limestone formations exist, isn't it 3 correct that the typical soil found in or 4 near limestone deposits is not normal 5 Alabama red clay? 6 A. I'm not aware of that to be true, 7 no. 8 Q. You don't have any idea one way or 9 the other then, do you? 10 A. What I can say is -- 11 Q. Do you, sir, have any idea one way 12 or the other? 13 MR. SHARMAN: About what? I'm 14 sorry. 15 Q. About whether the typical soil found 16 around a limestone quarry or around where 17 limestone formations exist is typical 18 Alabama red clay or not? 19 A. I see no reason why it wouldn't be 20 typical Alabama red clay. 21 Q. My question to you, sir, is do you 22 have any idea one way or another? If 23 you're just guessing, you can guess, but
Page 18 1 Q. Well, where limestone is available, 2 is the soil a different color than where 3 you have native Alabama red clay? 4 A. For both limestone -- I mean what 5 you're talking about now is different 6 materials. Iron ore, you're talking 7 about an ore which is more in a rock. 8 It's something you would find more in a 9 rocky-type of material. 10 Q. When I get close -- 11 MR. SHARMAN: Wait a second. 12 A. If I could finish the question. And 13 the same with limestone. It's not a soil 14 material, so when I'm talking soils, I'm 15 talking about material that you can grow 16 stuff in. You cannot grow stuff in 17 limestone. You can't grow plants in 18 limestone. You can't grow plants in iron 19 ore. I'm talking about an overburden 20 material. The soil type material is 21 clay. 22 Q. Well, let's get back to my limestone 23 for a moment. Let's just deal with	Page 20 1 tell me it's a guess. 2 A. I'm telling you that soils that 3 would be found in the vicinity of a 4 limestone quarry, you would expect, in 5 this area, to be typical Alabama red 6 clay. 7 Q. All right, fine. Now, around where 8 coal deposits are normally found, in an 9 area around that, would you say the same 10 thing around that, typical Alabama red 11 clay? 12 A. I'm not aware of any coal deposits 13 being in the area. 14 Q. General question. General question. 15 Where coal deposits are found, typical 16 Alabama red clay or not? 17 A. I'm saying that Alabama red clay is -- 18 prevalent throughout the area and that in 19 most locations, that is typically what 20 you'll find. Now, if you're asking me -- 21 Q. Sir, if you know the answer to my 22 question? 23 A. I'm trying to answer your question.

Page 21 1 Q. I'm not asking -- I'm asking you 2 right now, in areas where coal deposits 3 are found, is the soil around and near 4 where the coal seams are typical Alabama 5 red clay or not? 6 A. Yes, in the vicinity of an area 7 where you would find coal, I assume you 8 would find typical Alabama red clay. 9 Q. And in an area where iron ore 10 deposits are found, would you find 11 typical Alabama red clay, same kind of 12 color, same kind of look as regular old 13 Alabama red clay? 14 A. Yes, in the vicinity of iron ore 15 deposits in this area of Alabama, I would 16 expect you would find some typical 17 Alabama red clay. 18 Q. So is it correct that you would be 19 of the view that anywhere you went in 20 Calhoun County that the soil would be 21 what you would call typical Alabama red 22 clay? 23 A. If they are native soils, yes. And	Page 23 1 remediation being done at this particular 2 house, how deep did you go? Tell me, 3 what are you doing there? Tell me how 4 it's being remediated. 5 A. Well, what we do is, basically, we 6 go in and we remove the upper foot of 7 soil from that yard and that upper foot 8 on this particular property and other 9 properties, the depth is defined by the 10 criteria in the AOC which is anything 11 above ten parts per million basically 12 gets removed, and in this case, the 13 material greater than ten was only in the 14 upper foot of soil. 15 When we tested it from one foot 16 to two feet, I don't know what the 17 specific results were, but they were 18 below ten parts per million. As far as 19 the actual removal, once we get, 20 obviously, permission of the property 21 owner and get the EPA's approval, I guess 22 for lack of a better term, of 23 specifically what the removal will be, we
Page 22 1 when I say native, I mean soils that have 2 not been disturbed, moved around, used in 3 any sort of way, just stuff that is 4 naturally occurring soil is in the 5 overburden in the upper, whatever depth 6 that may be, depending on the location is 7 going to be typical Alabama red clay, 8 yes. 9 Q. Okay, and down to how far? What do 10 you mean? I want to be fair when I go 11 out and try to put some -- 12 A. All I can specifically say is 13 typically in Northeast Alabama, and 14 that's about as specific as I can get 15 because that's -- when we look at geology 16 as part of our remediation, when we talk 17 about general geographic features, that's 18 what we talk about, is this typical clay 19 layer you see, and call it overburden 20 above the bed rock in this area of 21 Alabama, so I would call it regional for 22 lack of a better term. 23 Q. All right, with regard to the	Page 24 1 will then mobilize a crew in the field, 2 and that's what you see here, which is 3 basically a couple of guys, an excavation 4 contractor will come in and they'll 5 remove the material from that portion of 6 the yard that contained PCBs above that 7 cleanup level by excavating it out, by 8 digging it out. 9 Now, there are certain setbacks 10 to avoid any structural damage to the 11 house, any structural damage to 12 driveways, any damage to trees that might 13 be located on the property that the 14 property owner doesn't want removed, 15 which is why you see a tree still 16 standing in the middle of the yard here. 17 And that material is removed, it's placed 18 in roll-off containers which is the green 19 box you see on the right of the picture, 20 and that material is typically taken to a 21 landfill that is licensed to accept 22 material of this nature and the specific 23 landfill is dependent on the levels of

Page 25 1 PCBs we've detected in the soil. 2 Q. Between ten and fifty parts per 3 million, where is it taken? 4 A. Between ten and fifty, the material 5 is typically taken to a landfill owned by 6 waste management out in Piedmont, Alabama 7 which is just north of Anniston. 8 Q. And you have talked about setbacks. 9 Over here by this house, for example, the 10 shrubs around the edge of the house seem 11 to be left there and is that because 12 there's a certain distance away from the 13 house that you don't dig out? 14 A. Yes, that's correct. 15 Q. What is that distance? 16 A. I don't know specifically. It's 17 specifically defined in the work plan 18 that's been approved by the EPA. I want 19 to say it's two feet, but it's on that 20 order. 21 Q. We can all look at that later, but 22 with regard to that distance from the 23 house that you don't excavate, let's just	Page 27 1 somebody's back door? 2 MR. SHARMAN: Object to form. 3 You can answer. 4 A. In accordance with the work plan, we 5 are allowed to leave material containing 6 PCBs in those defined setback areas, yes. 7 Q. Which, I suppose, would include 8 within two feet of the back door because 9 you wouldn't get close to the foundation 10 and closer to a couple feet from there; 11 correct? 12 A. Yes, however that setback is 13 defined. I think it's two feet, but 14 however it is defined in the work plan, 15 you're correct. 16 Q. Now, with regard to this particular 17 house, I guess, we may end up using it as 18 an example. I hope I won't ask so many 19 questions about every picture, but with 20 regard to this particular house, do you 21 know whether y'all tested, for example, 22 the areas around it, the neighbor's 23 house, or out by the street or what you
Page 26 1 say two feet, would your leaving a 2 two-foot-wide section of soil there be 3 dependent on the level of PCBs you find 4 or would you always leave that no matter 5 how much PCBs you find? 6 A. Well, it's not dependent on the 7 levels of PCBs that are found. As I said 8 earlier, it's based on avoiding any 9 structural damage to the property. In 10 this case, we don't want to crack the 11 foundation of the house or a lot of 12 stress to be placed on the house where 13 the foundation could be cracked by 14 removing soil away from the foundation, 15 so that is the reason for the setbacks. 16 Q. Okay. 17 A. And once again, that's all in 18 accordance with the work plan that EPA 19 has approved for conducting these removal 20 actions. 21 Q. So it's just fine with EPA if y'all 22 leave over fifty parts per million in 23 PCBs, for example, within two feet of	Page 28 1 do know about that? 2 A. Well, this house is located in an 3 area defined in the administrative order 4 as Oxford Lake Neighborhood. It's a zone 5 that's been identified and there's -- I 6 want to say probably in the order of 7 maybe one hundred fifty residential 8 properties in that area and we have 9 tested, I would guess, as of today, maybe 10 about half of the properties in that area 11 and there's more that are scheduled to be 12 tested and there's more that we're trying 13 to get access to to test, so we've tested 14 a fair number of the properties in this 15 area and some of those properties would 16 be in the immediate vicinity of this 17 house. I couldn't tell you specifically, 18 but some of them would be, yes. 19 Q. But you don't know -- well, let me 20 ask you this: as a matter of -- I will 21 withdraw the question for a minute. 22 Oxford Lake, what is the water source for 23 Oxford Lake?

Page 29 1 A. The drinking water source? 2 Q. You said the Oxford Lake community. 3 Is there a lake there? 4 A. Yes, there's -- 5 Q. Where does the water that feeds that 6 come from? 7 A. It's a spring-fed lake. It's 8 actually more of a big pond, but they 9 call it Oxford Lake. 10 (Another photo shown.) 11 Q. I've got a picture here with a guy 12 with a cowboy hat and some soil. What's 13 that about? 14 A. Well, at this stage of the removal, 15 we've already removed the PCB-contained 16 soil from the yard. We've back-filled it 17 with clean material which the 18 lighter-colored material you see there, 19 and we're currently in the process of 20 placing some new sod down in the yard. 21 Q. The material I'm seeing there, is 22 that what you refer to as native Alabama 23 red clay?	Page 31 1 conducting a removal action on a property 2 and based on that picture right down 3 there, I think I can narrow that to a 4 property that is located in the Glenaddie 5 area of Anniston, but during the course 6 of that removal, we were finding things 7 like that that suggested the material 8 there came from a foundry and so we -- to 9 document that, we took a picture of it. 10 Q. Is that the same piece of property? 11 A. That property is located on 12 Glenaddie. I couldn't tell you whether 13 that specific piece of slag came from 14 that property without knowing in detail 15 where those pictures were taken, but it 16 would have been in the same vicinity and 17 certainly, from this picture, you can 18 see, although it's hard to pick out 19 individually, there's a tremendous amount 20 of slag in that portion of the yard. You 21 can tell from the discoloration and the 22 rocky nature of the material. 23 (Another photo shown.)
Page 30 1 A. Yes, I would refer to that as some 2 typical Alabama red clay. 3 Q. Where did y'all get that soil from? 4 A. I couldn't tell you specifically 5 where we received it from. We get our 6 backfill material from several different 7 sources. It really just depends on the 8 location of the property, but it is 9 tested to ensure there's no PCBs in that 10 material before it's placed down and that 11 would be the case on this property. 12 (Another photo shown.) 13 Q. What's that rock? 14 A. That looks to be a piece of what we 15 call slag. Slag is basically a material 16 -- it's basically a waste material from 17 molten iron ore or scrap metal in the 18 foundry process. 19 Q. And where is that rock? Where did 20 you find it? Why have we got a picture 21 of it? 22 A. Well, that particular rock -- well, 23 we have a picture of it because we were	Page 32 1 Q. What are we looking at here? 2 A. It's the same property we looked at 3 in the previous picture. Once again, 4 this property is located on Glenaddie in 5 Anniston. We conducted a removal action 6 at this property in accordance with the 7 administrative order, and in this 8 particular case, you can see we're 9 removing the soil from the yard. 10 Q. Going out at one foot again at this 11 property? 12 A. This property would have been one 13 foot. There's only been one property 14 where we have had to go deeper than one 15 foot. All of the rest have been to a 16 depth of one foot. 17 Q. How many pieces of property have you 18 -- do you say you remediated to a depth 19 of one foot? 20 A. We've remediated twelve properties 21 to a depth of one foot in accordance with 22 the work plans that have been approved by 23 EPA and there has been one property that

Page 33 1 has been cleaned to a depth of two feet. 2 Q. I forget already. How many to one 3 foot? 4 A. Twelve. 5 Q. Twelve? 6 A. Yes. 7 Q. Of the twelve that you have done to 8 one foot, how many of those would you say 9 had fill material on them? 10 A. Well, I would say there is a 11 potential for fill material to be on all 12 twelve of those properties. 13 Q. Yeah, but that's not what I asked 14 you. Do you have an opinion with regard 15 to how many of those pieces of property 16 actually had fill material on them? 17 A. Yes, twelve. All of them, I 18 believe, had some degree of fill material 19 on them. 20 Q. Okay. How many of those pieces of 21 property would you say that the PCB 22 levels and the fill dirt was higher than 23 the PCB levels in the nonfill portion of	Page 35 1 portion of the yard and we found foundry 2 material. We did not detect PCBs in the 3 backyard and we didn't see foundry 4 material in the backyard. So that's one 5 if somebody can help me keep track of the 6 numbers here. 7 Q. Well, we're only up to one. 8 A. So we're going to keep going. The 9 next property, there's a property located 10 at, I believe the address was -- I can't 11 remember the exact address. It was on 12 Crawford Avenue and all of the details of 13 those are outlined in various reports 14 that we've pulled together and given to 15 EPA and I'm sure have been given to you 16 guys in discovery. 17 But at that particular 18 property, we found, and I can't remember 19 the specifics, but we found greater than 20 ten parts per million in the front yard. 21 I can't recall the exact levels. We 22 found less than ten in the backyard, but 23 we did detect PCBs in the backyard above
Page 34 1 the yards? 2 A. Well, that's a very difficult 3 question to answer unless I go through 4 each property one by one. 5 Q. Well, there's only twelve so we can 6 start. Have you got a list of the 7 twelve? 8 A. Well, let me just go through what I 9 have in my mind, and if we need to find a 10 list, we can find a list, but I'll start 11 with the property that was located on Zen 12 Parkway. It was located at 717 Zen 13 Parkway. 14 The data from that property, we 15 found greater than fifty parts per 16 million in the front yard. We found less 17 than one part per million in the backyard 18 and when we conducted the removal on that 19 property which is well outside the flood 20 plain, we found very clear indications of 21 foundry fill material, foundry wastes on 22 that particular property and there's an 23 example of where we had PCBs in one	Page 36 1 one part per million. We removed soils 2 from both the front and backyard at this 3 property and we did find evidence of 4 foundry material in that yard, in this 5 particular case, foundry sands. This 6 property, while it's located near the 7 edge of the flood plain of Snow Creek, 8 it's located well upstream of where 9 discharges from the Monsanto facility 10 would have entered Snow Creek. So that's 11 property number two. 12 The next property I'll go to 13 was located -- well, I'll talk about this 14 property that's on the screen right now 15 located on Glenaddie. There's actually 16 two properties located on Glenaddie. I 17 don't recall the specific data from those 18 two properties, but we did see evidence 19 of foundry sands and foundry materials in 20 the yards of those properties and the 21 yards of the adjacent properties, the 22 neighbors for both of these two. I 23 believe it was 529 Glenaddie and 620

