ANTONIA TOLBERT, et al.

v.

MONSANTO COMPANY, et al.

CRAIG BRANCHFIELD

April 25, 2003

REAGAN REPORTERS, LLC
Phone: 334.262.7556
Fax: 334.262.4437
www.ReaganReporters.com

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION

ANTONIA TOLBERT, et al., Plaintiffs, vs. MONSANTO COMPANY, PHARMACIA, INC., and SOLUTIA, INC., Defendants.

Civil Action No: CV-01-C-1407-S

DEPOSITION OF CRAIG BRANCHFIELD

S T I P U L A T I O N S

IT IS STIPULATED AND AGREED by and between the parties through their respective

counsel that the deposition of CRAIG BRANCHFIELD, a witness in the above-entitled cause, may be taken before Laura E. Durden, Notary Public in and for Alabama State at Large, at the offices of Lightfoot, Franklin & White, L.L.C., The Clark Building, 400 20th Street North, Birmingham, Alabama, on the 25th day of April, 2003, commencing at 10:00 a.m., pursuant to the Alabama Rules of Civil Procedure.

IT IS FURTHER STIPULATED AND AGREED that it shall not be necessary for any objections to be made by counsel to any questions except as to form or leading questions, and that counsel for the parties may make objections and assign grounds at the time of trial or at the time said deposition is offered in evidence or prior thereto.

It is further stipulated and agreed by and between the parties hereto and the witness that the signature of the witness to this deposition is hereby waived.

APPEARANCES:

For the Plaintiffs:

MR. D. FRANK DAVIS, ESQUIRE
Davis & Norris, L.L.P.
One Highland Place
2151 Highland Avenue
Suite 100
Birmingham, Alabama 35205

For the Defendants:

MR. KEVIN CLARK, ESQUIRE
Lightfoot, Franklin & White
400 20th Street North
The Clark Building
Birmingham, Alabama 35203

EXAMINATION

(No exhibits were marked and/or admitted to this deposition.)

I, Laura E. Durden, acting as commissioner, certify that on this date there came before me at the offices of Lightfoot, Franklin & White, L.L.C., The Clark Building, 400 20th Street North, Birmingham, Alabama, on April 25, 2003, beginning at or about 10:00 a.m., CRAIG BRANCHFIELD, a witness in the above cause, for oral examination, whereupon the following procedures were had:

CRAIG BRANCHFIELD
having first been duly sworn,
testified as follows:

EXAMINATION BY MR. DAVIS:

Q. State your name for the record, please.

A. Craig Randall Branchfield.

Q. What state and county do you reside in?

A. I live in Alabama, in Talladega County.

Q. By whom are you currently employed?

A. Solutia.

Q. And what is your position at Solutia?

A. My position is manager over remedial projects.

Q. How long have you been employed by Solutia?

A. I've been employed by Solutia for four and a half years now.

Q. Who was your employer before that?

A. A company called Morrison Knudsen.

Q. So you never actually worked for Monsanto before starting with Solutia?

A. That's correct. I was hired by Solutia.

Q. When did you begin working for Solutia?

A. My initial position with Solutia was as a manager of remedial projects, working

Page 6

out of our corporate offices in St. Louis.
Q. When was the first time you had any responsibilities with regard to Anniston?
A. The first time I had any responsibilities would have been January of 2000. That's when I assumed responsibility for my current role as project manager for the Anniston remediation.
Q. When was the first time you visited Anniston?
A. The first time I visited Anniston would have been in probably September of 1999.
Q. What was the purpose of that?
A. The purpose was to come down, see the city, and meet the -- I had been offered the job as project manager. Basically, was to learn a little bit about it and help me decide whether I wanted to accept the position or not.
Q. When was it you said you actually accepted the position?
A. Actually accepted the position by

Page 7

October of 1999.
Q. You told me what your title was at that time, and we had a little break here for a second. And now I've forgotten what it was.
A. Manager of remedial projects.
Q. For Anniston?
A. Since I started working for Solutia, that's been my title both up in St. Louis and since I assumed responsibilities here in Anniston.
Q. Once you assumed responsibilities in October of 1999 for Anniston, did you also have any responsibilities outside of Anniston, or were you solely working for Anniston?
A. At first, I wasn't fully responsible for Anniston until January of 2000. Between October and January was a transition period between myself and my predecessor, Alan Faust.
The second part of your question was, after I assumed responsibility

Page 8

for Anniston, I did maintain responsibility for some other projects that I had been working on for a period of time. But I have since been relieved of those responsibilities.
Q. What other projects did you maintain responsibility over for a period of time?
A. After I came to Anniston or after I assumed responsibilities for Anniston?
Q. Yes.
A. There was a superfund site in Maryland called the Spectron Galaxy site, which I maintained responsibility for about a year and a half after I came to Anniston. For a short period of time, I maintained responsibility for another project that we have outside of Texas called the Motco site.
There was also -- had some responsibilities for some work that was going at our coining plant in St. Louis and some other miscellaneous recurrent superfund sites.
There was about a six-month

Page 9

transition when I came down to Anniston, where I was turning many of those projects over to other managers.
Q. At about what date were you working just on Anniston?
A. Well, except for the Spectron Galaxy site, I turned over all my other projects by April or May of 2000. The Spectron Galaxy site, I kept responsibility for -- I can't remember the exact date. It would probably have been sometime in mid 2001 before I turned over responsibility for that project.
Q. During the period of time you have been at Solutia, have you had any responsibilities over any PCB sites other than Anniston?
A. I had responsibility over sites where PCB was typically a very small part of the remediation. There were other issues we were dealing with. There were no sites that were specifically PCB-related, like Anniston is.
Q. Prior to the time you came to work for

Page 10

Solutia, had you been involved in any remediation projects where the constituent, which was the principle constituent involved, was PCB?
A. No.
Q. You told us about coming down to Anniston in October of 1999.
But on at least one occasion prior to the time you accepted the position, did you come just once before you accepted the position, or was it more than once?
A. Just once, before I accepted the position.
Q. How long were you down in Anniston on that first occasion?
A. About a week.
Q. What did you do during that time period?
A. A variety of things. Obviously, part of the visit was to learn about the remediation that was going on in Anniston, meet the people that I would be working with and would be implementing much of the work

Page 11

we were trying to accomplish down in Anniston.
There was also another part of my family accompanying me on that trip, and we were interested in learning about the area in general -- schools and so forth -- to see if it was someplace we would like to come and live.
Q. You indicated that you currently live in Talladega County.
Did you move to Talladega County immediately after coming to Anniston?
A. Yes.
Q. Where in Talladega? I don't need to know the exact address. I don't like to put people's addresses on depositions. Some people do, but I don't.
Where in Talladega?
A. It's in the city of Oxford, which is just south of Anniston. It really sits almost right on the border of between Calhoun and Talladega counties.
It's less than a mile south of

Page 12

Calhoun County, off of Highway 21.
Q. How far from Snow Creek?
A. I would estimate less than two miles from Snow Creek.
Q. Prior to the time you came to Anniston that first time, had you reviewed any documents or information, historical information or current information, about the site?
A. No.
Q. Tell me what you were told about the site when you came down on that first trip.
A. That first trip, I just really received a very broad overview of the work that was ongoing and a little bit of the history. I was obviously told about the history of PCBs in Anniston.
Anniston was one of the plants Monsanto owned that manufactured PCBs, and that we manufactured those PCBs from -- I don't know the exact date -- late 1920s until 1971. That we were currently involved in a facility investigation to characterize

Page 13

the nature and extent of PCBs, both in our manufacturing facility in Anniston as well as in the ditches and downstream waterways, the creeks.
I talked with some of our consultants about some of the details of those investigations -- what we had learned, what investigations we saw in our future, and the type of work we anticipated doing over the next several years while I was considering being involved with the project.
I was also given what I would describe as a very general overview of the work we had completed prior to my coming down; specifically, the cap and cover systems we placed on our landfills, some of the ground water collection systems we had put in place on the plant site to monitor and collect ground water as well as some of the runoffs we had implemented on properties adjacent to our facility.
It was really sort of just a broad overview of what we had done and what

Page 14

we were doing and where we foresaw ourselves going.
Q. What do you recall being told about what had been done so far?
A. At that time most of what -- most of the work that I had been briefed on -- and it wasn't by any means a complete description of everything that had been done -- is there is lots that had been done, and we didn't get into all of it.
The larger projects we had been involved with at the time was the capping of the landfills that Monsanto had used and the investigations that had taken place around the plant site, the actual collection of samples and having those samples analyzed by laboratories and what that data told us about how PCBs were moving around in the environment.
I was obviously told that there was some ongoing litigation on the project. But getting back to the remediation, I learned a little bit about the ground water

Page 15

collection systems we had on the site. These discussions were very general.
It was just really a trip to see what was going on. The more detail turnover -- I guess would be a proper term -- took place between those months between October and January, when I took over the work they were doing in Anniston. That first visit was just a real broad nature.
Q. Let's, then, take a different approach.
Let's say at the time that you took over, what were you told then about what had been learned about how the PCBs moved?
A. As far as how the PCBs moved, at that point I had been told, and this pretty much remains the case today, that the primary means for PCBs to be transported away from the facility was through surface water.
When it would rain, the rain would, of course, flow down a mountain that

Page 16

is upgrade of our facility from a surface water standpoint. That rainwater would flow across our plant site. It would flow across our historical landfill, which, of course, had been closed, and you would get bits of erosion.
The PCBs particles tended to like to bind to soil particles, sedimentary material. That surface water would capture those soil particles and wash them into ditches and creeks and wash them downstream.
When there were flooding events, when that water would go outside the banks of the ditches or creeks, there was a potential for PCBs to be deposited in those flood plains.
This is how the site we were investigating at the time had been defined, was the flood plains of these creeks and ditches as well as the waterways themselves.
Q. At the time you came down then, you saw them investigating PCBs outside the flood plains?