Page 37 1 Glenaddie, if I'm not mistaken. But the 2 PCB concentrations in the adjacent yards 3 were not similar to the PCB levels in the 4 yards of these two properties, once 5 again, suggesting that the PCBs were 6 physically placed there as opposed to 7 them getting there by flooding, and as I 8 said, we did see physical evidence of 9 foundry fill on both properties. As far 10 as differences within the individual 11 sections of the yard, I don't recall the 12 data. I would have to go look. 13 There were, I want to say three 14 properties located in the vicinity of 15 12th Street basically between 11th Street 16 and 12th Street in Anniston and I believe 17 it was bordered by McDaniel if I'm not 18 mistaken, on one side. Those three 19 properties, and within those three is one 20 of the properties where we had to do a 21 removal of the two feet. On these 22 properties, we saw varying concentrations 23 of PCBs between the three properties as	Page 39 1 709 Mulberry. They were right next 2 door. On one of those properties, we 3 found PCBs in the backyard only, and like 4 I say, we found them greater than ten in 5 the backyard only. 6 In the front yard, we did not 7 detect PCBs. We conducted that removal, 8 but once again, there's an example of 9 where the levels of PCBs in one portion 10 of the yard were significantly different 11 than in another portion of the yard 12 which, once again, is a suggestion or an 13 indicator that that was a result of fill 14 material. Both of these properties, by 15 the way, are in the flood plain of Snow 16 Creek. 17 The other property, and I get 18 701 and 709 mixed up, but the other 19 property, we found PCBs of above ten in 20 both sections of the yard. Well, we 21 found PCBs above ten in at least one 22 section of the yard and we found them 23 above one in another section. I don't
Page 38 1 well as varying concentrations from the 2 neighbors that we have been to to get 3 access to sample. 4 We found very clear indications 5 of foundry material on those three 6 properties and, in fact, we had one of 7 the neighbors come out and ask us 8 specifically why are you, why is Solutia 9 digging up these yards, all these 10 materials were placed here by Union 11 Foundry. And as I said, when we were 12 conducting the removal, there was lots of 13 evidence of foundry fill on those 14 properties, of the slag, foundry bricks, 15 other materials that would clearly be 16 associated with a foundry operation. 17 What does that get me up to, 18 seven? 19 MR. SHARMAN: Seven. 20 A. Okay. There were two properties 21 that were located close to each other. 22 They were located on a street called 23 Mulberry. I believe it was like 701 and	Page 40 1 recall if the other section was above ten 2 or not, but I do know we did a removal 3 from the entire yard. Once again, that's 4 two properties that are next door to each 5 other and they both had sections that 6 were above ten, but there wasn't 7 consistency in the data between the two 8 yards. 9 Let's see. I'll move down now 10 to Oxford Lake Neighborhood where we've 11 done removals on four properties. I 12 don't recall the addresses of any of 13 those four. All four of those are 14 located outside the flood plain. Once 15 again, it's a similar situation where we 16 were finding PCBs above ten and certain 17 portions of the yard on these properties, 18 I know one, one property we found PCBs in 19 both the front and the backyard and 20 conducted removal on both sections of the 21 yard. On another property across the 22 street, we only found PCBs that required 23 to be cleaned up in the front yard of the

Page 41 1 property. We didn't find anything in the 2 backyard. 3 There is another property very 4 close to these two properties, I mean 5 within a stone's throw, basically right 6 next door where we found PCBs in, I want 7 to say the front yard in what we call the 8 side yard of the property, but in the 9 backyard, we didn't detect PCBs and 10 that's -- I'm going off memory there so 11 I'll kind of clarify that there were -- 12 maybe I should go back and say there were 13 two sections of the yard where we had to 14 do a removal and one section where we 15 didn't. I can't remember whether it was 16 the backyard or the side yard, but we 17 didn't have to do the removal, but once 18 again, an example of varied PCB levels on 19 the same property and varied PCB levels 20 in relation to nearby properties. 21 And then there was a fourth one 22 which is the one we looked at, the first 23 property we looked at earlier on the	Page 43 1 different concentrations of PCBs in the 2 same yard or between one yard and a 3 next-door neighbor's yard, that suggests 4 to you that the dirt was put there, the 5 PCBs were placed there rather than got 6 there by water or by air? 7 A. Yes, that's correct. 8 Q. Okay. Has Monsanto done some PCB 9 testing on it's own property? 10 A. Yes. 11 Q. For example, with the south 12 landfill, they have tested at various 13 times different places around it? 14 A. We've tested, yes. 15 Q. Did you get varying results? 16 A. The data that I recall from looking 17 around the south landfill was most of it 18 was under a consent order and I'm going 19 to get to the answer to your question, 20 but let just try to think through the 21 history of my mind so I can get to the 22 answer to your question. 23 Most of that sampling was done
Page 42 1 video here, and I don't recall whether we 2 did a removal in the backyard of that 3 property or not and I don't recall what 4 the PCB levels were on that specific 5 property. But on that one, as we 6 discussed earlier, there were differing 7 concentrations when you look at the 8 neighbors and the properties across the 9 street, once again, suggesting the 10 material was physically placed there and 11 did not get there by any type of 12 flooding. And what does that get me up 13 to? 14 MR. SHARMAN: That's thirteen. 15 Q. Yes, that's thirteen. You went over. 16 One, you mentioned went down to two 17 feet? 18 A. One, we mentioned went down to two 19 feet, right. So that's my best 20 recollection. I would refer you to the 21 report to confirm the details, but that's 22 my best recollection. 23 Q. So it's your view when you find	Page 44 1 under a consent order with -- I think it 2 was a 1996 consent order and it was based 3 on a screen level assessment. I'm not 4 aware that any of those samples were sent 5 to a laboratory for analysis. In other 6 words, what that data told us was whether 7 it was greater than five parts per 8 million, which I think was the screening 9 limit, or less than five and that allowed 10 us to define the extent of PCBs around 11 the facility and the cleanup that was 12 done was based on that. 13 Now, there was a gradient 14 that's very clear. When you look at that 15 data, you find that we're detecting PCBs 16 above five close to the drainage ditches 17 inside and close to the drainage ditches 18 near the facility. As you move away from 19 those drainage ditches, you are finding 20 concentrations of less than five so 21 that's what we would expect to find if it 22 was due to flooding. And so when you say 23 are there varying concentrations, yes,

Page 45 1 there's varying concentrations, but they 2 vary in a manner that's consistent with 3 the deposition by flooding, whereas, on 4 these residential properties, there's a 5 variation in the PCB levels, but it's not 6 consistent with what you would expect to 7 see from a flooding pathway. 8 Q. The levels are not consistent 9 because of too much radiation? 10 A. Because there's too much variation 11 because, you know, the difference between 12 going from -- and I'll use rough numbers 13 here, greater than five and less than 14 five and going from, say, twenty-five in 15 a ditch and going out to less than five, 16 you know, one to five, you know, one to 17 five, less than one, whatever it is, 18 outside is different than finding, you 19 know, I'm just making these numbers up 20 for the sake of the example, but it's 21 different than finding twenty-five in the 22 front yard, nondetect in the backyard, 23 you know, maybe two parts per million	Page 47 1 this year in January, we did some testing 2 of the south landfill covers and we were 3 finding, you know, PCBs in the one to ten 4 parts per million range on the surface 5 where the PCB cells were. So to answer 6 your question, there has been some 7 laboratory testing, but most of the data 8 was collected under that 1996 consent 9 order. 10 Q. When did you do testing on top of 11 the south landfill? 12 A. It was in the January-February time 13 frame. 14 Q. Of this year? 15 A. Yes. 16 Q. And describe the results for me. I 17 think you just told me but -- 18 A. Well, we tested -- basically, 19 there's two sections to the south 20 landfill. There's a section that was 21 capped under the RCRA program. I should 22 say it had an upgraded cap put on it. We 23 tested those soils and we didn't detect
Page 46 1 next door, maybe nondetect next door, 2 maybe forty across the street. I mean 3 that's significant variation within a 4 small area in an area that's outside the 5 flood plain. 6 Q. Let me ask you about some other 7 areas since your recollection is that the 8 only testing that was done on the south 9 landfill is plus or minus five. 10 MR. SHARMAN: Object to the 11 form. I don't think 12 that's what he said, but 13 if you can -- 14 Q. I thought that is what he said. 15 Isn't that what you said? Was there some 16 more sophisticated testing done on the 17 south landfill? 18 A. Most of the testing done on the 19 south landfill and in the vicinity has 20 been of that nature. There has been 21 some, not as much, but some specific 22 testing where samples were sent to a 23 laboratory. For example, we just earlier	Page 48 1 any PCBs, so that made perfect sense to 2 us because we capped it with clean soil. 3 There's another section where 4 on the -- it would be the eastern portion 5 of the south landfill where basically, 6 1-E, 2-E, 3-E, 4-E, and 5-E, those cell 7 numbers, the area around the PCB cells, 8 we detected PCBs in the one to ten part 9 per million range which was consistent 10 with historical data. 11 And then there's a lower 12 portion of that side of the landfill 13 which is the old waste management area 14 one, is what it's referred to under our 15 permit and we didn't detect any PCBs down 16 there and all that data was consistent 17 with screening level data that had been 18 collected historically. 19 Q. So the one to ten part per million 20 that you found on 1-E, 2-E, 3-E, 4-E, and 21 5-E was consistent what you expected to 22 find? 23 A. Well, it was consistent with

Page 49 1 historical data. 2 Q. Does that mean consistent with what 3 had been found there before? 4 A. It was consistent with that, you 5 know, greater than five, less than five 6 screening that we did back under the '96 7 consent order. 8 Q. So you tested that area back in 1996 9 and you found between one and ten parts 10 per million; right? 11 A. Correct. 12 Q. And then you tested it again earlier 13 this year and found one in ten parts per 14 million? 15 A. Right. 16 Q. Is there some time in the future 17 when you intend to cap that area of the 18 landfill so that you won't be finding 19 between one and ten parts per million on 20 top of that landfill anymore? 21 A. Well, I won't speculate as to what 22 types of remedies the EPA may require in 23 the future or ADEM, but --	Page 51 1 within the subject matters 2 of the 30(b)(6). 3 Q. As far you know, y'all are going to 4 just going leave that that way forever? 5 MR. SHARMAN: Object to the 6 form. 7 A. Based on the data we have which 8 shows that there are not PCBs migrating 9 through surface water from that landfill, 10 I see no reason to do anymore additional 11 work on that section of the landfill and 12 I would also say, just for the record, 13 1-E, 2-E, 3-E, 4-E, and 5-E encompasses a 14 large section of the landfill. The PCBs 15 were not found on all of those cells. It 16 was just found on a subset of those 17 cells. 18 Q. Do you remember which cells it was 19 found on? 20 A. The cells where the PCBs section of 21 the landfill was located. I want to say 22 1-E, 2-E, and 3-E. I believe 4-E and 5-E 23 are a separate waste management area and
Page 50 1 Q. Sir, I'm asking you, as you sit here 2 today -- 3 MR. SHARMAN: Let him finish 4 his answer, Frank. 5 A. If I may answer your question? 6 Q. I would like an answer to my 7 question. I don't want you to speculate 8 as to what somebody else might require. 9 I think I asked you a pretty simple and 10 direct question. 11 A. And I'm trying to give you a 12 thorough answer. 13 Q. Is there some day, sir, when you 14 expect to cap sections 1-E, 2-E, 3-E, 15 4-E, and 5-E of the south landfill in 16 such a way that you won't be finding PCB 17 levels on top of that landfill anymore? 18 A. No. 19 MR. SHARMAN: Mr. Branchfield, 20 you answer that question 21 as you feel appropriate 22 and I also object to it 23 because it's not anywhere	Page 52 1 we didn't detect PCBs in the vicinity of 2 those cells. 3 Q. All right. We were looking at 4 pictures. I do want the get back to 5 asking you some foundry questions 6 sometime, but let's go back to pictures. 7 (Another photo shown.) 8 Q. What's that? I don't have any way 9 of identifying these pictures for the 10 record, so I'm just going to have to do 11 the best I can. It looks like, to me, 12 like some kind of a scarred rock or 13 something there. What is that? 14 A. That looks, once again, to be 15 another piece of foundry slag. I would 16 say that based on the kind of greenish 17 color you see in there which is typically 18 the color you find in the slag from the 19 various metals that are -- the waste 20 metals that are in that material and just 21 to better define what that is, I suspect 22 that's the material from the one of the 23 Glenaddie properties where we did the

Page 53 1 removal, the same property we were 2 looking at on a previous picture. 3 Q. What about the dirt around that? It 4 looks kind of red and you had 5 light-colored dirt earlier. Is that 6 native Alabama red clay there or is that 7 something else? 8 A. There could be some component of 9 that soil that's native Alabama red clay, 10 yes. 11 Q. Well, is native Alabama red clay 12 that dark red or the light color you 13 described earlier? 14 A. Well, the dark red you would expect 15 to be indicative of Alabama red clay, but 16 you can look on other areas of that 17 picture and see that the soil is not a 18 reddish in color, it's black, so that 19 suggests that there's a mixture there 20 potentially. 21 Q. I'm sorry, where do you see some 22 black? 23 A. You look on the right side of the	Page 55 1 life? 2 A. Have I personally? 3 Q. Yes, ever been a groundsman on a 4 piece of property being filled in, a 5 residential piece of property having fill 6 dirt put in? 7 A. I have not, no. 8 Q. Okay. Is the Anniston area kind of 9 hilly? 10 A. Yes. 11 Q. Do you think it's strangely 12 coincidental that fill dirt being brought 13 in would only be a foot deep instead of 14 deeper on all twelve pieces of property? 15 A. Well, you know, I don't find it 16 strange, no. I mean, I don't know what 17 the basis was for filling in that yard. 18 I don't know what the property owner was 19 trying to accomplish. I'm also not 20 saying the foundry fill was only found to 21 a depth of a foot. I'm saying we found 22 PCBs above ten parts per million to a 23 depth of a foot and some of those
Page 54 1 photo compared to the left side. On the 2 left side, you see some reddish color in 3 the soil and I look to the right side and 4 I don't see any reddish color in the 5 soil. I see the black sandy type of 6 material, and you know, the logical piece 7 of -- if you want to call it conclusion 8 -- that I would draw from this picture 9 is that there's foundry slag in this 10 material and the foundry slag had to come 11 from a foundry, so regardless of the 12 presence of the Alabama red clay, there's 13 some material that had to come from a 14 foundry. 15 Q. While I'm thinking about it, before 16 we get too far away, I'm curious about 17 the concept of the twelve pieces of 18 property you have that you -- the twelve 19 that you moved down one foot. 20 A. Yes. 21 Q. Have you ever done any -- back up a 22 second. Have you ever done any filling 23 on a piece of property any time in your	Page 56 1 properties, there may have been PCBs 2 greater than a foot deep. It just wasn't 3 required to be removed under the terms of 4 the AOC or EPA. 5 Q. The way you did the testing, you 6 didn't find it over ten deeper, so you 7 didn't go any deeper in the removal? 8 A. That's correct, yes. 9 Q. But see, what I'm confused about is 10 that is if the PCBs are coming from the 11 foundry-related fill, why didn't you go 12 and take out all the foundry-related fill 13 instead of stocking with fill? 14 A. Because the data we had told us that 15 the PCB levels down in the deeper soils, 16 with the one exception, did not require 17 to be removed in accordance with the 18 terms of the AOC. 19 Q. So you think something was happening 20 concerning this foundry fill that 21 resulted in only the foundry fill, the 22 top foot being that much PCBs whereas the 23 other foundry fill that was on the same

Page 57 1 piece of property was just fine and 2 dandy? 3 MR. SHARMAN: Object to the 4 form. You can answer. 5 A. Well, I think to answer that 6 question -- the simple answer to your 7 question is I don't think that's 8 inconsistent with what I would expect to 9 find given my knowledge of how foundries 10 operated and how they managed their waste 11 materials. 12 Q. Well, explain that to me. How can 13 you have a load of foundry materials that 14 fills up a hole three feet deep and have 15 PCBs in it, but all you need to do is dig 16 up the top foot? That's what I'm 17 confused by. If you could explain that 18 to me, I would appreciate it. 19 A. Well, there's a couple of things you 20 have to look at. First of all, it's not 21 necessarily true that we were finding 22 stuff three feet deep on these 23 properties, I'll have to say that, but --	Page 59 1 foundries, and this is based on studies 2 that were done by the EPA, studies that 3 were done by Dr. Scrudato is that the 4 consistency of PCBs, specifically PCBs in 5 foundry waste, was not consistent. In 6 other words, you could go, if you had a 7 pile of foundry sand right here in front 8 of me, I could take a sample from the 9 side and I could get thirty parts per 10 million PCBs. I could take a sample from 11 this side and not detect anything. And I 12 could get a sample from the interior and 13 I find nine hundred parts per million 14 PCBs. These were waste piles. They were 15 taken -- 16 Q. How big of a pile are we talking 17 about, by the way? 18 A. I'm sorry? 19 Q. You were describing this pile. How 20 big a pile are we talking about? 21 A. Well, the waste piles on these 22 foundries could have contained hundreds, 23 if not thousands, of cubic yards of
Page 58 1 Q. But you would agree that there were 2 occasions where you left foundry fill, 3 what you thought was foundry fill on the 4 property below a foot? You just scraped 5 off the top foot and put soil on it; 6 correct? 7 A. Yes, we did, that's correct. 8 Q. I'm trying to understand why, sir, 9 if you believed the PCBs on the property 10 were coming from the foundry fill, you 11 didn't remove all the foundry fill on the 12 properties. 13 MR. SHARMAN: I think you told 14 him, but tell him again. 15 A. When you look at the way the 16 foundries managed their waste material, 17 they didn't have a -- this wasn't a waste 18 stream. It wasn't a continuous flow of 19 waste from a foundry. What it was a pile 20 of material and that material could have 21 come from any aspect of the foundry 22 operation. 23 What we know about the	Page 60 1 material. These foundries were 2 generating, you know, as recently as the 3 -- I will say 1980s or 1990s, they were 4 generating, you know, an individual 5 foundry was generating, you know, 6 hundreds of tons of this stuff a day and 7 they had to do something with it. Now, 8 some of that material would get 9 contaminated with PCBs whether it was 10 from a transformer leak or a hydraulic 11 leak that they used some foundry sand to 12 clean up or whether they had an old 13 transformer they threw in a pile or 14 whether it was just some shredder fluff 15 that had PCBs in it that got put in the 16 pile, I mean it was very -- 17 Q. So PCBs were inconsistent -- 18 A. It was very inconsistent and that is 19 consistent -- you know, that picture, 20 what we know about how those foundry 21 piles were created and how they were 22 distributed throughout the area is 23 consistent with what we've found in the

Page 61 1 areas where we've found foundry sand. 2 Q. So if you had, for example, three 3 dump trucks full of foundry waste, you 4 would think PCBs within them would also 5 be inconsistent? 6 A. Yes. 7 Q. Okay. On one of these pieces of 8 property, and it varies, you tell me it 9 varies, I don't know, but let's take a 10 typical one of these twelve houses. How 11 did you first find that that house 12 merited cleanup? Was it taking a 13 composite sample of the front yard and 14 one in the backyard; is that where it 15 started? 16 A. Yes, that's correct. The terms of 17 the administrative order where the EPA 18 defined a five-point composite sampling 19 program for the front yard and the 20 backyard and if the properties were 21 greater than a one-quarter acre, we can 22 subdivide it beyond that. 23 Q. Okay, now, let's suppose on one of	Page 63 1 digging? 2 A. Yes, we had to do that depth 3 sampling. 4 Q. Okay, depth sampling. 5 A. Right. 6 Q. And where did you do it? You had a 7 composite from the front yard. How many 8 more tests did you make of depth? 9 A. The depth sampling would be done in 10 that portion of the yard where we found 11 greater than ten in that zero to one foot 12 composite sample. In other words, if we 13 go to, you know, pick John's Smith's 14 house, just some arbitrary house, we'll 15 sample the front yard, okay, from zero to 16 one foot and then sample the backyard 17 from zero to one foot. If that front 18 yard is greater than ten and the 19 backyard, we don't find anything, then we 20 would go back to the front yard and 21 sample from one to two feet until we stop 22 finding PCBs above ten parts per million. 23 Q. When you do the sample in the front
Page 62 1 these pieces of property -- I guess it's 2 true on more than one of these pieces of 3 property -- you found over ten on that 4 screening sample in either the front or 5 the backyard but not the other one. 6 A. Yes. 7 Q. Okay. What did you do next in terms 8 of sampling? Did you do more sampling 9 before you actually put a backhoe out 10 there or did you clean the yard up on the 11 basis of that first composite? 12 A. Well, the first composite would have 13 only been in the surface soil. I should 14 say define that to zero to a foot and if 15 we found greater than ten in that surface 16 soil, then we would go down and conduct 17 additional sampling to define the depth 18 to which we will find the PCBs. 19 Q. I may be a little slow, but starting 20 off with the idea that you found -- you 21 have a composite sample of the front yard 22 over ten, what did you do next? Did you 23 do more sampling before you started	Page 64 1 yard from down -- when you first come 2 back after this first composite sample 3 and surface sample, you go back and you 4 dig how deep for the next sample? 5 A. We don't dig anything until the 6 property is fully characterized so we 7 only have to go dig once. 8 Q. Well, I guess what I mean by that is 9 how deep do you go with the first set of 10 samples after that original composite? 11 A. We sample until we are no longer 12 finding PCBs greater than ten parts per 13 million. 14 Q. No, I'm still confused. 15 A. Maybe I'm misunderstanding your 16 question. 17 Q. Let me back up. I'll just start at 18 the very beginning so I'll understand it. 19 You have this composite sample consistent 20 of -- the front yard, let's say, is 21 consistent of pulling dirt from five 22 different places and mixing them all 23 together and sampling and it's over ten.

Page 65 1 Now, did you reserve the individual 2 portions of that composite sampling, let 3 me start there? In other words, can you 4 go back to the individual drawings and 5 figure out where the PCBs were that made 6 that compose to be high? 7 A. No, we don't reserve the individual 8 -- 9 Q. So that doesn't exist anymore, so 10 all you know is you have a composite on 11 the front yard on the surface? 12 A. Right, yes. 13 Q. Okay, what do you do next? 14 A. We will then go back to the 15 property, okay, at a separate time and we 16 will, obviously, inform the property 17 owner we found greater than ten in your 18 front yard, we need to do more sampling 19 in the front yard of your property so we 20 can determine how deep the PCBs go, so 21 that's when we'll come back and we'll 22 start at that one foot depth and we'll 23 get a sample between one and two feet and	Page 67 1 we're doing under this administrative 2 order, yes, it's always composites. 3 Q. So there are not occasions where 4 then you would clean up a piece of a 5 front yard? It's either all or not? 6 It's either all front yard or not front 7 yard? 8 A. That's correct. 9 Q. To educate me, what do you do about 10 side yards? You have front yard 11 composite, backyard composite. What do 12 you do about side yards? 13 A. The side yard is included in either 14 the front yard or backyard. 15 Q. If you clean up one, either one, you 16 clean up the sides at the same time? 17 A. Yes, and it's based on, you know, 18 the -- what's the easiest way to explain 19 this? 20 Q. When you start it off, you designate 21 either the side as either part of the 22 front or part of the back? 23 A. Exactly, yes.
Page 66 1 we'll get a sample between two and three 2 feet and we'll test those samples: 3 Q. And you do three foot cores? 4 A. Well, we do them on one foot 5 intervals and we screen them, and if the 6 screening says it's greater than ten then 7 we'll go and get another sample at the 8 next depth interval. 9 Q. So the first thing you do is go out 10 and take it in one foot cores? 11 A. Yes. 12 Q. Okay, how many one foot cores would 13 you take? 14 A. It's the same program of five point 15 -- 16 Q. A composite? 17 A. Yes. 18 Q. You mix it all together and do a 19 composite? 20 A. Correct. 21 Q. All right, so when you do -- do you 22 always do composites? 23 A. Under the residential program that	Page 68 1 Q. And you stay with that the rest of 2 the way? 3 A. Yes. 4 Q. All right, now, assuming you were 5 right about foundry waste and PCBs not 6 being consistent, that it might have a 7 hot spot in foundry waste here and not 8 over there somewhere else, wouldn't you 9 expect in sampling an area with foundry 10 waste, to get inconsistent results? 11 A. Yes, you would. 12 Q. Therefore, if you found foundry 13 waste in the top foot, wouldn't it be 14 prudent to take all the foundry waste out 15 of the property because there might be 16 another hot spot that your method of 17 sampling simply did not get? 18 A. Well, the removal is based upon the 19 data as we collect it and in accordance 20 with what the EPA has basically directed 21 us to do under this administrative order 22 and it's the EPA that has concluded that 23 using this process, if we don't detect

Page 69 1 PCBs at a certain location, that it does 2 not need to be removed. That's not 3 Solutia's opinion or what we're doing. 4 We're doing what we've been directed to 5 do by the EPA in that case. 6 Q. Nobody is keeping you from taking 7 out the foundry waste, are they? 8 A. No, nobody is keeping us from doing 9 it, and based on the data and the 10 criteria that has been established by the 11 EPA, there's no need to remove it. 12 Q. Well, based on what your 13 understanding is of the inconsistency of 14 PCBs in foundry waste, if there, in fact 15 is foundry waste on a piece of 16 residential property, if you don't remove 17 it all, there may very well be another 18 hot spot there left that you didn't 19 happen to hit the way you do the testing; 20 right? 21 A. Well, by conducting a composite 22 sample, if there is a hot spot, you have 23 a greater chance of detecting that hot	Page 71 1 MR. SHARMAN: Object to the 2 form. Argumentative. You 3 can answer. 4 A. The removal is dictated by the 5 presence of PCBs, not the presence of 6 foundry wastes, so the answer to your 7 question is no, I don't think it's 8 prudent. 9 Q. Sir, if you believe -- let me ask 10 you this: do you believe foundry waste 11 typically contains PCBs? 12 A. I believe PCBs are constituents that 13 could be found in foundry sand. Now, 14 typically, that's a pretty general term, 15 but yes, PCBs are consistent with foundry 16 waste materials. 17 Q. Well do you believe that where you 18 find a dump truck full of foundry waste, 19 you will typically find PCBs? 20 A. Well, by putting the question like 21 that, I would say, no, you won't 22 typically find PCBs. Sometimes you will 23 and sometimes you won't.
Page 70 1 spot and being able to conclude or not 2 conclude exactly -- I should say being 3 able to conclude what you're suggesting 4 could be a problem is not a problem 5 because the composite sample is -- that's 6 why you take five points and you just 7 don't go to one point because if there is 8 a hot spot, you want to increase the 9 probability that you're going to find it 10 so you go to five spots in the yard and 11 you take those samples and you mix them 12 together so I think this program takes 13 that into account by requiring the 14 composite sampling program to increase 15 the probability that you will find that 16 hot spot if it exists. The alternative, 17 of course, is to go to a single spot on 18 the yard, get one sample and run risk of 19 missing that hot spot. 20 Q. No, sir, the alternative would be if 21 you thought you found foundry waste to 22 take out all of the foundry waste; 23 wouldn't that be the alternative?	Page 72 1 Q. Okay. If you find a dump truck full 2 of foundry waste and you do a sample on 3 one edge of it and find some PCBs, do you 4 believe you would typically find some 5 more PCBs somewhere else in that dump 6 truck full? 7 A. Once again, I don't know. I don't 8 know if you would or not. You would have 9 to get a sample that's representative of 10 that pile to make that determination. If 11 you find PCBs in one part, it would be 12 prudent to check the other parts of the 13 pile, but I can't -- you know, based on 14 how the PCBs got into the foundry 15 material, based on the observations that 16 have been made by the EPA in their pilot 17 studies and in this report of the study 18 done by Dr. Scrudato, sometimes you find 19 it and sometimes you don't. 20 Sometimes you'll have a pile 21 and you will find it throughout the pile, 22 dump truck load if you want to use that. 23 Sometimes you will have a dump truck load

Page 73 1 and you will not find it throughout the 2 dump truck load. That is what's unique 3 about PCBs in foundry sands is that it is 4 very spread. There are a number of 5 properties in Anniston that have been 6 sampled where the EPA has found high 7 levels of lead that's associated with 8 foundry fill and they have not found 9 PCBs, so as I said, it's case by case. I 10 really can't generalize it. 11 Q. Where you have found something you 12 thought was foundry-related or foundry 13 fill, have you taken any additional 14 efforts at sampling or do you still do 15 the same thing whether you do or don't 16 find foundry waste? 17 A. We conduct the same sampling program 18 at each individual property regardless of 19 whether we find foundry fill or whether 20 we do not find foundry fill and that 21 sampling program is the one that has 22 been, you know, basically dictated by the 23 EPA.	Page 75 1 again, a discoloration of the soil. You 2 see sort of different shades of brown in 3 the soil. The darker shades are 4 certainly indicative of a potential for 5 there to be foundry sand there. 6 (Another photo shown:) 7 Q. What is that? 8 A. That is a barron that we removed 9 from the property at 717 Zen Parkway. 10 Q. And what about the barron? 11 A. Well, the barron is -- it was found 12 among other material, other foundry-type 13 material that we found in that yard such 14 that, I mean, glass, trash, things like 15 that. That's also at 717 Zen Parkway. 16 Q. Is that a foundry bottle? 17 A. I don't know. 18 Q. What about glass tells you 19 something? 20 A. Glass tells me nothing other than 21 the material was probably placed there 22 and didn't get there through flooding or 23 other transport, just, once again,
Page 74 1 Q. Is the EPA telling you you can't do 2 any more sampling? 3 A. No, the EPA hasn't specifically said 4 not to do more sampling. They've 5 basically said no more sampling is 6 required. 7 (Another photo shown.) 8 Q. What's in this bucket here? 9 A. Once again, just more examples of 10 slag material from a foundry operation, 11 waste material from the melting of the 12 iron ore or scrap metal. 13 Q. Did you test those rocks there for 14 PCBs? 15 A. No, we did not test those rocks 16 specifically. 17 (Another photo shown:) 18 Q. What am I looking at there? 19 A. I couldn't tell you specifically 20 what property that is, but once again, 21 you're looking at some rock material that 22 is, once again, the slag material we're 23 looking at and you also see here, once	Page 76 1 supports the hypothesis that the material 2 was physically placed there, this fill 3 material. 4 Q. What about down here (referring to 5 photograph)? 6 A. That is, once again, foundry sands 7 that we're looking at. You see the 8 black, grainy nature in the soil which is 9 indicative of foundry sands. 10 Q. What's this down here (indicating 11 photograph)? 12 A. I don't know. 13 Q. Same thing? 14 A. I would use the same description. 15 Q. What's going on here with the 16 tractor and backhoe? It looks deeper 17 than a foot. That's the reason I'm 18 stopping there for a minute. 19 A. Well, if it's deeper than a foot, 20 it's obviously not a residential cleanup. 21 Q. Do you know where that is? 22 A. No. Let me look at the list I have 23 here.

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1 MR. SHARMAN: Mr. Branchfield 2 is referring to the cover 3 of the CD to try to aid 4 his recollection. 5 A. I do not -- based on that picture, I 6 cannot tell you specifically where that's 7 at. 8 (Another photograph shown.) 9 Q. What am I looking at here? It looks 10 like a pole. 11 A. That is a power pole that's on a 12 property which we own north of our 13 facility upon which a transformer was 14 mounted and what we're looking at is that 15 the soil beneath that transformer, 16 there's no vegetation beneath it 17 suggesting that something may have leaked 18 from that transformer and prevented 19 anything from growing in the vicinity of 20 that area. 21 Q. Is that a PCB transformer? 22 A. I don't know specifically whether 23 that transformer had PCBs in it or not.	1 bases for our conclusions, we brought 2 this along to help describe what we had 3 been seeing during our work in the 4 Anniston area. 5 (Another photograph shown.) 6 Q. What's this with all these big 7 trucks out here? 8 A. That is our Highway 21 project where 9 the Alabama Department of Transportation 10 is preparing to build a new bridge across 11 Choccolocco Creek. We're working with 12 them because a portion of this area is in 13 the flood plain of Choccolocco Creek, but 14 more specifically, at this location, 15 we've seen -- found a document and I 16 believe it was in ADEM's file that 17 suggested -- I shouldn't say suggested -- 18 stated that one thing -- I want to say it 19 was U.S. Pipe which is a local foundry 20 was disposing a foundry fill material in 21 this vicinity near Highway 21 and 22 Choccolocco Creek. And the data we found 23 there -- well, we haven't conducted any
Page 78	Page 80
1 I do recall that we checked -- got some 2 wood chips from the pole and we did 3 detect PCBs in those wood chips. 4 Q. What about that dirt? Did you check 5 that? 6 A. I don't recall whether we sampled 7 the soil or not. 8 (Another photograph shown.) 9 Q. What's this? 10 A. Those are some bottles we use to 11 demonstrate to people the differences in 12 the characteristics between foundry sand 13 and Alabama red clay and the typical area 14 of top soil. 15 Q. Demonstrate to whom? 16 A. Well, to demonstrate to basically 17 anyone who had questions on this 18 particular issue. 19 Q. Who do you remember asking questions 20 about it that you have used these for? 21 A. When we filed this cost for recovery 22 action, we met with a number of people 23 around Anniston and to help explain the	1 excavation and seen signs of foundry 2 fill, the data we've seen suggests that 3 foundry fill may be present. 4 Q. Did you find PCBs around where this 5 construction is? 6 A. Yes, we did. 7 Q. You're of the view that those PCBs 8 came from foundry sand deposited there by 9 U.S. Pipe instead of from the creek that 10 runs under the bridge there? 11 A. I don't know where the PCBs came 12 from. I haven't had an opportunity to 13 conduct any excavation down there to 14 either confirm or deny the existence of 15 foundry sand. I have a document that 16 says there's foundry sand there. I have 17 data that supports that conclusion, 18 chemistry data that supports that 19 conclusion, but as far as physically 20 seeing foundry sand, I can't say that 21 I've seen any there yet. 22 (Another photograph shown.) 23 Q. What's this next picture?