Page 17

A. When I came down, we had -- I have to think about it. When I came down, it had been just brought to our attention. I think this was through the course of one of the lawsuits that was ongoing at the time, and it's still ongoing.
That some PCBs had been detected in some properties outside the flood plain. But at the time we didn't have a very good sense for what those levels of PCBs were or where they were, for that matter.
That was not something that had been completely developed at the time, certainly not to the extent to which we've developed that data today.
Q. When was it in 2000 that you moved here permanently?
A. January of 2000.
Q. By January 2000, had Monsanto tested the yards of any residents?
A. Some residential properties within the flood plains of Snow Creek and Choccolocco

Page 18

Creek, as well as residential properties adjacent to our facility, we had tested, yes.
Q. Do you remember in general what the results of that testing was?
A. It really varied based on the location. Theoretically, you would anticipate the higher levels of PCBs to be closer to the facility, and as you work your ways down the waterways, the levels would fall.
That's generally what we found; particularly, on Choccolocco Creek. Once we get to Snow Creek, it's a little more spotty. It isn't a nice clear grading on Snow Creek, but nevertheless, we still had some of that data.
Q. Since then, do you have any idea of the total soil samples you have done?
A. Total soil samples?
Q. Yeah.
A. If you want to include sediment samples taken in the creek, the plant site,

Page 19

residential properties, commercial, industrial, I would say in excess of five-thousand. Probably much higher than that, but at least five-thousand soil and sediment samples within creeks themselves.
Q. I'm curious about the consistency and predictability of those samples. You have five-thousand of them.
If I picked out a residential piece of property, say, within half a mile of the plant, and said to you, if we sample that piece of property, would we find PCBs or not, and if we find them, what level, are you now in a position to predict that?
A. There is a few that -- I'm trying to think of a good way to answer that question.
The simple answer to your question is no. It's very difficult to predict; particularly, in the Anniston area. In the Anniston area, you can go and sample one property -- pick a location really.
This is typically within a half mile radius of the plant, in the downgraded

Page 20

direction. Of course, upward is nothing but a forest and a mountain.
In the downgraded area of the plant, outside the flood plain, you can pick one property and not detect PCBs, and you can go to the next door property and find fifty parts per million PCBs. And you go to the property right next to that and find two parts per million PCBs. There is no clear, consistent pattern to the distribution of PCBs on residential properties in the western parts of Anniston.
As we work our way downstream, down Snow Creek, and get to the Choccolocco Creek, the pattern becomes very apparent. You get a very nice correlation between the location of PCBs -- I should say the concentration of PCBs both with distance downstream, Choccolocco Creek, as well as distance away from the banks of Choccolocco Creek.
And without exception, when it comes to Choccolocco Creek, we don't find

Page 21

PCBs outside the flood plain. So detecting PCBs outside the flood plain is really unique in West Anniston. It's really not what we found in Choccolocco Creek.
So the simple answer to your question is, in West Anniston, no, I can't predict for you. On Choccolocco Creek, I think I could give you a very good feel.
Q. On Choccolocco, your prediction would be based on an assumption that if it's in the flood plain, there would be PCBs probably there; if it wasn't, there probably wouldn't be?
A. In certain areas of Choccolocco Creek, when we completed our initial flood plain investigation of Choccolocco Creek, which we did I want to say in -- I want to say in late 2001. I think it was probably October or November of 2001 when we went in the flood plain of Choccolocco Creek and collected soil samples.
For the first five miles of the creek, from Snow Creek down to a location in

Page 22

the vicinity of Coldwater Creek -- it's about five miles distance -- we detected PCBs pretty much through the width of the flood plain.

Once we got down below Coldwater Creek, from a point about five miles downstream of Snow Creek to about 15 miles downstream of Snow Creek, the PCB detections were pretty much, without exception, limited to the banks of the creek. And I will define the banks of the creek as anywhere within 50 feet of the water.

Once we got away from the banks of the creek, there is one or two exceptions. Generally speaking, we did not detect PCBs outside the banks of the creek, once we got below Coldwater Creek.

That's not something you would find unusual. You would expect theoretically, the way PCBs are transported, that you find the higher levels PCBs in the upstream areas and they would reduce as you

Page 23

go downstream, and you would find the higher levels close to the bank of the creek, and they would reduce as you move away from the bank. We pretty much found what we predicted we would find.

Q. In the same way that you found in Anniston, PCBs that are fairly down in one yard, and the next door neighbor, not nearly so high, would you expect it if you did multiple samples within a particular person's yard that you would also find significant variations in the levels of PCB?

A. I think in Anniston, yes. There have been a number of properties that we have sampled, or the EPA sampled, where we detected fifty parts per million in the front yard, and we have not detected anything in the backyard. We have theories about why that might be the case. We have some data to suggest why that's occurring.

Yeah, within one particular property, you can find variation within that property by itself, which suggests to us that those

Page 24

PCBs are not there because of flood plain deposition. They're there because something physically put them there.

Q. Would your conclusion be that there have been multiple ways that PCBs are spread around Anniston?

A. I think "multiple" might exaggerate. There's really only two primary ways that PCBs move around.

One is through surface water transport, in deposition and flood plains, and the other is literally picking them up and moving them or picking the soil or other material that contains PCBs and moving it and placing it there.

There is some transport -- it's a very minor component. Typically, it's not even statistic from a deposition view, but there is some minor transport through the air. On most PCB sites, you typically don't see that as an issue. That's really the case in Anniston.

Most of the deposition in

Page 25

Anniston is through surface water transport or physical movement of the PCB-containing material.

Q. But you agree that some PCBs move by attaching themselves to soil and blowing in the wind, so to speak?

A. Absolutely. And we have data showing there are low levels of PCBs in the air in our facility.

Q. And some PCBs get moved around by getting on the bottom of somebody's feet and transporting around?

A. Sure, that's possible.

Q. Truck tires moving around or car tires moving around, right?

A. That's certainly possible. I wouldn't suggest that's the primary way PCBs moved around Anniston, but it's certainly possible.