Page 81 1 A. That is a picture of Oxford Lake 2 Park. There's a softball area where we 3 found PCBs in a significant amount of 4 foundry fill and this is an example of 5 what we found. 6 Q. Is that in the flood plain? 7 A. Yes, it is. 8 Q. Of Snow Creek? 9 A. Snow Creek, yes. 10 (Another photograph shown.) 11 Q. What are we looking at here? 12 A. Once again, this picture was taken 13 during our cleanup of Oxford Lake Park. 14 This picture shows the black foundry 15 material that we found at the park and 16 you can contrast it very nicely with the 17 native Alabama soil which you see in the 18 background. From a color perspective, 19 there's a very distinct contrast. 20 Q. What's going on in this picture? 21 A. Well, in this picture, we're in the 22 process of conducting a cleanup activity 23 to address PCBs that we found at the park	Page 83 1 A. What it looks like is that building 2 is a pawnshop that we acquired through a 3 settlement with a former property owner 4 of that pawnshop. We own it now, and 5 about a year and a half ago, we were 6 cleaning it up, basically getting all the 7 garbage out of it and that's what you see 8 there. I don't know why that picture was 9 taken. 10 (Another photograph shown.) 11 Q. What's this? 12 A. That's a picture of us doing the 13 renovation of the inside of that pawnshop 14 building, making it usable again, 15 basically. 16 Q. Is the building still there now? 17 A. Yes. 18 Q. Okay. What remediation of that site 19 did you do? 20 A. There's no remediation required of 21 that site. 22 MR. SHARMAN: Frank, at a 23 convenient point, I need
Page 82 1 through sampling. More specifically, 2 there were four softball fields located 3 at Oxford Lake Park. We tested those 4 softball fields. We found PCBs on three 5 of them, and through an agreement with 6 the City of Oxford and, obviously, with 7 the approval of the EPA, we came in and 8 we removed the upper foot of 9 PCB-containing soil from those three 10 softball fields and, specifically, what 11 you see here is after we removed that 12 upper foot and we're in the process of 13 backfilling with clean soil. 14 Q. So this is actually the area of the 15 softball fields? 16 A. Yes, that's correct. 17 (Another photograph shown.) 18 Q. Same area? 19 A. Yes, same project, same area. 20 Q. Now, I don't know why took you a 21 picture of these trucks, so tell me about 22 that. Something about the stuff on the 23 back of that truck that was interesting?	Page 84 1 to take a break. 2 MR. DAVIS: Sure. We can do it 3 now. That's fine. 4 (Whereupon, a brief recess was 5 taken at this time.) 6 (Another photo shown:) 7 Q. It looks like the next photograph is 8 a photograph of a shopping center. What 9 is the significance of that? 10 A. This is Quintard Mall. The 11 significance is that we worked on a 12 project in cooperation with the developer 13 of the mall to expand the mall to the 14 east. This picture is after that 15 expansion has been completed. In the 16 course of doing this work with the mall, 17 we came across some foundry sands in 18 certain areas that had to be excavated. 19 Q. In what areas? 20 A. I specifically couldn't tell you. 21 This project was completed before I came 22 to Anniston. 23 Q. Do you know whether --

Page 85 1 A. I believe it was in the vicinity of 2 Snow Creek, you know, close to Snow Creek 3 which runs underneath the mall right now. 4 Q. You didn't observe the so-called 5 foundry sand yourself at that time? 6 A. At Quintard Mall, no, I did not. 7 Q. How do you know it was there? Where 8 did you get the information from? Have 9 you got photographs of the so-called 10 foundry sand there or what? 11 A. I know it's through discussions I 12 have had with my predecessor, Alan Fast, 13 who was the project manager at the time 14 this project was completed as well as 15 some of the people that worked on the 16 mall site for Solutia at that time. 17 Q. So when you say the area of Snow 18 Creek, it was an area of Snow Creek, was 19 Snow Creek rerouted as part of this 20 project? 21 A. It was temporarily rerouted, yes. 22 Q. Okay, and then put back essentially 23 where it had been before?	Page 87 1 Quintard Mall site in and around Snow 2 Creek came from the Monsanto plant, don't 3 you? 4 A. I don't think I can say that 5 conclusively. We know that Snow Creek is 6 in the drainage pathway from the Monsanto 7 facility. I know that there were a 8 number of foundries and other industries 9 located that also discharged PCBs into 10 Snow Creek. 11 I know that based on the data 12 we have observed, that and in particular, 13 there's a U.S. Pipe foundry and a company 14 called Tull Chemicals that are located 15 probably maybe a quarter of a mile, at 16 most, a half of a mile upstream of 17 Quintard Mall. Both of those, we believe 18 -- well, Tull Chemical, we know, dumped 19 PCBs into Snow Creek and U.S. Pipe, we 20 believe they contributed to PCBs in Snow 21 Creek also. Whether there are specific 22 PCBs from Monsanto's facility, I couldn't 23 say for sure.
Page 86 1 A. Yes. There may have been some minor 2 variations, but basically, where it was 3 before. 4 Q. And was the foundry sand found in 5 the old creek bed? 6 A. I believe it was found in the 7 vicinity of the banks of the creek. 8 There may have been some found in the 9 creek bed. 10 Q. In that situation, you say you found 11 or your company found foundry sands in 12 Snow Creek and you found PCBs in Snow 13 Creek, and from that, did you conclude 14 that the PCBs came from foundry sand? 15 A. No, we haven't concluded that. What 16 we've concluded is there's a potential 17 for PCBs to be at the mall site -- 18 there's a potential for PCBs to be 19 present at the mall site from sources 20 other than or potential in addition to 21 Monsanto. 22 Q. Well, you fully believe some of the 23 PCBs, at least some of the PCBs at the	Page 88 1 Q. Well, you know that Monsanto dumped 2 a whole a lot more PCBs in Snow Creek 3 than anybody else ever did, don't you 4 know that? 5 A. No, I don't know that. 6 Q. You know Monsanto, in a typical, 7 average, single day prior to, say, 1969, 8 released more PCBs in Snow Creek than 9 Tull Chemical ever did in the biggest 10 spill they had, didn't you know that? 11 A. I don't know the specific quantity 12 that Tull Chemical released. I know it 13 was not insignificant and I don't know 14 any details related to how much Monsanto 15 may have discharged into Snow Creek. 16 Q. You have seen documents that suggest 17 that Monsanto, even after it started 18 trying to restrict the amount of PCBs 19 leaving the plant, even if after it 20 started doing a little bit about that in 21 late-1960 or about that time, was still 22 releasing about two hundred fifty pounds 23 a day of PCBs, don't you know that?

Page 89 1 A. I have not seen those documents. 2 Q. You know Tull Chemical never 3 released more than two hundred fifty 4 pounds in Snow Creek, don't you? 5 A. I don't know that, no. I know that 6 Tull Chemical released enough PCBs into 7 the creek that it caught the attention of 8 the Alabama attorney general's office and 9 ADEM and they came up and had to address 10 it proactively with Tull Chemical. 11 Q. And you know they finally concluded 12 after investigation with regard to Tull 13 Chemical the amount of PCBs released into 14 Snow Creek was, quote, "insignificant" 15 close quotes, don't you? 16 A. I don't know the data that drew that 17 conclusion. The data certainly doesn't 18 suggest that. 19 Q. Okay. You say Monsanto participated 20 in the work or the expansion of Quintard 21 Mall? 22 A. Yes. 23 Q. In what way did y'all participate?	Page 91 1 conducted. 2 Q. Yes, sir, but did that happen? 3 A. I don't know that there was a sign. 4 There were some soils that were excavated 5 and they were given away to different 6 parties. I know that occurred, and we 7 took steps to try and test and recover as 8 much as of that soil as we could. 9 Q. That occurred after your PCBs in 10 soils had been excavated? 11 A. Well, our going out and trying to 12 find the soil certainly occurred after 13 that. 14 Q. The soils were given away after you 15 knew there were PCBs in the soils being 16 excavated? 17 A. Yes, they were given away after we 18 knew that. They were given away by a 19 contractor not associated with Solutia. 20 It was one of the mall's contractors and 21 that was done without our knowledge and 22 certainly without our approval. We would 23 never have approved anything like that.
Page 90 1 A. We participated in respect to the 2 fact that there were -- well, we realized 3 there was a potential for there to be 4 PCBs present at the mall. We went out 5 and we characterized soils in the 6 vicinity of the mall and confirmed that 7 and then we worked with the mall to -- I 8 should say the mall developer to manage 9 those PCB-containing soils. 10 Q. So Monsanto actually had one or more 11 employees onsite during the excavation 12 and the work with the soils? 13 A. At times, yes. 14 Q. Regularly? 15 A. I would classify it as regularly 16 during the management of the soils, yes. 17 Q. And did the management of soils from 18 that site include piling some of the 19 contaminated soils up in a big pile and 20 putting a sign on it that said free fill 21 dirt to anybody that wanted to come and 22 get it? 23 A. We were not a party to that being	Page 92 1 Q. Did your participation or 2 involvement, did that regular 3 participation include educating the 4 contractor on the dangers of the soils 5 that he was dealing with? 6 A. We educated the contractor that 7 there were PCBs in that soil, yes. 8 Q. And so your view would be of the 9 facts of what occurred would be even 10 though Monsanto carefully educated the 11 contractor about PCBs being in the soil 12 and dangers of PCBs, the contractor, 13 nevertheless, decided well, what the 14 heck, I'll just give them away to anybody 15 that wants them in the community? 16 A. Well, we didn't discuss anything 17 about the danger. We don't think there's 18 anything dangerous about it. The 19 presence of PCBs was known to the 20 contractor and, certainly, we did not 21 authorize or approve in any way and we 22 were very upset when we found out that 23 that contractor was giving that soil

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1 away. He did it without our knowledge
 2 and without our permission and he
 3 shouldn't have done it.
 4 Q. Do you didn't tell him there were
 5 any hazards associated with PCBs?
 6 A. Specifically what types of hazards
 7 are you saying?
 8 Q. Small children born with
 9 neurological injuries as an example.
 10 A. No, we would not have discussed
 11 that. I'm not here to testify about
 12 health effects, but it's my personal
 13 opinion that PCBs don't have those types
 14 of effects on children or people.
 15 Q. I didn't ask that question, but you
 16 need to do a little bit more reading.
 17 A. Well, you implied it and I --
 18 MR. SHARMAN: Object to form.
 19 Argumentative. Move to
 20 strike.
 21 Q. I withdraw the comment, but I would
 22 appreciate, sir, if you would answer my
 23 questions and not just go off talking

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1 about some subjects, okay? Now my
 2 question to you, though, was just did you
 3 educate this contractor that the PCBs
 4 were hazardous, were dangerous?
 5 A. No, he was educated that there were
 6 PCBs present and that soil needed to be
 7 actively managed by Solutia.
 8 Q. And did you just assume, then, from
 9 the fact that you said the word "PCBs"
 10 that this contractor knew all about what
 11 to do or not to do with PCBs?
 12 A. They were directed that PCB soils
 13 should not be taken offsite and they did
 14 it anyway.
 15 Q. Who was this contractor?
 16 A. I believe the name of contractor was
 17 Holmes Excavation.
 18 Q. Is this a big national company or
 19 little local outfit?
 20 A. They're not national, but they're
 21 larger than local. I would say regional.
 22 They're not a mom-and-pop shop, for
 23 example.

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1 Q. PCBs at Quintard Mall, there are
 2 still PCBs underneath the mall there?
 3 A. Yes.
 4 Q. Do PCBs still exist underneath the
 5 pavement there?
 6 A. Certain portions of the pavement,
 7 yes. They were left in place, you know,
 8 with the approval of the -- in this case,
 9 the state regulatory agency, ADEM.
 10 Q. Y'all got a lot of things approved
 11 by ADEM, didn't you?
 12 MR. SHARMAN: Object to the
 13 form.
 14 A. All the work we're doing up until
 15 recently has been done under a RCRA
 16 permit issued by the State of Alabama and
 17 we have to comply with that permit which
 18 is enforced by ADEM, so yes.
 19 (Another photograph shown.)
 20 Q. What's that picture of those pretty
 21 flowers?
 22 A. That is an area on our plant site.
 23 Q. And it's significant because why,

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1 flowers grow on your plant site or what?
 2 A. I don't know why it's significant.
 3 It's an area of our site that was cleaned
 4 up and remediated under our RCRA permit.
 5 I mean, we found PCBs in that area.
 6 Q. Where there on the site is that?
 7 A. It's located in the -- it would be
 8 the southeast corner of the plant.
 9 That's -- in the background that's
 10 Highway 202 and then the south landfill
 11 is directly on the other side there.
 12 Q. In what way did y'all remediate
 13 that?
 14 A. It was with a cap and cover system.
 15 Q. What was the level of PCBs that were
 16 found at that location of the plant?
 17 A. I don't know specifically. I would
 18 have to go back and look at the data. It
 19 was greater than a part per million.
 20 Q. Under ten? Between one and ten or
 21 do you remember?
 22 A. I don't remember. It was addressed
 23 because they were greater than one and

Page 97 1 there was a potential for them to migrate 2 away from the facility so we had to 3 contain them. 4 Q. Did you get more consistent testing 5 over there or at some places, you get ten 6 and other places, you get nondetect 7 and other places, you get one? 8 A. I don't know. I would have to look 9 at the data. 10 Q. Exactly how did you remediate it? 11 Same thing, take a foot off, put a foot 12 of clean dirt, or do something different? 13 A. I don't know specifically what was 14 done. There was -- but the remedy, in 15 general, was a capping remedy where there 16 was a liner material placed down and then 17 at least twelve inches, typically more, 18 like fourteen or sixteen inches of clean 19 soil and vegetative layer placed on top 20 of that soil. 21 Q. Did you put a liner down? 22 A. Yes. I don't know specifically what 23 kind of liner, whether it was just a	Page 99 1 decision, depending on which or both, I 2 would fully expect we would propose what 3 we did here as a final measure, yes. 4 Q. And you will just leave the PCBs in 5 place below that foot that you put on top 6 of it? 7 A. Yes, and we would continue to 8 monitor -- to cover to make sure it 9 wasn't eroding and we would sample the 10 surface water that comes from that area 11 regularly in accordance with our 12 state-issued permit to make sure, once 13 again, that PCBs aren't migrating from 14 that area. 15 Q. And is that a picnic table there on 16 top of it? 17 A. Yes, there's a picnic table in that 18 picture. 19 Q. Y'all actually encourage people to 20 go over there and have picnics at that 21 table? 22 A. There's no reason -- I can't say we 23 encourage people, but there's no reason
Page 98 1 fabric material or whether it was an 2 impermeable liner. 3 Q. Why did you put a liner down here? 4 A. Because we didn't remove any soils 5 from this area that I'm aware of and we 6 wanted that liner there to differentiate 7 for us for future purposes of where the 8 PCB-containing soils were and where the 9 clean soils were. 10 Q. Did you regard this as an interim 11 measure or as a permanent measure? 12 A. As an interim measure at this time. 13 We would certainly propose, when we reach 14 that point in the process, we would 15 propose that as a final measure, but we 16 haven't reached that point yet. 17 Q. As long as the EPA doesn't make you 18 do any more, this would be final as far 19 as you're concerned? 20 A. EPA and ADEM, we would certainly -- 21 as long as EPA or ADEM, as I said, when 22 we get to the time of a final permit, 23 RCRA permit modification or a record of	Page 100 1 why plant employees can't go over there 2 to have their lunch or whatever in that 3 area. 4 (Another photograph shown.) 5 Q. Let's go down here to that little 6 backhoe. 7 A. This is a clean up of a residential 8 property located at 717 Zen Parkway. 9 Q. Any significance to this particular 10 picture? 11 A. In this picture, we're actually back 12 filling the yard. The only significance 13 of this property is -- and we have 14 discussed this one earlier. I should 15 take that back. We're probably removing 16 soils from this property based on the 17 fact that the gentlemen in the picture is 18 wearing some booties. But we found 19 foundry material on this property. 20 (Another photograph shown.) 21 Q. What is this picture? 22 A. This is just a picture of a crew in 23 the field. Either -- well, they're

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1 sampling a yard or preparing to sample a
 2 yard is what they're doing.
 3 (Another photograph shown.)
 4 Q. How about this picture with the fish
 5 in it?
 6 A. Well, that picture is actually, as
 7 I've come to learn, that's not even a
 8 picture from Anniston. That's a picture
 9 that one of my consultants sent me and I
 10 thought it was from Logan Martin Lake,
 11 but I was later told that I was
 12 incorrect.
 13 Q. It's got nothing to do with this
 14 case?
 15 A. It means nothing to Anniston or
 16 anything that Solutia is working on.
 17 (Another photograph shown.)
 18 Q. What's this pile of dirt?
 19 A. This is a pile of dirt from the
 20 Choccolocco Waste Water Treatment Plant.
 21 We did some work with the Anniston Water
 22 Works and Sewer Board to assist them in a
 23 plant expansion that is still ongoing.