Q. When you are seeing PCBs in the Anniston area above the flood plains, outside the area where it flooded, do you have a view as to what the primary means

Page 26

were for which it got there?
A. For outside the flood plain?
Q. Right.
A. Yeah. On many of the properties we sample outside the flood plain, there seems to be a correlation between the presence of PCBs and the presence of old waste material from foundries that used to operate in Anniston many years ago.
I should also mention, just to be clear, that we also see that inside the flood plain, where we will sample a yard in the flood plain and see some foundry material in the yard and also the presence of PCBs.
I don't think that would be -- that's unexpected because, typically, you would use a foundry fill material or any fill material of that nature to fill in a low area, and if you're close to a creek, you probably have more low areas you want to fill in than not.
Q. Do you know in general where the

Page 27

foundries used to be located?
A. Some of them, yes.
Q. Are some of them in the flood plain?
A. There's probably one or two. I think there's two or three foundries that were located in the flood plain of Snow Creek. Most of the foundries were located either outside the flood plain, or if they were in a flood plain, they were upgraded with our facility.
Q. Do you know of any areas around the United States where they're concluding the foundries, in typically the cities other than Anniston, contain PCBs or any level of PCBs?
A. I can't say I know specifically anywhere outside the United States, but, obviously, my focus isn't outside the United States. It's in Anniston.
Q. I'm talking around the United States. Do you know any basis for concluding in general when you see the foundry sands in other cities that you also see PCBs, or is

Page 28

this a phenomenon related to Anniston?
A. I don't know. I wouldn't suspect it's limited to Anniston. The EPA issued -- I believe it's in the early 1980s. They issued a report called "The EPA Treatability Studies Report."
It listed characteristic discharges from different types of industries. And one of those industries was the foundry industry, and it clearly lists PCB as a characteristic discharge from foundries anywhere in the United States.
But, as far as a specific example, I couldn't give you a specific example.
Q. You have indicated that sometimes you saw foundry sand in the same area where you saw PCBs.
Have you or anyone else done or made an effort to correlate those; that is, correlate samples, showing PCBs to foundry sand in those same areas?
A. I don't know that I understand what

Page 29

type of correlation you are looking for, whether you are asking is there a correlation between the mere presence of foundry sand and the presence of PCBs.
Generally, speaking, yes, there is. But foundry sands are unique. I mean, foundry sands aren't a result of a continuous, ongoing discharge, like you would see in surface water. Foundry sands are a result of pile of waste that somebody comes and gets something from that pile and then hauls it away.
Wherever you -- the different materials -- whether it's led, zinc, PCBs -- the various constituents you would detect from what you pull from that pile, obviously depends on what is placed on that pile. There are some areas that may have high areas of led.
Probably there's some led waste and probably other areas where maybe they threw an old transformer that was filled with PCB fluids, and that fluid may have

Page 30

leaked into the foundry sand. And that particular foundry sand would have higher levels of PCBs.

We have looked at properties that have foundry sand and low levels of PCBs, and it's typically low levels. It's typically in the one to ten part per million range.

But we have looked at the correlation of the foundry sands, the PCBs, and other contaminants; such as, led, and we find there are a fair number of properties in Anniston that contain all three that are outside the flood plain and typically in locations that, in our opinion, would be physically impractical for the PCBs to have come from us.

That leads us to a conclusion that those PCBs are present on that specific property or properties as a result of foundry operations.

Q. You are using an assumption there wasn't a significant amount of PCBs that was

Page 31

moved?

A. Yes. And the data we have certainly supports that conclusion. I don't want to call it an assumption.

Q. The only data you have is from when?

A. What type of data?

Q. Air.

A. We been collecting air data since 1999, I believe. But the conclusion I would draw isn't based on air data we are collecting today.

It would be based on, if there was an air source, what you would expect to see versus what we are actually seeing. If air was a significant source of PCB in the West Anniston community, you would expect to see a gradient. You would expect to see a pattern of PCBs that would be detectable.

Very similar to what you see with surface water -- higher levels closest to the plant; lower levels as you move away. It would be in a direction consistent with the prevailing winds.

Page 32

In Anniston, we see nothing of the sort. We see, as I described to you earlier, very spotty levels of PCBs -- non-detect here, ten here. We see it in all directions. It's not indicative to air transport by any stretch of the imagination.

Q. But if you proctor those results on a map, you do see higher results for PCBs the closer you get to the plant?

A. In the drainage ditches, not outside the flood plains. Once you get outside the flood plains and look at the residential properties, I can take you to properties that are greater than ten parts per million that are a mile away from our facility that have hundreds of properties in between them where there's no detections of PCBs. When I say "between," between that property and our facility.

Q. As we discussed earlier, there seems to be inconsistency in the results between individual pieces of property, right?

A. We are seeing different levels and

Page 33

different concentrations of PCBs from property to property.

Q. That's really not what I'm asking. What I'm asking, though, if you were to plot all your results on a map and plot levels detected.

Let's say, use different colors for different levels. One color for under five, one color for five to ten, one color for ten to twenty, and so forth.

Don't you find that, in general, the higher levels are closer to the plant?

A. I think, when you are looking within the drainage pathways, certainly. We never tried to argue we are not responsible for PCBs discharges from our facility. Certainly, PCBs were discharged from our facility.