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1 We had to remove about a thousand cubic
 2 yards of material which you see piled
 3 here and the significance is we're just
 4 finding a lot of trash. You can see
 5 tires. You can see old pipes, just
 6 different things in this pile. That's
 7 the only significance of it.
 8 Q. Okay. Is this area in the flood
 9 plain of Snow Creek and Choccolocco
 10 Creek?
 11 A. Yes, it is.
 12 Q. Does it surprise you to find old
 13 tires and things like that in a creek?
 14 A. No, not particularly.
 15 (Another photograph shown.)
 16 Q. Same area?
 17 A. Yes. ...
 18 Q. Now, you said you were assisting the
 19 water works sewer board. When did the
 20 situation; that is, there being high
 21 levels of PCBs on the sewer board's
 22 property in the floods plain first come
 23 to your attention?

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1 A. Back in early- to mid-2000.
 2 Q. About thirteen years ago?
 3 A. No, about three years ago.
 4 Q. I'm sorry, about three years ago?
 5 A. Three and a half years ago, correct.
 6 Q. Excuse me. So you learned about
 7 three and a half years ago that there
 8 were PCBs in the flood plain on the sewer
 9 board's property; right?
 10 A. Yes.
 11 Q. And when did you actually start
 12 doing something about that?
 13 A. We started doing something about it
 14 right away as soon as we learned of the
 15 activity that was going on down there.
 16 Q. Y'all went down there and threw some
 17 plastic over the top of it back then;
 18 right?
 19 MR. SHARMAN: Object to form.
 20 A. Well, what we did was we went down
 21 and characterized the area. The water
 22 board had excavated some soils. We
 23 needed to sample those, which we did. We

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1 also needed to sample other areas around
 2 the property so that we could understand
 3 the nature and extent of PCBs on the
 4 property and that was the first step and
 5 that was completed fairly shortly after
 6 we learned what was going on down there.
 7 Q. When is the first time y'all did
 8 something other than test it?
 9 A. Well, it would have been this work
 10 right here which was conducted, I want to
 11 say, maybe a year, a year and a half ago,
 12 early to mid-2002.
 13 Q. A couple of years after you first
 14 found out about it?
 15 A. About a year and a half, a year and
 16 a half to two years after we first became
 17 aware of it, yes.
 18 Q. What did you do here? What are
 19 y'all doing in the this picture?
 20 A. In this particular picture, there
 21 was an area, and I don't know what the
 22 specific excavation was for, but it was
 23 part of the Anniston Water Works and

Page 105 1 Sewer Board's expansion of their facility 2 and they needed to install some equipment 3 in this area that required excavation of 4 about four feet of material. 5 We had sampled this area. It 6 determined that there were PCBs present 7 in this area in that one to three to four 8 part per million range, pretty low 9 concentrations in this area. But it was 10 still there and we had to actively manage 11 it, so we sent a contractor down there to 12 perform that excavation and stockpile the 13 material. 14 Q. The highest level y'all found down 15 at the sewer plant was one to three or 16 four parts? 17 A. In the area shown on this particular 18 picture, yes. There's areas -- 19 Q. Did you find other areas over 20 fifty? 21 A. Yes. 22 Q. As of today, that three and a half 23 years later or whatever it is, what have	Page 107 1 to do that and, you know, there are times 2 in the process when we have to go dig up 3 some soil because of the presence of 4 PCBs. There are other times when they're 5 doing all above-ground work and Solutia 6 will demote from the site for a period of 7 time so they can complete their non-PCB 8 related work, so that is ongoing and it 9 has been ongoing, now for, as I said, 10 perhaps a year, a year and a half. 11 The stockpiled soils, when we 12 learned of the stockpiled soils, 13 initially, we went out and we 14 characterized it. We then have prepared 15 and have gotten approval for a corrective 16 measure study for addressing that 17 stockpiled soil. We got that approved by 18 ADEM. We've prepared a design for 19 capping that material in place, basically 20 consolidating the pile and capping it and 21 that is currently going through a public 22 comment period actually as of today. And 23 as soon as that's done and our permit
Page 106 1 you done to clean up the PCBs found at 2 the sewer plant? 3 A. Well, it's been going on on two 4 parallel paths, the work down at this 5 plant. One path is to address the 6 stockpile of soils that the water board 7 excavated even though they knew there 8 were PCBs there and that they shouldn't 9 be excavating that material. The other 10 parallel path was to work with the water 11 board to complete their plant expansion. 12 Now, I'll start with the plant 13 expansion. We prepared -- well, first 14 of all, we characterized the area so we 15 knew what we were dealing with. We 16 prepared a work plan which we got 17 approved by ADEM to go down and conduct 18 excavations in certain areas, one of 19 which you see right here (indicating 20 photograph) to allow that plant expansion 21 to move forward, and that's currently in 22 progress. 23 We're still working with them	Page 108 1 gets modified, we'll go down there and 2 we'll complete that activity. 3 The water board, in the 4 interim, had some responsibilities under 5 a consent decree that they had signed 6 with ADEM to address their conduct with 7 relation to this stockpile and they were 8 responsible for putting, basically, a 9 tarp over the pile and setting up erosion 10 controls to help prevent any migration of 11 PCBs away from that stockpiled soil into 12 the adjacent creeks. 13 Q. Do y'all intend to haul the dirt out 14 of that location in the flood plain of 15 Snow Creek and Choccolocco Creek that's 16 full of PCBs? 17 A. Well, once again, there's two parts 18 of that question, but any future 19 excavations that have been conducted 20 where the material is greater than fifty 21 parts per million, yes, it gets hauled 22 out to a mill, to the waste facility in a 23 mill. Anything less than fifty and the

Page 109 1 stockpiled soils which contain some 2 material greater than fifty will be 3 managed on the site. 4 Q. The stockpiles and material that 5 have already been dug out, if they are 6 over fifty, you are going to haul them 7 out to a mill; right? 8 A. No, that's not correct. 9 Q. You're just going to leave them 10 there and cap them? 11 A. They are going to be incorporated 12 under this cap, yes. 13 Q. So no matter how high they are, you 14 are going to leave them there and cap 15 them? 16 A. Yes. 17 Q. The ones that have already been dug 18 out? 19 A. The ones that were dug out and 20 placed on the stockpile on the east side 21 of the creek. 22 Q. By the sewer company? 23 A. By their contractor.	Page 111 1 A. If the risk assessment and the 2 feasibility study, which we may conclude, 3 it's not necessarily EPA. We do the 4 feasibility study. We are the ones that 5 recommend a cleanup alternative to EPA. 6 Now, whether EPA agrees with that or not, 7 sometimes they will and sometimes they 8 may not, but we may propose to remove 9 some soil, but until we conduct that 10 process, I can't tell you whether we 11 would or not. 12 Q. So you can tell me that, at least as 13 of this moment in time, that even though 14 you know there are PCBs in the soil 15 adjacent to Snow Creek and Choccolocco 16 Creek and, in particular, in the flood 17 plains of those creeks at levels that 18 exceed fifty parts per million in some 19 cases, you have no current intention of 20 removing it? 21 A. There's no current intention to 22 remove them, no, but we may propose 23 something different when we complete the
Page 110 1 Q. Okay. There are additional soils in 2 the vicinity that have not been dug out 3 yet that have PCBs in them; right? 4 A. Yes. 5 Q. Do you have any intention of 6 removing those soils? 7 A. They will be removed to the extent 8 that it's required to support the plant 9 expansion that's occurring at the waste 10 water treatment plant. 11 Q. What about otherwise? 12 A. Otherwise, right now, there are no 13 plans to remove them. Now, this area 14 will fall under the RIFS that will be 15 done under the consent decree that we've 16 signed with the EPA, and should that 17 program, that remedial investigation and 18 feasibility study program and the risk 19 assessment conclude that additional 20 removal is required, then, yes, we would 21 go down and conduct that. 22 Q. If the EPA makes you do it, you'll 23 do it?	Page 112 1 RIFS process, but right now, the answer 2 to your question is no. 3 (Another photograph shown.) 4 Q. Now, on a different disk. Can you 5 tell me what I'm looking at there? 6 A. This is the old pawnshop building 7 that we talked about earlier and the 8 renovation. 9 Q. What was done with that? Do y'all 10 rent it out to somebody or use it 11 yourselves? What are you doing? 12 A. Well, we opened a portion of it for 13 the EPA to use as a project office and 14 they're currently doing that. There's 15 another portion that we are in the 16 process of setting up for use as a 17 document repository and a meeting of our 18 citizen's advisory group which we'll be 19 putting together here soon. And then 20 there's a third portion that's used by 21 our field crews for processing samples 22 and storing samples. 23 (Another photograph shown.)

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1 Q. What's the next photograph after
2 those pictures of the pawnshop? It's got
3 a tractor and a ditch? Do you know what
4 that's about?
5 A. From this picture, I can't tell you
6 specifically where that's located at.
7 Q. Anything significant about that
8 picture that you know?
9 A. Well, you notice a lot of rock and
10 material in the soils being excavated
11 which suggests or may be some foundry
12 fill, but then again, in the background
13 you see railroad tracks and rock there so
14 it may just be soil mixed up. I don't
15 know what project that is from the
16 picture.
17 (Another photograph shown.)
18 Q. Does the next picture help any?
19 A. Yes, as a matter of fact, it does.
20 Those are photographs that may be
21 photographs from when we were working
22 with a concrete company called LaFarge to
23 construct a cement plant on property we

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1 allowed LaFarge to come in and build a
2 concrete plant on top of that capped
3 portion of the property.
4 Q. Did you sell the property to
5 Lafarge, lease it to them? What did you
6 do?
7 A. We're leasing it to them.
8 Q. Okay. What were the levels of PCBs
9 on this piece of property?
10 A. They varied between nondetect and I
11 believe there were some samples that we
12 took that were up to one thousand parts
13 per million.
14 Q. Did you haul any of that dirt out?
15 A. I don't believe we took any of the
16 soil offsite from the north side
17 property. I believe it was all capped in
18 place.
19 Q. And capped with a one-foot cover or
20 how did you cap it?
21 A. On this particular property, there
22 were some portions where we put down a
23 high density polyethylene or much more

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1 owned north of our facility. There was
2 some excavation that was required on that
3 property and I believe that's what we're
4 looking at are some photographs that were
5 taken during that excavation activity.
6 (Another photograph shown.)
7 Q. And you've got a close-up picture of
8 some of the dirt taken out of a trench.
9 Is there anything significant about that?
10 A. A potential for there to be foundry
11 fill based on the sandy look of the
12 material as well as the discoloration,
13 the nonuniformity in the color and the
14 rocky material in the soil.
15 Q. And this is to a piece of property
16 that y'all owned and that you were doing
17 something with LaFarge with?
18 A. Right, it's a property that we
19 purchased under our property purchase
20 program north of our facility. We had
21 actually put in a cap and cover system on
22 this property with ADEM and the EPA's, I
23 guess, blessing is the best word, have

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1 thicker, sturdier liner. There were
2 other areas where we just put down a
3 light fabric material and then we put a
4 minimum of twelve inches of soil and then
5 the vegetative layer on top.
6 Q. The thicker material you referred
7 to, is that impermeable?
8 A. Well, it had a very low
9 permeability. You could classify it as
10 impermeable, but we call it low
11 permeability material.
12 Q. And was there a distinction between
13 when to use one material and when to use
14 the other one?
15 A. As I recall, and the actual work
16 plans were done before I came to the
17 project, as I recall, it was based on --
18 the concentration of PCBs was the
19 criteria for making that determination.
20 Q. And over what level do you think was
21 the more impermeable?
22 A. I don't recall.
23 Q. All right, and your leasing the

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HARTOLDMON0039008

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1 property to LaFarge. What's the term of
2 the lease?
3 A. The terms as far as how long?
4 Q. Yes.
5 A. I don't recall off the top of my
6 head.
7 Q. What are they putting on the
8 property?
9 A. What is LaFarge putting on the
10 property?
11 Q. Yes.
12 Q. Well, they have installed concrete
13 over a large portion of the property, a
14 large concrete pad so it can withstand
15 truck traffic, and there's -- I don't
16 know much about the concrete business,
17 but there's hoppers and bins for storing
18 the different sands and material that
19 they need to make their cement.
20 (Another photograph shown.)
21 Q. Any significance to this? Still the
22 same area?
23 A. Based on the date and on the

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1 A. It was purchased because we knew
2 there had to be some remediation done on
3 that property due to the presence of
4 PCBs, so I guess, yes, you could say it
5 was purchased.
6 (Another photograph shown.)
7 Q. All right, what are we looking in
8 this picture dated March 21, 2003?
9 A. This is Oxford Lake Park again and
10 what you're looking at is a picture of an
11 area of the park that is generally
12 between the softball fields we looked at
13 earlier and Snow Creek. Snow Creek is
14 actually in the background there running
15 under the bridge you can see and as part
16 of a final interim measure at the park,
17 we installed a one-foot soil cap on a
18 section of the park and that's what you
19 see here. What we're in the process of
20 doing is actually installing that cap.
21 Q. This is the same place where you
22 said Oxford Lake was we looked at in some
23 earlier pictures?

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1 photograph, I would conclude it's the
2 same area, and once again, the
3 significance, the same things we've
4 talked about before, the texture and the
5 color of the material, the different
6 color of the material between different
7 locations.
8 Q. How big is this piece of property,
9 by the way?
10 A. It's probably in the order of,
11 perhaps, fifteen acres.
12 Q. Is this a piece of property -- who
13 did you buy it from and when?
14 A. It was owned by a number of
15 different people. There were several
16 different light industrial properties in
17 this area. I believe there also may have
18 been a few residential properties in this
19 area also.
20 Q. And when was it purchased?
21 A. Late-1990s.
22 Q. Was it purchased because of PCB
23 contamination?

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1 A. Yes.
2 Q. Where is that in relationship to
3 this photograph? Can you tell me where
4 it is?
5 A. Where Oxford Lake is?
6 Q. Yes.
7 A. Well, Oxford Lake is actually a
8 pretty good distance from this spot, a
9 pretty good distance, it is an eighth of
10 a mile, maybe a quarter of a mile.
11 Q. Which direction, towards us or back
12 your way?
13 A. It would be -- well, it's to the
14 northeast of this location.
15 Q. I don't know which way this
16 photograph is oriented so can you tell me
17 which direction it is from here?
18 A. It would be to the right and towards
19 us about, I would say, between an eighth
20 and a quarter of a mile away. It's up on
21 a hill from this location.
22 Q. Is the lake there in the flood plain
23 of Snow Creek?

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1 A. No.
 2 (Another photograph shown.)
 3 Q. Okay. What am looking at here?
 4 A. Same picture, just a different angle
 5 or same location as the last photo, just
 6 different angle. You can see Interstate
 7 20 in the background there.
 8 Q. And the water I see there in the
 9 front, does it have any significance?
 10 A. It's just ponded water from recent
 11 rains.
 12 Q. Does broken glass relate to
 13 something?
 14 A. I'm sure that was a picture taken by
 15 somebody that works for me to document
 16 that we had a piece of broken glass in
 17 the pawnshop that needed to be replaced
 18 by the people doing the renovation.
 19 (Another photograph shown.)
 20 Q. What's going on here where we've got
 21 this core drilling, April 2nd?
 22 A. That is -- I don't know. Maybe if
 23 there are some additional pictures, I'll

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1 find PCBs, yes.
 2 Q. Do you recall what levels?
 3 A. Not specifically, no. Less than
 4 fifty, but specific levels, no, I don't
 5 recall.
 6 (Another photograph shown.)
 7 Q. It looks like the bottom of a pole.
 8 Is there some significance to that?
 9 A. No, not that I'm aware of.
 10 Q. It may not be the bottom.
 11 A. I think what they did with the
 12 wooden poles was they just cut them off
 13 at the base. Why we would have taken a
 14 picture of that, I don't know. It has no
 15 significance as far as I know.
 16 (Another photograph shown.)
 17 Q. What about this picture here, any
 18 significance to that?
 19 A. No, my guess is they're just moving
 20 the pole. They just cut it off at the
 21 base.
 22 Q. We've got some dirt here and a tarp,
 23 any particular significance to that?

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1 be able to place it.
 2 (Another photograph shown.)
 3 Q. How about this one?
 4 A. Yes, this is -- Alabama Power owns a
 5 fairly large substation that is to the
 6 west of our facility. They needed to
 7 install some new power poles. We
 8 recognized that there was a potential for
 9 PCBs to be present on that property so we
 10 worked with them over there to manage the
 11 soils that were being -- the excess soils
 12 that were being generated during the
 13 process of installing these power poles,
 14 and that's what we're seeing here is the
 15 power poles being installed.
 16 Q. Is that the same general area where
 17 PCBs had earlier been found to be seeping
 18 from the sides of the trench?
 19 A. Yes, it's in that same area as the
 20 west end landfill.
 21 Q. Did you find PCBs here when you did
 22 this work on installing these poles?
 23 A. On most of the locations, we did

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1 A. Not that I'm aware of, no, just
 2 showing the dirt that was, you know,
 3 pulled up when they drilled down to
 4 create the hole for the pole.
 5 (Another photograph shown.)
 6 Q. What do we have here? It looks like
 7 some kind of testing equipment.
 8 A. It's a meteorological station that
 9 we recently installed on our plant site
 10 to support an air pathway study.
 11 Q. Who's this guy in the photograph?
 12 A. That is a gentleman that works for
 13 me at Solutia that does some of the field
 14 oversight work for me.
 15 Q. Has any part of this study been
 16 completed?
 17 A. Yes, we actually started collecting
 18 data for this air study, I want to say in
 19 April, and that data will continue to be
 20 collected for a year in accordance with
 21 the work plan and then we'll let the
 22 scientists go to work and tell us what it
 23 says.

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HARTOLDMON0039010

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1 Q. Has any of it been submitted to any
2 regulatory authority yet?
3 A. Yes, the data we collect is given to
4 ADEM and EPA every other month.
5 (Another photograph shown.)
6 Q. What about these flowers here,
7 actually shrubs?
8 A. I don't know.
9 (Another photograph shown.)
10 Q. Any significance to this next
11 picture?
12 A. Not that I'm aware of, no.
13 (Another photograph shown.)
14 Q. What about this one?
15 A. No, I think these are home photos,
16 actually, because that's the wife and
17 grandson of one of the guys that works
18 for me.
19 (Another photograph shown.)
20 Q. Okay. What about the picture taken
21 4-10-2003 where you have a guy with an
22 orange jacket?
23 A. Well, that's in the vicinity of

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1 where some railroad tracks cross
2 Clydesdale Avenue just down the street
3 from our plant, from the Solutia plant.
4 They had to run some -- there was some
5 utilities under Clydesdale and so we were
6 down there working with them on that
7 project to deal with any excess soils
8 that were generated, whether they
9 contained PCBs.
10 Q. Do you recall anything about the
11 results from that?
12 A. I don't know that we sampled
13 specifically for that project. We had
14 characterized that area under the 11th
15 Street ditch project which is why we knew
16 we needed to be down there when they did
17 this work and work with them to deal with
18 the soils that they generated. This is
19 all the same stuff.
20 Q. So you had characterized the area
21 earlier and you had contained -- that
22 area contained PCBs?
23 A. Yes.

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1 Q. And does that include the area like
2 around where these people are standing?
3 A. Yes, it does.
4 (Another photograph shown.)
5 Q. And we have a picture here, I don't
6 know if that's the same side of the
7 street that they were standing on a
8 minute ago or the other side. Do you
9 know?
10 A. I believe that's where they were
11 standing, as a matter of fact, in the
12 previous photo.
13 Q. And you knew that area over there
14 contained PCBs and they were going to be
15 doing some construction work there?
16 A. Yes.
17 Q. And so you were out to be sure if
18 they started up some dirt that it got
19 handled correctly; is that the idea?
20 A. Yes, that's correct.
21 Q. How broad an area around there did
22 you have those same concerns about?
23 A. Well, for this particular project,

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1 it was limited to this intersection right
2 here.
3 Q. I guess, in terms of your knowledge,
4 that there were contaminated soils there
5 that you would need to be concerned about
6 if construction were to occur. For
7 example, did that knowledge apply to all
8 four corners of that intersection or one
9 corner or how was that?
10 A. Based on the data we collected, that
11 area all around that intersection had the
12 potential for there being PCBs present.
13 Q. And how large an area was that that
14 you were concerned about?
15 A. Once again, the specifics to this
16 project, it was just that intersection.
17 Q. But another project that occurred,
18 for example --
19 A. This is right along the 11th Street
20 ditch, and basically, from our facility
21 to where the 11th Street ditch goes into
22 Snow Creek, we have a concern that whole
23 stretch about the potential presence of

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1 PCBs.
 2 Q. Okay. You know, in general, that
 3 PCBs have been found in those areas of
 4 reasonably high levels?
 5 A. Well, they have been found in those
 6 areas. High is a relative word, but they
 7 have been detected above a part per
 8 million.
 9 Q. Has any -- well, when were they
 10 detected?
 11 A. Well, the initial sampling took
 12 place in 1999. Let me take that back.
 13 The initial sampling took place in 2000,
 14 and there was some follow up sampling
 15 conducted in -- it would have been either
 16 2001 or early-2002.
 17 Q. And this area that you have
 18 described, is that all public property or
 19 a combination of public and private
 20 property?
 21 A. It's primarily -- most of it is in
 22 Norfolk-Southern Railroad right-of-way,
 23 so private property.

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1 Q. And what has been done with regard
 2 to remediate either on a temporary basis
 3 or a permanent basis the areas you
 4 described?
 5 A. Well, back in the early-1990s, I
 6 don't know the exact year, '91 I believe,
 7 under an agreement with ADEM, and I
 8 believe the EPA might have been involved
 9 from an oversight level, but we went in
 10 and we removed all the sediments from the
 11 ditch that we found contained greater
 12 than fifty parts per million, so that's
 13 one activity that has been completed.
 14 Subsequent to that, we went out
 15 and we did additional characterization,
 16 which I just described to you. Some of
 17 it was done under our RCRA permit. Some
 18 of it was done under our administrative
 19 order with the EPA. We have prepared and
 20 gotten approval for a -- what we call a
 21 removal action work plan for this ditch.
 22 We've completed the design to implement
 23 that corrective measure.

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1 What we are waiting for to get
 2 started is basically permission from
 3 Norfolk-Southern to go onto their
 4 property and do the work and we're real
 5 close to having that done. I think we're
 6 real close to having an access agreement
 7 with them to conduct the work.
 8 Q. How long are you trying to get
 9 access to clean it up?
 10 A. With Norfolk-Southern, we've been
 11 working actively with them for about four
 12 months, I would say.
 13 (Another photograph shown.)
 14 Q. This picture dated April 7, 2003?
 15 A. Once again, I think that might be
 16 personal pictures of the guy that works
 17 for me.
 18 (Another photograph shown.)
 19 Q. What about these?
 20 A. It has no significance to me.
 21 Q. This culvert here, no significance?
 22 A. No.
 23 Q. More flowers?

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1 A. No, once again, I think these are
 2 all personal photographs.
 3 (Another photograph shown.)
 4 A. This one is not. This is a property
 5 we cleaned up.
 6 Q. This is one that we looked at
 7 before, though, I think.
 8 A. Right, that's correct.
 9 Q. Lots of pictures of that one. That
 10 must have been the first one you did.
 11 A. That's actually the most recent
 12 property that we've cleaned up.
 13 (Another photograph shown.)
 14 Q. What are we looking at here?
 15 A. I think we're looking at the same
 16 property based on the date in the corner
 17 of the picture. What we see in the
 18 background is a roll-off container which
 19 contain the PCB soils being loaded onto a
 20 truck where it could be taken to the
 21 landfill.
 22 (Another photograph shown.)
 23 Q. What about here?

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33 (Pages 129 to 132)

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HARTOLDMON0039012

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1 A. That is some soil that we are
2 stockpiling on a property which we call
3 the Miller property. There are some -- I
4 should say a company has expressed an
5 interest in locating a light
6 manufacturing industry there and one of
7 the things that would need to be done for
8 them to do that is we would have to
9 basically grade that property and level
10 it out a little bit and what we've
11 started doing is stockpiling some soil
12 there that we think we might be able to
13 use to complete that effort.
14 Q. You use it basically as fill
15 material?
16 A. Basically, yes.
17 Q. And is this dirt that you're putting
18 there contaminated with PCBs?
19 A. I would say, based on the date, yes,
20 it probably is. It's probably -- well, I
21 won't say probably. It does have PCBs
22 above a part per million.
23 Q. And less than ten?

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1 fifty?
2 A. No, not all of it. I mean --
3 Q. You decide what goes there and what
4 doesn't? That's confusing?
5 A. It's a case-by-case decision, and to
6 be honest, it's primarily driven by how
7 far it has to be hauled or if there's a
8 better use for it at the place where
9 we've removed it. For example, and I
10 don't know where this dirt came from, but
11 --
12 Q. But for example, if you're over at
13 the park there in Oxford, some of the
14 dirt you left in place and kept there?
15 A. Yeah.
16 Q. And whereas, in the area where the
17 Miller property is, you would be more
18 likely to put dirt there if the place you
19 were removing it from were closer to the
20 Miller property; is that the idea?
21 A. More or less, yes. You know,
22 there's, once again, material that's, you
23 know, kind of what goes into the

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1 A. If it came from -- I don't know
2 specifically what project that came
3 from. I know it's a less than fifty,
4 because if it was greater, it would have
5 to go to a mill, but certainly it's going
6 to be greater than one.
7 Q. And what dirt, in general, are you
8 putting on the Miller property for this
9 purpose? Is it dirt from the residential
10 cleanups, for example?
11 A. It could be. What we've proposed to
12 the EPA, and they haven't approved it
13 yet, so we may very well have to take
14 this up, dig it back up, I should say,
15 but what we've proposed to them is to use
16 any material less than fifty parts per
17 million that we excavate and use it to
18 grade this property which already
19 contains PCBs on it and then put a
20 one-foot cap on that.
21 Q. Okay. And this -- currently, are
22 you putting dirt there from wherever
23 you're removing dirt that's less than

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1 decision-making process is if the
2 material is less than fifty and the EPA
3 and/or ADEM approves it, we can manage
4 that material onsite under the toxic
5 substances control act, TSCA. If it's
6 greater than fifty, then it obviously has
7 to go to a landfill or mill, so if we can
8 make some beneficial use of that
9 material, we think that's an appropriate
10 thing to do and that's what we're trying
11 to accomplish here.
12 Q. Okay. And also save more money at
13 the same time?
14 A. This is more cost-effective, but
15 that's not what drives the decision.
16 It's obviously the concentrations in the
17 soil and, once again, when you haul dirt
18 to a landfill, it provides no beneficial
19 use. You just have to bring in dirt from
20 somewhere else, so there's more than just
21 a cost issue you look at when you do
22 something like this.
23 (Another photograph shown.)

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1 Q. Same area, the Miller property?
 2 A. Yes, I think that's the same picture
 3 just a little farther back.
 4 (Another photograph shown.)
 5 Q. What are we looking at here with
 6 these tarps in the road?
 7 A. This is our contractor preparing, it
 8 looks like, to do a removal from a
 9 residential property. They've put some
 10 tarps down on the street in case any soil
 11 was to miss the roll-off containers,
 12 we've got it contained on a tarp and can
 13 pick it up pretty easily.
 14 (Another photograph shown.)
 15 Q. What about right there?
 16 A. That is actually at Oxford Lake
 17 Park. A portion of the cleanup we did
 18 down there involved working with the City
 19 to build some new tennis courts which is
 20 actually just to the right of that and
 21 the City built a building down there and
 22 that was just a picture of that building.
 23 (Another photograph shown.)

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1 Q. What's this?
 2 A. I don't know what those are pictures
 3 of.
 4 (Another photograph shown.)
 5 Q. What about this with the air
 6 conditioner in the background?
 7 A. This is a property, once again, down
 8 in the Oxford Lake neighborhood that we
 9 had cleaned up about a year ago. The
 10 property owner called us and said he was
 11 having some problems with the sod that we
 12 had put down, that there were some brown
 13 patches developing so we went down there
 14 to take a look and see what we could do
 15 to work with him to get that fixed.
 16 (Another photograph shown.)
 17 Q. What about this picture with the
 18 fence and the red hose in front of it?
 19 A. From that picture, I can't say what
 20 that is.
 21 (Another photograph shown.)
 22 Q. How about from this one?
 23 A. No, it doesn't look familiar. This

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1 may be a picture from a pond that's
 2 actually located about two miles to the
 3 west of our facility. It's where we hold
 4 or we sponsor a fishing derby for
 5 mentally retarded children.
 6 Q. Does it have anything to do with
 7 PCBs?
 8 A. No.
 9 (Another photograph shown.)
 10 Q. What about this picture?
 11 A. That's a picture of Oxford Lake
 12 Park. Once again, we had some concerns
 13 with the amount of -- this was after a
 14 fairly large storm event, but we had some
 15 concerns with the amount of water that
 16 was backing up there so we got some
 17 pictures to help figure out -- you can
 18 see here the tennis courts actually got
 19 flooded and you can see that the tennis
 20 courts are having to be cleaned off here.
 21 Q. And the flood water came from where?
 22 A. Snow Creek.
 23 Q. Are PCBs left in site underneath

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1 this tennis court?
 2 A. Yes.
 3 (Another photograph shown.)
 4 Q. Another picture of the tennis courts
 5 that y'all built on top of the PCBs that
 6 got flooded?
 7 A. Well, the PCBs that are there, once
 8 again, at Oxford Lake Park, there's
 9 visible and very clear indications as
 10 well as people telling us that the
 11 material placed there was foundry sand
 12 from the U.S. Pipe foundry.
 13 Q. Did you hear my question?
 14 A. I'm sorry?
 15 Q. My question to you was, sir, is that
 16 the PCBs -- these tennis courts -- let me
 17 restate it. This is a picture of the
 18 tennis courts that you built on top of
 19 the PCB-laden fill that is later being
 20 flooded by Snow Creek?
 21 A. Yes, that's correct.
 22 (Another photograph shown.)
 23 A. This is another example right there.