And in those areas where we are confident that those discharges, in large part, came from our facility, that is exactly what you see, what you just

Page 34

described.
Once you get outside those pathways, once you get outside the flood plains, what you are describing is not the case. It is actually -- we have tried to correlate concentrations with distance from the plant in those outside the flood plain areas, and it's scattered. You get no consistent pattern or gradient that you are trying to suggest outside the flood plains.
Q. And your title once more is what?
A. My title?
Q. Yes, sir.
A. Manager of remedial projects.
Q. Does that mean you're in charge of remediation in Anniston?
A. Yes.
Q. Is it, then, correct that, in general, you do not take the responsibility for the PCBs around the Anniston plant other than the flood plains?
A. No, that's not correct.
Q. Well, then, is the opposite true?

Page 35

That you do, as the guy in charge of the PCB remediation of the Anniston plant, take responsibility for cleaning up the PCBs around the Anniston plant whether they do or do not appear in flood plains?
MR. CLARK: Object to the form.
A. What is true is that we have made commitments and reached agreements with the Environmental Protection Agency and the State of Alabama to go out into Anniston and address the presence of PCBs, wherever we find them. We have been in the process of fulfilling that commitment for a number of years.
Q. (By Mr. Davis) I don't know what "addresses" means. I don't want to be too picky.
Let's start with y'all investigate, right?
A. That's typically one of the earlier steps, to investigate, yes.
Q. What I want to know is, folks in Anniston who have residential properties

Page 36

that got PCBs on them, whether they are in a flood plain or not, do y'all intend to clean those PCBs up?
A. I would say we more than intend to clean them. We are actively cleaning them up.
Q. And are y'all just doing that out of the goodness of your heart, or is it because you admit you're responsible for them being there?
MR. CLARK: Object to the form.
A. We are doing it because we made a commitment to EPA, to ADEM, and regulatory agencies as well as the community to address PCBs in Anniston, and that is exactly what we are doing, wherever we find them.
We could step in and draw a hard line and say, these are ours and that's all we are dealing with. That's not the commitment we made. We made a commitment to deal with them wherever we find them, and that is exactly what we are doing.
Q. (By Mr. Davis) One of the places you

Page 37

found them was down at a park in Oxford?
A. Oxford Lake Park, yes.
Q. You dealt with them by putting them under a parking lot?
MR. CLARK: Object to the form.
A. There were two different methods we used to clean up the PCBs down there at Oxford Lake Park. Some of the PCBs we found exceeded the toxic levels for managing them on site. They were higher than fifty parts per million. Those had to go to a regulated disposal facility in a mill in Alabama.
Those PCBs that were less fifty parts per million -- actually, I should say less than forty.
Anything less than forty, we did manage at the park itself, and one of the ways we did that was building a parking lot on top of some of them.
Q. (By Mr. Davis) How did you manage them other than putting a parking lot on top of them?
A. Some of them were just capped in

Page 38

place. There was an area in the park where we worked out a cooperative agreement with the City of Oxford to build some tennis courts over the top of those PCBs as a containment remedy.

There was another area in the park, just across the street from where we built the tennis courts, in another small parking lot, where we just brought in about 18 inches of clean soil and placed that on top of the PCB-containing soil and planted some grass, which is growing slowly but growing nonetheless.

Q. Is that an area where kids still play in?

A. Yes.

Q. Are you not aware, based on your reading literature, that PCBs buried will migrate back to the surface?

MR. CLARK: Object to the form.

A. I'm not aware of anything that suggests PCBs that have been capped in place will migrate to the surface, no.

Page 39

Q. (By Mr. Davis) Have you made an inquiry in that regard or looked that question up?

A. Absolutely.

Q. Your testimony would be that there is no support for that?

A. My testimony would be that the remedies we put in place are adequate, just not in our opinion or but in the opinion of the regulatory agencies, and that that potential issue you're suggesting, migration back to the surface, if it exists, is so small as to be inconsequential.

Q. Have you been back out to test for that to see?

A. Yes.

Q. Where you put the clay caps?

A. Yes.

Q. Let's move for a minute to your landfills on the south side.

Do they have a clay cap on them, back in the good old days?

MR. CLARK: Object to the form.

Page 40

A. I wouldn't define anything as "the good old days."

There is a -- the south landfill, based on which section of the landfill you look at, has different types of caps now.

Q. (By Mr. Davis) I don't want to talk about the current caps that have been put on there since you're been there or just shortly before then. I want to go back now in the '70s or so.

Weren't there clay caps put on that landfill a long time ago?

MR. CLARK: Object to the form.

A. Certain portions of it had clay caps put on it in the '70s. The south landfill operated until 1986, I believe.

Some areas have more -- I will use the term "thorough" caps put in place based on what was buried in that particular part of the landfill.

Q. (By Mr. Davis) The area of the landfill that had PCBs put in it, did it

Page 41

have a clay cap put on it during the '70s?

A. During the operation of the landfill, there would be layers of clay put on the waste material that was placed in the landfill. Then, when we closed down the PCB-manufacturing facility and closed that portion of the landfill, my recollection, based on reading reports we provided to the regulatory agencies, is that there was a clay cap put on top of the PCB cell.

That area was then used for a short period of time for some just municipal waste -- paper, wood, not chemical waste. Waste like you generate in your house.

Then, on top of that was placed another foot or more of clay, and, then, a vegetating cover. There is quite a bit of cap between the current vegetated cover and where the PCB is at.

Q. During the operation of the landfill, as certain parts of the landfill were used, there was clay put on top of it then?