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Page 141 1 (Another photograph shown.) 2 Q. What's this next one with two trees 3 in it, a lot of trees, but two in the 4 foreground? 5 A. Based on fact that there's water 6 there, I would suspect that's somewhere 7 along Snow Creek during that flooding 8 event, but I couldn't say specifically 9 where. 10 (Another photograph shown.) 11 Q. What about the one with the pickup 12 truck here, Chevrolet pickup truck? 13 A. I don't know what that is. Once 14 again, I think these may be personal 15 pictures. 16 (Another photo shown.) 17 A. Those are obviously the park again. 18 Q. That's what you're talking about 19 earlier about the playing fields? 20 A. Those are the softball fields, yes, 21 although I think what those pictures are 22 associated with is, you know, in order to 23 maintain a healthy vegetative cover over	Page 143 1 like beside the road, kind of a deep 2 hole? 3 A. Yes, this is actually a picture of 4 some work that the Anniston Water Works 5 and Sewer Board was doing under 11th 6 Street. They had a water main break and, 7 obviously, they had to dig down into the 8 street. We are obviously interested in 9 it because of its proximity to the 11th 10 Street ditch so we were working with them 11 to, once again, make sure if there are 12 any PCB-containing soils. 13 Once again, I think the other 14 interesting thing from this picture is 15 you can see the black material there and 16 you can see it in the water. That's 17 certainly an indicator that foundry sand 18 was used to help fill in and level off 19 that street which is what you find. You 20 find foundry sand was used in a wide 21 variety of applications throughout the 22 Anniston and Oxford area and that's some 23 other information that you can -- that's
Page 142 1 clean soil we have there, we work with 2 the park to get down the proper 3 fertilizers and so on and so forth on a 4 periodic basis. 5 (Another photograph shown.) 6 Q. This picture here, is that the 7 Lafarge facility? 8 A. Yeah, to the right there where you 9 see the large towers with the American 10 flag on top, that's the LaFarge facility. 11 Q. Is that the significance of this 12 picture or is it something else? 13 A. My guess is they took the picture 14 because that's probably one of our 15 contractors driving a piece of heavy 16 equipment down the street although where 17 they're going, I couldn't tell you. 18 (Another photograph shown.) 19 Q. What's this? 20 A. Furniture that we're either moving 21 into or taking out of that pawnshop. 22 (Another photograph shown.) 23 Q. And the excavation here, it looks	Page 144 1 something that's exhibited by this 2 picture I think. 3 Q. You don't think any of that is 4 asphalt? 5 A. Some of it could be asphalt. I 6 wouldn't debate that point, but clearly, 7 the stuff that's down in the soil itself 8 in the vertical profile there, that's not 9 going to be asphalt. 10 (Another photograph shown.) 11 Q. What am I looking at here, a bunch 12 of men standing around? 13 A. It looks like a bunch of guys 14 standing around. 15 Q. Anything significant about it? 16 A. No. They're in the vicinity of a 17 groundwater well that we had just 18 installed, although why they're all 19 standing there staring at it, I couldn't 20 tell you. 21 (Another photograph shown.) 22 Q. What about this picture? 23 A. These are some guys hooking up

Page 145 1 electricals to some new groundwater 2 recovery wells that we've installed at a 3 facility earlier this year. 4 Q. And by groundwater recovery well, 5 what do you mean? 6 A. Well, we have three groundwater 7 recovery systems on our plant site. 8 There is one located towards the north 9 end that we felt could be working better, 10 so we installed four more collection 11 wells in that area to better recover the 12 groundwater down there and this is the 13 guy hooking up the electricals to one of 14 those wells. 15 Q. Pump and treat systems? 16 A. Yes, exactly. 17 (Another photograph shown.) 18 Q. What is this? 19 A. That looks like a photograph of our 20 plant site where some rock might have 21 gotten down in one of our outfalls. It 22 really has no significance from a 23 remediation perspective that I know of.	Page 147 1 A. Yes. 2 Q. We're looking at pictures we've 3 seen, I think. 4 A. Yes, I think we've covered -- these 5 all look familiar. 6 Q. I think we've seen them all, but 7 let's be sure. Could there be two disks 8 just alike? Yes, it looks like I have 9 two disks just alike with actually the 10 same label on them, so maybe they are. 11 Do you have a recollection of any of the 12 photographs that we have not looked at 13 took in connection with remediation? 14 A. I do not, but I don't take most of 15 pictures. People that work for me take 16 most of them. Certainly, with these 17 pictures, we've covered much of the work 18 we've done. 19 Q. At the other end of the table, 20 there's a some box that seems to have 21 some things in it. What's that? 22 A. Those are different materials that 23 we've removed from various properties,
Page 146 1 (Another photograph shown.) 2 Q. The one with the wooden fence? 3 A. I think we're back to some personal 4 photos here. 5 MR. DAVIS: I don't know what 6 you want to do about 7 lunch. 8 MR. SHARMAN: Do you want to go 9 another ten minutes and 10 break? 11 MR. DAVIS: No, we may as well 12 break now since I'm 13 starting on a new disk. 14 (Whereupon, a recess was taken 15 at this time.) 16 (Another photograph shown.) 17 Q. This picture dated March 6, 2003, 18 was that the pawnshop? 19 A. Yes. 20 (Another photograph shown.) 21 Q. And the next picture after that is 22 still some of the work being done 23 inside?	Page 148 1 just an example of some of the stuff we 2 found. We found various foundry 3 artifacts. 4 Q. Do you know which foundries they 5 were removed from? 6 A. Yes. Do you want me to just haul 7 that down here and go through it with you 8 real quick? 9 Q. You have got a brick here. Do you 10 know where that came from? 11 MR. SHARMAN: Let me carry it 12 down there, Frank. That 13 might be easier for him. 14 A. This is a brick which was a type of 15 brick used along the inside of cupola. 16 It came from a residential property we 17 cleaned up. It was in that area of three 18 properties we cleaned up between 11th and 19 12th Streets and bordered by McDaniel. 20 That's where we found this brick as well 21 as this fire brick retaining ring or a 22 piece of a retaining ring which is right 23 here. This grindstone, this is a stone

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1 that the foundries would use to kind of
2 grind down the sharp edges on the end of
3 a soil pipe when it came out of the molds
4 and cooled. We removed that from one of
5 the properties on Glenaddie. I think it
6 was the -- I want to say it was 529
7 Glenaddie which is one of the ones we
8 looked at a picture of, but I can't
9 remember the specific address.

10 This bag right here contains
11 various foundry slags and cinder rock
12 which is the kind of greenish type of
13 material we saw in some of the pictures.
14 It came from really a variety of
15 properties. It didn't come from any one
16 specific project.

17 And the jar, we looked at
18 pictures of this also. This is material
19 that came from Oxford Lake Park. And I
20 think that's everything in the box there,
21 and it's just a sample of some of the
22 materials that we removed from different
23 properties, certainly not all inclusive.

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1 Q. Y'all have done a fair amount of
2 testing of PCB -- let me restate it.
3 Y'all have done a fair amount of testing
4 of soil in the Anniston area for PCBs,
5 haven't you?

6 A. Yes.

7 Q. And do you have an estimate with
8 regard to what percentage of the
9 PCB-contaminated soil that you have found
10 has been caused by something coming from
11 a foundry versus something coming from
12 Monsanto?

13 A. No, I don't have a good estimate of
14 that.

15 Q. Would you agree that the great
16 majority of it at least came from
17 Monsanto?

18 A. No, I wouldn't agree with that.

19 Q. You just don't know one way or the
20 other?

21 A. I don't -- it really would require a
22 lot more data than we currently have to
23 answer that question in a definitive way.

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1 Q. Remind me, since it's been a while
2 since we took your first deposition, what
3 your educational background is.

4 A. I graduated from the United States
5 Naval Academy with a Bachelor of Science
6 Degree in Physics back in 1987.

7 Following my graduation, I attended a
8 naval nuclear power school where I
9 received some postgraduate work in the
10 various engineering and science
11 disciplines.

12 Additional education that I
13 received, I've got my Master's Degree in
14 Business from Washington University in
15 1998, I think it was. 1998 is when I
16 received that and that's the extent of my
17 college and postgraduate work.

18 Q. Did you have any educational
19 background in foundries and how to
20 operate foundries or anything about
21 foundries?

22 A. No, nothing specific to foundries.

23 Q. Do you have any work experience in

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1 or around foundries?

2 A. No.

3 Q. You talked about foundry sand.
4 Where does foundry sand start? Where
5 does it originate? What is foundry sand?

6 A. Well, foundry sand itself is a sand
7 that the foundries use to create their
8 molds.

9 Q. It starts off as just sand dug out
10 of the ground somewhere; right?

11 A. I don't know specifically where they
12 get it but, yes, it came from somewhere.

13 Q. It just starts out as plain old
14 ordinary sand?

15 A. Yes.

16 Q. And it goes into a foundry and then
17 it is used for -- what is your
18 understanding of what it's used for in a
19 foundry?

20 A. It's primarily used -- it's mixed
21 with some kind of binding agent, and what
22 that binding agent was varies depending
23 on the process, but it's mixed with a

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1 binding agent to give it some shape so
2 they can put it in the form of a mold and
3 then the hot melted metal is poured into
4 the mold and the product is allowed to
5 form. In Anniston, it was primarily soil
6 pipe, but there are exceptions to that in
7 Anniston.

8 Once it's formed to a certain
9 point, the mold is cracked, the pipe is
10 removed, and the sands can either be, I
11 suppose there's potential for them to be
12 reused for a period of time, but
13 eventually, it's a waste material and it
14 goes into their foundry sand pile with
15 the rest of their waste materials.

16 Q. You spoke of a binding agent added
17 to the sand, and what's the purpose of
18 that?

19 A. Just to give the sand some sort of,
20 something to bind it together so it can
21 hold a shape. I mean, obviously, if you
22 just pick sand up, it's going run all
23 over the place. You can't form anything

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1 have multiple sources of PCB
2 contamination at each facility including
3 dielectric and hydraulic equipment, scrap
4 and investment casting wax?

5 A. Yes.

6 Q. And I think I was confused for a
7 moment so before we go to that paragraph,
8 let's get back to the binding agents for
9 a minute. What are the binding agents
10 made of?

11 A. I don't know. Typically, there were
12 -- from the soil pipe perspective, my
13 understanding is that the binding agents
14 were typically a trade secret and I'm not
15 aware of what the soil pipe foundries use
16 as a binding agent.

17 Now, I know that there were
18 some specialty foundries that did
19 investment casting which is referenced in
20 this Paragraph 77 of the complaint that
21 had to create molds that had very fine
22 tolerances. There wasn't a whole lot of
23 room for air-based or whatever it was

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1 with it, so they have to put some sort of
2 binding agent to give it structure so
3 that it can maintain the shape of the
4 mold.

5 Q. Is it correct that Monsanto sold
6 PCBs for use in binding agents?

7 A. I'm not aware that we sold them for
8 use as binding agents, no.

9 Q. Is it correct that Monsanto, in
10 fact, sold PCBs for use as a binding
11 agent in specialty foundries? Well,
12 let's do it this way, let's go to the
13 complaint for one minute. I think I've
14 got a copy of the complaint around here
15 somewhere that's styled against McWayne
16 and others. Have you read the complaint
17 in full?

18 A. Yes.

19 Q. Do you happen to have a copy of it
20 handy there?

21 A. I do.

22 Q. Let me ask you to go to Paragraph 77
23 of Page 16. There it says the foundries

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1 they were trying to make, and some of
2 those foundries would use PCBs as a
3 binding agent in those molds. Now, we
4 know that there were some foundries that
5 used these binding agents after Monsanto
6 stopped producing PCBs for open
7 applications and they would import them
8 from other countries, but specifically
9 did any of these companies use Monsanto
10 PCBs for that purpose, I couldn't say.

11 Q. Let me break that down into pieces
12 for a minute. Leaving aside the
13 specialty or what's referred to in
14 Paragraph 77 as investment casting wax,
15 leaving that aside for a moment, as far
16 as you know, the binding agents normally
17 used in sand in the process that a
18 foundry employs did not contain PCBs and
19 were not a source of PCBs?

20 A. I don't know whether they contained
21 them or not.

22 Q. You have information that they were
23 a source of pollution one way or the

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1 other, I guess?
 2 A. As used as a binding agent in the
 3 molds for the soil pipe industry
 4 specifically, no, I don't know.
 5 Q. Do you know of something else other
 6 than soil pipe?
 7 A. Just the investment casting wax is
 8 the only one.
 9 Q. Let's move over to the investment
 10 casting waxes, okay? Do you agree that
 11 a substantial purchaser of PCBs from
 12 Monsanto was the company which made the
 13 wax for investment casting for use in
 14 that process?
 15 A. I haven't seen any information that
 16 would allow me to answer that question.
 17 I don't know who our customers were in
 18 any specific detail.
 19 Q. But you do believe investment
 20 casting wax was a source of PCBs that
 21 ended up in foundry sand and foundry
 22 waste?
 23 A. Yes.

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1 Q. All right, in Paragraph 77, you
 2 appear to be listing there -- did you
 3 review the complaint, by the way, before
 4 it was filed?
 5 A. No, I did not review it before it
 6 was filed.
 7 Q. All right, Paragraph 77 seems to be
 8 listing where the PCBs came from that
 9 appear in foundry sand or foundry waste?
 10 A. Yes.
 11 Q. Do you know of any sources for PCBs
 12 in foundry sand and foundry waste other
 13 than what is listed in Paragraph 77?
 14 A. No, I do not.
 15 Q. Okay, well, we talked about
 16 investment casting wax, so let's talk
 17 about including dielectric. What does
 18 that refer to, dielectric equipment, I
 19 guess?
 20 A. Well, dielectric, what it's
 21 referring to there is basically the use
 22 of PCBs as a cooling agent in
 23 transformers and capacitors and other

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1 large electrical equipment.
 2 Q. And the source of those PCBs would
 3 have been Monsanto originally?
 4 A. Certainly, we manufactured that
 5 product and sold it to companies that
 6 used it for that purpose, yes.
 7 Q. Since you were the only manufacturer
 8 in the United States, you would assume
 9 that the PCBs that are found in foundry
 10 sand and in foundry waste that originated
 11 from that source at least came from
 12 Monsanto?
 13 A. Well, once again, I wouldn't argue
 14 that we didn't sell PCBs to some of these
 15 companies potentially, but while we were
 16 the only producer in the United States,
 17 we were not the only producer in the
 18 world and I have seen things, seen
 19 information that has told me that some
 20 PCBs were imported for various uses, but
 21 I'm not trying to say that we were not a
 22 potential supplier to these companies.
 23 Certainly, we would have been and I'm

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1 sure back then, we would have loved to
 2 have them as customers.
 3 Q. You would at least agree that, by
 4 far, the great majority, if not all of
 5 PCBs sold to use in transformers in this
 6 country came from Monsanto?
 7 A. I haven't seen any information that
 8 will allow me to conclude that
 9 specifically, but I know we sold large
 10 quantities of PCBs for those purposes.
 11 Q. The next item there listed,
 12 hydraulic equipment. Do you know, in
 13 particular, what kind of hydraulic
 14 equipment they're referring to, any and
 15 all kinds of hydraulic equipment or some
 16 particular kind of hydraulic equipment
 17 used in foundries?
 18 A. Hydraulic -- it was used as a
 19 hydraulic fluid for equipment that was
 20 operated in a very high temperature
 21 environment obviously to take advantage
 22 of the stability and the heat resistant
 23 characteristics of PCBs to prevent fires.

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1 Q. Particularly used in casting
 2 equipment?
 3 A. Well, used in any type of
 4 hydraulically powered equipment in the
 5 foundry operation. I don't know enough
 6 about how hydraulic equipment was used in
 7 the foundry process to really be any more
 8 specific than that.
 9 Q. And is it correct that Monsanto
 10 specifically sold PCBs for that use?
 11 A. The PCBs we manufactured certainly
 12 could have been used for that purpose,
 13 yes.
 14 Q. Monsanto knew that the PCBs it was
 15 selling was being used in hydraulic
 16 equipment in foundries?
 17 A. I don't know for a fact that we knew
 18 that. It seems logical, but I couldn't
 19 say conclusively whether that's true or
 20 not.
 21 Q. Because you weren't around back
 22 then, I guess?
 23 A. Yeah, I was -- I wasn't around,

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1 talked to people who have worked in
 2 foundries that have told me the same.
 3 Q. Is hydraulic equipment containing
 4 PCBs still being used in foundries?
 5 A. It shouldn't be. I don't know where
 6 they're getting it from if they are using
 7 it in foundries.
 8 Q. You think it all leaked out by now?
 9 A. Well, at the time, I would assume
 10 that they would have drained their
 11 systems of PCB hydraulic fluid and
 12 refilled it with approved substitutes
 13 back the 1970s and 80s time frame when
 14 that was current.
 15 Q. Isn't it a fact that Monsanto, in
 16 fact, sold extra supplies to those people
 17 so they would have enough on hand to last
 18 a while when it got out of business?
 19 A. I don't know that that occurred.
 20 The use of PCBs in transformers and other
 21 applications was governed by the toxic
 22 substance control act and there were
 23 allowances for you to continue to use

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1 that's correct. And it goes beyond not
 2 just being around. I just have never
 3 seen any documents that would, or
 4 anything allow me to make statements like
 5 that.
 6 Q. And the hydraulic equipment that was
 7 used in foundries leaked?
 8 A. Certainly, yes.
 9 Q. And it got in the sand and the other
 10 refuse from the foundries and that's how
 11 it got outside the plant; is that what
 12 you're saying?
 13 A. It is one way. It would have. You
 14 would have hydraulic leaks or ruptures
 15 that could leak, you know, not just
 16 drips, but hundreds of gallons of
 17 hydraulic fluid on the ground and I have
 18 seen documents, more recent documents,
 19 you know, 1980s and 1990s where the
 20 foundries state that they would use their
 21 foundry sands to wipe up oil spills and
 22 then they would take that material and
 23 put it in the foundry piles. I've also

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1 transformers that contained PCBs, albeit
 2 at much lower levels of transformers so
 3 --
 4 Q. I'm talking about hydraulic fluids.
 5 I ask you to look at the paragraph
 6 beginning "concerning Tull Chemical".
 7 There appears to be a reference in
 8 Paragraph 122 to a leak of equipment at
 9 Tull Chemical in 1984 containing PCBs?
 10 A. Yes.
 11 Q. Does that paragraph, although it
 12 doesn't involve a foundry in particular,
 13 change your view as to whether hydraulic
 14 equipment using PCBs or some kind of
 15 equipment using PCBs was still in
 16 existence in the 80s?
 17 A. I wouldn't -- I mean, obviously, in
 18 Tull Chemical's case he was still using
 19 PCBs. Now, whether he should have been
 20 or not, I'm not familiar with the toxic
 21 laws enough say otherwise, but the point
 22 here is he was releasing PCBs into the
 23 environment and he wasn't doing anything

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1 about it.
 2 Q. When did you first hear about the
 3 Tull Chemical event?
 4 A. It was shortly after I came to
 5 Anniston, 2000, probably mid-2000.
 6 Q. Okay. So at least by that date, you
 7 personally were aware that there were
 8 some people out there still using
 9 equipment with PCBs in them?
 10 MR. SHARMAN: Object to form.
 11 You can answer.
 12 A. Well, obviously, the data of this
 13 ADEM investigation is 1984 and I learned
 14 about in early 2000, so there's a
 15 sixteen-year difference there. I mean,
 16 what I know, obviously, is that Tull was
 17 using them in 1984. I don't know what
 18 other companies were doing.
 19 Q. Do you know whether any of the
 20 casting locations, any of the foundries
 21 are still using the equipment today
 22 containing PCBs or not?
 23 A. I know that a couple of foundries,

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1 if you're asking about hydraulic
 2 equipment --
 3 Q. Well, let's limit it to hydraulic
 4 equipment for the moment.
 5 A. As far as hydraulic equipment goes,
 6 no, I don't know.
 7 Q. You just don't know one way or the
 8 other, right?
 9 A. I don't know one way or the other,
 10 no.
 11 Q. Since you seem to believe that
 12 some foundry waste contains PCBs and you
 13 seem to identify which foundries they may
 14 be coming from because you named them as
 15 defendants in this lawsuit, I'm curious
 16 about something; that is, prior to the
 17 time you filed this lawsuit, what efforts
 18 did you make to warn these foundries that
 19 they may be creating a hazard by leaking
 20 PCBs into waste and waste being
 21 distributed into the area?
 22 A. Well, I'm not aware of anything. I
 23 didn't do anything personally, and as far

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1 as what Solutia or Monsanto have done,
 2 I'm not familiar enough with Monsanto's,
 3 you know, history and -- what's the word
 4 I'm looking for -- how Monsanto, you
 5 know, dealt with those types of issues.
 6 I just don't know what and how we
 7 communicated to industry during the time
 8 that PCBs were being phased out.
 9 Q. You're, at least as you sit here
 10 today, not aware of any warning ever
 11 given to any of those companies?
 12 A. I'm not aware that one was given or
 13 not given.
 14 Q. Okay, and that includes since the
 15 date that you personally found what you
 16 believe was foundry sand contaminated
 17 with PCBs; you did not go to those
 18 companies and warn them that there might
 19 be a hazard if they were still using PCB
 20 equipment around foundries?
 21 A. Well, I think if you're looking at
 22 the standards, by today, you would expect
 23 these companies to follow and operate in

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1 accordance with federal law regarding
 2 PCBs and I don't see where it's our
 3 responsibility to inform them what the
 4 federal law says.
 5 Q. (To the court reporter:) Would you
 6 please read my last question back?
 7 (Record read.)
 8 Q. What's the answer to my question?
 9 A. The answer is no, I'm not aware that
 10 we've done that.
 11 Q. All right, going back for a minute
 12 to Tull Chemical again, is it correct
 13 that Monsanto sold to Tull Chemical the
 14 PCBs that you say leaked into Snow
 15 Creek?
 16 A. I don't know that we sold them the
 17 PCBs.
 18 Q. Is it correct that Monsanto, in
 19 fact, designed the equipment that you say
 20 leaked and contaminated Snow Creek with
 21 PCBs?
 22 A. I believe that the process that was
 23 used down there at Tull Chemical used to

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1 be owned by Monsanto a pilot project in
 2 that we sold, I guess, I don't know the
 3 details, but that Tull came into
 4 possession of that because Monsanto
 5 didn't want to manufacture that product
 6 and didn't want to get into that
 7 business, so yes, that was the process
 8 that at some point in the past it was
 9 owned by Monsanto.
 10 Q. In Paragraph 77, there's also
 11 reference to PCBs in scrap or scrap is --
 12 well, let's just look at Paragraph 77.
 13 It says "foundries have multiple sources
 14 of PCB contamination at each facility
 15 including", and one of the things you
 16 list there is scrap.
 17 A. Yes.
 18 Q. Tell me what you know about scrap as
 19 a source of PCBs in foundries.
 20 A. Well, I can talk generally and then
 21 I can move to a specific example if you
 22 like.
 23 Q. Sure.

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1 A. Generally, there's a study that was
 2 done by the EPA, I want to say it was in
 3 mid-1980s, where they characterized scrap
 4 and shredder, you know, the byproducts of
 5 the shredding process in these foundries
 6 which was the metallic, the nonmetallic,
 7 I'm sorry, the ferrous, the nonferrous,
 8 and the nonmetallic waste streams, and
 9 long story short without going through a
 10 lot of detail on the study, they detected
 11 low levels and I'll define low levels of
 12 between point five and I want to say two
 13 parts per million in the ferrous and
 14 nonferrous materials which the foundries
 15 could use.
 16 And in the waste material, the
 17 fluff is what they call it, the
 18 nonmetallic material, they detected
 19 varying levels of PCBs ranging from a
 20 couple of parts per million to I want to
 21 say as high as seven or eight hundred
 22 parts per million of PCBs and while they
 23 couldn't be specific as to what the

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1 sources of those PCBs were, the
 2 inference, I guess for lack of a better
 3 term, was that it was coming from the --
 4 well, the things that the foundry was
 5 shredding which could be automobiles, it
 6 could be appliances, potentially, it
 7 could be old transformers or old
 8 capacitors or a variety of other, you
 9 know, scrap metal sources.
 10 Now, so from a general
 11 perspective, and that was based on a
 12 study of seven different foundries I
 13 think was the number that the EPA did.
 14 Now, narrowing it down more specifically
 15 to the Anniston area, I can think of one
 16 example off the top of my head. Heron
 17 Valley Steel which is a company named in
 18 this complaint did some fairly extensive
 19 characterization of their fluff material
 20 that nonmetallic waste in preparation and
 21 as part of trying to get a -- I want say
 22 it was part of trying to get a permit
 23 application to build a landfill to accept

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1 their foundry material and they were
 2 regularly finding, and this is as recent
 3 as late 80s early 1990s. They were
 4 regularly finding PCBs in that material
 5 on the order of a couple parts per
 6 million up to thirty or forty parts per
 7 million, so somehow in that shredding
 8 process, the PCBs are getting from that
 9 scrap metal, you know, whether, you know,
 10 from the various places it could from
 11 into that nonmetallic waste stream. So
 12 when we talk about scrap, that's
 13 specifically what we're talking about.
 14 Q. Did each of these foundries or
 15 defendants in this case do their own
 16 shredding?
 17 A. I don't know the answer to that for
 18 sure.
 19 Q. The company you were referring to,
 20 did they also cast or do their own
 21 shredding?
 22 A. I know Heron Valley was a shredder.
 23 Q. Were they also a caster though?

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1 A. I don't believe they were, no. I
2 believe all of them were involved in --
3 of the foundries now. I'm not including
4 Tull, they weren't a foundry and there
5 might be one or two others in there that
6 weren't foundries. But of the foundries
7 I believe -- well, I'm not aware of which
8 ones used scrap metal and which ones
9 didn't with the exception of Heron Valley
10 that I know used scrap.
11 Q. I'm not asking you which ones used
12 scrap metal. I'm asking you which ones
13 actually shredded scrap metal
14 themselves?
15 A. I know that most of them and I can't
16 be too specific and I apologize for that,
17 but most of them used scrap metal as a
18 raw material. Now, whether they shredded
19 it themselves or not, I don't know. I
20 don't know if they had another, you know,
21 scrap yard somewhere that shredded for
22 them.
23 Q. Heron, though, was shredding some of

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1 would have the fluff, no.
2 Q. And while -- was the fluff the
3 principle place you found PCBs from a
4 shredding operation in the studies you
5 looked at?
6 A. In the studies I looked at, the
7 fluff is where you found the highest
8 concentrations of PCBs. You found PCBs
9 at some detectible level in all of the
10 byproducts of that shredding operation.
11 Q. Okay. And the scrap, once it
12 arrived at the foundry, would be heated
13 for the purpose of making the casting; is
14 that the idea?
15 A. Yes, my understanding of the process
16 is they would put layers of coke and
17 scrap in a cupola, heat it and melt it.
18 Q. And do you know what temperature
19 they have to melt it to in order to cast
20 it?
21 A. I don't know the temperature, no.
22 Q. Well, was the temperature high
23 enough to eliminate the PCBs?

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1 it, right?
2 A. Well, Heron, I know specifically,
3 was shredding their own material.
4 Q. But they're not a cast foundry;
5 right? They're not casting anything?
6 A. You know, I don't know off the top
7 of my head.
8 Q. Do you know that they at least sold
9 shredded scrap to other foundries?
10 A. I'm not aware whether they do that
11 or not.
12 Q. Okay. If one had a foundry that did
13 not do it's own shredding, then it
14 wouldn't typically be out there buying
15 fluff, would it?
16 A. I'm sorry, could you repeat the
17 question?
18 Q. If you had a foundry that was not
19 doing its own shredding, they would not
20 have fluff, would they?
21 MR. SHARMAN: Object to the
22 form. You can answer.
23 A. You would not suspect that they

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1 A. I don't know what the temperature
2 was and I don't know what high
3 temperatures, I don't know.
4 MR. SHARMAN: Frank, may I make
5 a two-minute phone call, a
6 very brief break?
7 MR. DAVIS: Sure.
8 (Whereupon, a brief recess was
9 taken at this time.)
10 Q. What's Kaley doing these days?
11 A. I don't know. I don't talk to him
12 too much.
13 Q. Is he still working out of the
14 Anniston plant?
15 A. Well, he's never worked out of the
16 Anniston -- I mean, mean he's working out
17 of the St. Louis office.
18 Q. What involvement does he have with
19 the mediation at Anniston, any?
20 A. His involvement is, I would define
21 it as twofold. One, he kind of -- my
22 understanding of his involvement, he kind
23 of serves as a -- one, he's our most

Page 177 1 knowledgeable person on PCBs and risk 2 assessments and health effects and a lot 3 of the historical activities, a lot of 4 Monsanto's historical activities related 5 to PCBs. He also -- where he works with 6 me is he kind of serves as a 7 knowledgeable person to help keep the 8 attorneys informed of what's going on 9 with remediation. 10 Q. The reason I asked that is 11 apparently Mr. Kaley and you have both 12 been put up in response to a 30(b)(6) 13 request and I was wondering if you could 14 differentiate with me what areas he might 15 be more knowledgeable in versus you. 16 A. I couldn't necessarily -- I mean, I 17 know what he's more knowledgeable in than 18 I am, but I couldn't tell you what the 19 basis was in response to this request. 20 Q. With particular respect to this 21 complaint against the foundries and 22 others, what about that do you think he 23 has knowledge on that you don't have?	Page 179 1 there's -- which is basically this pile 2 right here that I have and that you have 3 also. 4 Q. You haven't seen any documents other 5 than those? 6 A. No, I have not. 7 Q. Are you aware of the existence of 8 any other documents? 9 A. Well, I'm aware that, in the course 10 of developing information and learning 11 more about this process, that I believe 12 there's some, I don't know what the 13 numbers was, thirty-five or forty 14 thousand documents that attorneys for 15 Solutia have reviewed. I have not 16 reviewed all those documents. 17 Q. Have you reviewed any of those 18 documents other than the ones on the 19 table? 20 A. Other than the ones that are here 21 today, no. I should say that I haven't 22 seen those documents so I don't know what 23 they are. If I have seen them in a
Page 178 1 A. With respect to the foundries, I 2 would say very little, if any. 3 MR. SHARMAN: For the record, 4 we have identified Dr. 5 Kaley as providing 6 information with response 7 to paragraphs 1-D and E of 8 the deposition notice. 9 MR. DAVIS: What is 1-D? 10 MR. SHARMAN: 1-D refers to 11 Monsanto's knowledge of 12 the persistence of PCBs in 13 the environment and 1-E 14 refers to Monsanto's 15 effort to minimize the 16 risk that PCBs could have 17 on the environment. 18 Q. What documents do you know of that 19 exists that support the allegations made 20 in the complaint against this company? 21 A. Well, the only documents that I have 22 seen are the documents that have been 23 produced for this deposition. I know	Page 180 1 different context, obviously, I wouldn't 2 know whether there were reviewed by our 3 lawyers or not. 4 Q. Did any other employees of Solutia 5 assist in either gathering those 6 documents or their organization to your 7 knowledge? 8 A. No employees that work for me in 9 Anniston and I'm not aware of any Solutia 10 employees that helped in that process. 11 Q. What employee of Solutia read the 12 complaint before it was filed and is 13 responsible for its accuracy? 14 A. I don't know. I would assume it's 15 one of our in-house attorneys, but I 16 don't know and perhaps I should preface, 17 I mean, I saw the complaint the day it 18 was filed or maybe the day before it was 19 filed, but I wasn't a party to preparing 20 the complaint or reviewing the complaint. 21 Q. Having reviewed it, then, either the 22 day it was filed or shortly thereafter, 23 are there any statements in the complaint

Page 181 1 which you would not have made? 2 A. No, I agree with everything that's 3 in that complaint. 4 Q. Did any of these companies assist in 5 any way in any of the remediation that 6 has already taken place, and when I'm 7 talking about remediation, I'm talking 8 about the remediation y'all have 9 participated in, I'm not talking about, 10 if Tull had spilled some kind of material 11 themselves? 12 A. No, none of these companies have 13 assisted Monsanto or Solutia in any of 14 their remediation, to the best of my 15 knowledge. 16 Q. Have they -- were they requested to 17 render assistance in any way, either 18 physical assistance or technical 19 assistance or monitoring assistance? 20 A. Not that I'm aware of, no. 21 Q. Was that request made at any time 22 prior to the time the complaint was 23 filed? That may be the same question I	Page 183 1 * * * * * 2 REPORTER'S CERTIFICATE 3 * * * * * 4 STATE OF ALABAMA 5 COUNTY OF JEFFERSON 6 I, Angela Abbott 7 Blankenship, Certified Shorthand Reporter 8 and Notary Public in and for the State of 9 Alabama at Large, do hereby certify that 10 on July 22, 2003, pursuant to notice and 11 stipulation on behalf of the Plaintiffs, 12 I reported the deposition of CRAIG 13 BRANCHFIELD, who was first duly sworn by 14 me to speak the truth, the whole truth, 15 and nothing but the truth, in the matter 16 of ANTONIA TOLBERT, et al., Plaintiffs, 17 versus MONSANTO COMPANY, PHARAMACIA, INC. 18 And SOLUTIA, INC., Defendants, Civil 19 Action Number CV-01-C-1407-S, now pending 20 in the United States District Court 21 Northern District of Alabama, Southern 22 Division, that the foregoing 182 23 typewritten pages contains a true and
Page 182 1 just asked, but I want make sure I 2 identify that. 3 A. Not that I'm aware of. If the 4 request was made, it wasn't made by me or 5 anyone that works for me. 6 Q. That's all I have. Thank you very 7 much. 8 9 (The deposition of Craig Branchfield, 10 Volume II, was adjourned at 2:15 p.m. on 11 July 22, 2003.) 12 13 14 15 16 17 18 19 20 21 22 23	Page 184 1 accurate transcription of the examination 2 of said witness by counsel for the 3 parties set out herein; that the reading 4 and signing of said deposition was not 5 waived by the witness and counsel for the 6 parties. 7 I further certify that I am 8 neither of kin nor of counsel to the 9 parties to said cause, nor in any manner 10 interested in the results thereof. 11 This 30th day of July 2003. 12 13 14 15 16 17 18 19 20 21 22 23 Angela Abbott Blankenship Reporter and Notary Public State of Alabama at Large

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