A. Yes, that's my understanding from what

Page 42

I read.
Q. As you told us, more clay and more clay put on it?
A. Yes.
Q. Is it correct that the PCBs in that landfill have migrated back to the surface?
MR. CLARK: Object to the form.
A. I don't think there's any data to suggest that the low levels of PCBs that have been detected on the cover of the old PCBs cells were a result of migration to the surface.
I think a more logical explanation is that the soil we used for that clay cap contained some low levels of PCBs in it.
Q. (By Mr. Davis) Where did that soil come from?
A. I don't know. Logically, you would suspect it came from somewhere in the vicinity of the landfill, but I couldn't tell you for sure.
Q. Didn't that clay come from the area

Page 43

where the landfill was being expanded to; that is, from up there on top of that hill?
A. I don't know specifically where that soil came from.
Q.
hill tion
that of
that f
the
was
cert
d
with
MR. CLARK: Object to the form.
A. I apologize. I don't know that I completely understand your question.
My first response is that I don't know where that soil came from. If you're telling me for a fact that it came from upgrade of the landfill --
Q. (By Mr. Davis) I don't get to testify. If I did, I'd tell you that for a fact.

Page 44

Best I can tell you is give you a hypothetical question, which is, assume with me for a minute that the soil used to cap the PCB landfill came from the area of the intended expansion of the landfill; that is, also across the road there and also uphill.
Would that have PCBs in it?
MR. CLARK: Object to the form.
A. I'm not aware of any expansion of the landfill uphill. The three PCBs cells were located at the northern edge of the south landfill. There is no additional landfill.
Q. (By Mr. Davis) I said "upgrade." Let me change the subject for just a minute -- not subject, but change the question.
You would at least agree that on the PCB landfill, on the south landfill, the portion that had PCBs buried in it that when y'all tested the top of that landfill, the top of that clay, you found PCBs?
A. Yes, we did.
Q. What did you do to examine the

Page 45

question of whether those PCBs might have been there because they were migrating up to the surface from within the landfill?
A. I'm not aware of any investigations that were conducted to draw that conclusion. That's not an investigation that would rise to the surface as the one you want to do right away.
The potential for PCBs to migrate in that matter is so small. I don't know that potential really even exists, certainly with the concentrations of PCBs we found in the low part per million rage. That's not how PCBs move.
Q. Quintard Mall -- were you involved in any way in figuring out what to do with some PCBs at Quintard Mall?
A. Towards the end of the Quintard Mall project, I was, yes.
Q. What was going on at Quintard Mall when PCBs were detected?
A. The mall was in the process of expanding to the east. In order to complete

Page 46

that expansion to the east, they had to basically build over the top of Snow Creek.
Q. Snow Creek currently runs under it?
A. Yes, it runs underneath the mall.
Q. Where were PCBs found at Quintard Mall?
A. They were found both in Snow Creek, along the banks of Snow Creek, and the flood plain in that particular area.
Q. What did y'all do about that?
A. Once again, two different approaches were taken. There were areas within the creek and outside the banks of the creek and the flood plain of Snow Creek where soils had to be excavated to allow for the expansion of the mall.
When those soils -- I should say before they were excavated, we obviously tested them to determine what levels of PCBs were present. Those soils that had greater than fifty parts per million of PCBs were sent to the hazardous waste landfill in the mountain.

Page 47

And those soils that were less than fifty parts per million PCBs were for a period of time just stockpiled at the Quintard Mall site itself. And the final disposition was they were buried under one of two parking lots constructed at the mall.
Once again, this was all done in accordance with work plans and overseen by the regulatory agencies.
Q. The regulatory agencies have been overseeing y'all's PCPB projects since what? 1972?
MR. CLARK: Object to the form.
A. The regulatory agencies have been overseeing work in Anniston since -- I will use the term "environmental laws" were passed by Congress and the EPA was formed.
Q. (By Mr. Davis) The regulatory agencies have known that -- the United States government in the State of Alabama has know about y'all's PCB problem since the '70s, haven't they?
A. They have known we manufactured PCBs,

Page 48

yeah.
Q. They have known you contaminated the Snow Creek and Choccolocco Creek since the mid '70s, probably the late '60s to early '70s?
MR. CLARK: Object to the form.
A. I couldn't tell you what the regulatory agencies knew back in the '70s. When I can tell you is that in the early 1980s, around 1983, if I'm not mistaken, the EPA came to our site and conducted a facility assessment, where they basically looked at our site and looked at our different manufacturing processes, both at the time current and historical, and wrote a report, which is called the "River Facility Assessment," which defined in the EPA's view what different areas of the facility needed to be addressed most immediately under the Resource Conservation Recovery Act.
Since the completion of the River Facility Assessment, we have been taking the appropriate steps to address

Page 49

those areas which were identified by the EPA, and that would include the PCB manufacturing process.
Q. (By Mr. Davis) So the time period you know about -- as you say, y'all have been working hard at it since the mid '80s, for almost twenty years?
A. For addressing environmental issues at our facility, yes.
Q. Let's go on and talk a little bit more about what you have accomplished in the almost twenty years since then. We talked about burying some PCBs under the parking lot at the park and burying some PCBs at the parking lot at Quintard Mall. Let's see.
Sometime in the '80s, do you know anything about doing some work to clean some PCBs out of a ditch leading to Snow Creek?
MR. CLARK: Objection.
A. Yes, we did do some sampling and removal of PCBs from a ditch. We call it the 11th Street ditch. And that cleanup

Page 50

also went a short ways into Snow Creek.
Q. (By Mr. Davis) That cleanup started at about where Bethel Church is?
A. I believe so. I don't know for sure.
Q. I know you weren't there. I don't want to ask you too many questions about a time period you weren't there.
What I'm curious about is, did you ever hear from anybody how come at that point in time the ditches further upstream from Bethel Church were not cleaned up?
A. I couldn't give you a very specific answer to that. Based on what I have read and what some people have told me, we were asked by the EPA and ADEM. And we agreed to do some sampling of the 11th Street ditch and Snow Creek and identify those areas within the ditch that contained sediments greater than fifty parts per million.
We identified those areas. We, then, proposed to the regulatory agency that we remove those PCBs from the ditch.
For whatever reason I can't

Page 51

explain, the regulatory agencies did not comment or address our proposals to remove those PCBs for about a year or two years until we basically called them up and said we are going to do it.
We went out there and removed that material and eventually was sent to the landfill.
Q. At that point in time, you removed them then to what level?
A. Fifty parts per million is what the regulatory agencies asked us to do.
Q. Anything below fifty, y'all just left there?
A. Yes.
Q. Anything above fifty that was upstream from Bethel Church, y'all didn't investigate or look at or do anything with?
MR. CLARK: Object to the form.
A. I don't know if we went upstream of Bethel and didn't find anything in the ditches greater than fifty or if we just didn't just go upstream. I don't know.

Page 52

Q. (By Mr. Davis) Based on what you have seen since you have been out there, do you have a judgment as to where the PCBs came from that were in those ditches that were cleaned up in the '80s?
A. In the 11th Street ditch and the ditches adjacent to our facility -- I will define "adjacent" as over in what we call the east side properties, a residential neighborhood that was east of our facility, it certainly -- the data certainly suggests a high probability that those PCBs came from Monsanto's manufacturing of those PCBs.
Q. Do you have a view as to whether they came from the plant property itself or from one or more of the two PCB dumps or how that works?
MR. CLARK: Object to the form.
A. I wouldn't define the landfills as "dumps."
In answer to your question, the surface water runoff from the west landfill, the south landfill, and the plant site all

Page 53

converged on the 11th Street ditch.
Q. (By Mr. Davis) So you would think all three of those contributed?
MR. CLARK: Object to the form.
A. Generally speaking, yes. It depends obviously where those surface water runoff points entered the 11th Street ditch. There is a point downstream where you would be correct.
Q. (By Mr. Davis) Was any effort, to your knowledge, made in the '80s at the time that work was done to cap the landfills or recap the landfills?
A. The '80s, there were processes going on in the south landfill. At that time we didn't own the west landfill. That landfill was owned by Alabama Power.
On the south landfill, there were activities going on to place caps on the south landfill at various cells at different times.
Q. What about the portion containing PCBs?

Page 54

A. As I said, that area, based on my understanding of what took place back then, was capped when we completed dismantling of the PCB manufacturing process.

There was an area on top of it used for a period of time for municipal waste, but it was finally capped, quote/unquote, once and for all back in the '80s. It would be before 1986 or '87. That's when we discontinued use of the south landfill.

Yes, there were capping activities going on back then.

Q. You said there were capping activities going on. It may be me. I may be confused.

Here is what I'm curious about. You had -- well, are you telling me that the area of the south landfill that contained PCBs was recapped in the mid 1980s because y'all learned that PCBs were leaking from that landfill into the ditches?

A. No, I don't believe that was the reason it was capped. The PCBs cells were

Page 55

capped in the process of discontinuing the use and operation of the south landfill.

A cap was put on to isolate the material from the environment. That cap, to the best of my knowledge, was not specifically designed at that time to address PCBs.

Q. The 1990s, when we are doing testing, you found PCBs again in the same area that had been cleaned up earlier, right?

A. Could you be more specific?

Q. You found PCBs in the west ditch?

MR. CLARK: Object to the form.

A. In the west ditch?

Q. (By Mr. Davis) Eleventh Street ditch?

A. Yes, we did find PCBs in the 11th Street ditch.

Q. The PCBs that you found in the 11th Street ditch, is it your judgment that those were the same -- those were just PCBs that had not been taken out in the 1980s, or were they new PCBs that had been deposited there from the landfills?

Page 56

A. I would say it's a combination of both. When we -- obviously, when we remove the sediments from the 11th Street ditch and a small section of Snow Creek, we only removed those sediments that contained greater than fifty parts per million.

Anything less than fifty would have been left behind. That's certainly a source of PCBs found in the 1990s.

Additionally, when we conducted some surface water monitoring from our facility in -- I believe it was early 1990s -- '94, '95, somewhere in there.

In the process of obtaining our storm water discharge limits, some low level of PCBs were found in that water migrating from the south landfill and from the plant site. I'm sure those were another source of PCBs into the 11th Street ditch.

Q. Were you involved in the work done when some houses were torn down, bought by Monsanto and torn down?

MR. CLARK: Object to the form.

Page 57

A. No. The property purchase program --

Q. (By Mr. Davis) When I say "Monsanto," Monsanto, Solutia.

A. I understand, yes.

Q. I'm talking about as they're all the same.

A. The same project. No. The remediation -- the property purchase program, remediation of those residential properties that had been purchased was completed before I became actively involved with the project.

Q. Are you familiar in general what's going on in the area of where y'all purchased property?

A. Yes.

Q. What have you done with PCBs in that area?

A. Generally speaking, PCBs in that area were also placed under a cap and cover system.

Q. So you're not aware of any PCBs in those areas that were actually hauled off?

Page 58

A. If any were hauled off, it would have been in small quantity. To answer your question, no, I'm not personally aware of any hauled off.
Q. If it was hauled off, it would have to be more than fifty parts per million?
A. Not necessarily. It would have been PCBs that had to be excavated for one reason or other.
The way the Toxic Substance Control Act is set up, you can manage PCBs in place. When I say "manage," I mean you're going to remedy them in place, regardless of the concentration.
Once you began excavating or moving or mobilizing those PCBs, if they were greater than fifty parts per million, they need to be treated as a hazardous waste and sent to the landfill or the mill. Anything less than fifty can then be managed on site.
So, to be quite honest, given the location, I would be surprised if there

Page 59

are not PCBs greater than fifty parts per million under that cap.
Q. There's a retention pond out around the plant somewhere, isn't there?
A. Yes, it's on the east side properties.
Q. Do you know when it was put in?
A. 1996 -- '95, '96, sometime in there.
Q. Do you know whether it's on the property y'all purchased under that program of purchasing residential properties?
A. The retention pond was built on property already owned by Monsanto.
Q. Do you have any idea what the levels of PCBs were on that property that was already owned by Monsanto prior to the time the retention pond was put in?
A. No, I don't.
Q. Based on your general understanding of PCBs in the area, would it be your conclusion that there are probably PCBs in that location?
MR. CLARK: Object to the form.
A. Based on the topography, you would not

Page 60

expect to find PCBs there. The retention pond is built rather high up, and the drainage ditch, which PCBs migrated through from the south landfill, ran in an area that was much, much, much lower than that particular piece of property.
It's unlikely that PCBs would have been able to migrate up to that point.
Q. (By Mr. Davis) Y'all just rerouted that ditch into the pond?
A. No. That drainage ditch -- the drainage ditch itself was closed down. We placed down some impermeable liners and put some clean soil on top and basically capped that entire area.
The storm water flow from the east side properties and the south landfill and the plant site was incorporated into a much broader and a -- well, a much broader storm water control project that was a part of the capping of the south landfill. I should say the final capping of the south landfill on those east side properties. The

Page 61

ditch itself no longer exists.
Q. Does water coming off the south landfill now go into that retention pond?
A. Yes.
Q. Water coming off the plant now goes into that retention pond?
A. No. From the plant site, it goes directly to a discharge monitoring point, an outflow structure.
Q. A collection box?
A. Yes, right by 10th Street.
Q. The water coming from the west landfill, that would not go into that retention pond either?
A. That's correct. There is another retention pond that is built, which collects water from the area, from the west landfill area, and that discharges through another outflow structure.
But both of them discharge into the 11th Street ditch.
Q. Does the water coming off the plant property or let's say where the old plant

Page 62

used to be, does that go into any retention pond before it goes into the Snow Creek?
A. No. Not now, it doesn't.
Q. Are the retention ponds designed to assist in keeping PCBs from getting in Snow Creek, or are they designed for a different purpose?
A. They are designed for a different purpose. They were primarily designed to control the rate of surface water runoff from those properties, from Coldwater Mountain and the landfills. We are talking hundreds and hundreds of acres.
We want to be able to control the rate at which that storm water was released into the downstream waterways, and that's what those retention ponds give us -- is a storage capacity.
Q. Basically, what they are designed to do is what any commercial project would be required to do; that is, have storm water retention?
A. That's correct. They were used

Page 63

obviously during construction of the cap and cover system on the landfill in 1997, somewhere in there.
The retention pond on the east side property was used to collect sediments that we knew were going to be disturbed while we were constructing a landfill cover. That would include both PCB-containing sediments as well as the clean soil we were bringing in. It would capture those. But the primary design was for the storm water control. That really remains its purpose today.
Q. When you have a retention pond that's primary purpose is to trap sediment containing toxic substances, is there typically a procedure for cleaning that pond out?
MR. CLARK: Object to the form.
A. Well, you have asked a question that's really not so applicable to our situation. You prefaced the question by saying it's designed to capture toxic substances.

Page 64

Q. (By Mr. Davis) No. I'm just talking about as a general principle. I'm not talking about these two retention ponds in particular.
I'm talking, as a general principle, assuming that someone did design a retention pond or -- let's back up a minute.
Are retention ponds sometimes used to assist in keeping toxic substances from leaving the area?
A. I'm sure they could be used for that purpose. I have no experience with any. I wouldn't argue that they could be used in some circumstances for that purpose.
Q. You don't think that's typically done?
MR. CLARK: Object to the form.
A. All I know it hasn't been done in any of the projects I have been associated with, which is an extremely small percentage of all the cleanup projects going on.
Q. (By Mr. Davis) None of the -- well, then, one of the cleanup projects you have

Page 65

been involved with before has used a retention pond similar to the ones that have been put in before for the purpose of keeping toxic substances from escaping?
A. None that I have been associated with. Other than the case here in Anniston, that is a partial result, I guess, for lack of a better term, of our system. That's not what it was designed for.
Q. If one had set out to design a retention system for the purposes of capturing toxic substances, would you have done it somewhat differently?
A. Not in this particular case. You keep using the term "toxic substances." I would have to disagree with characterizing PCBs in that manner.
For our case, where we are looking at PCBs, I think a storm water retention pond, as we have it designed, would accomplish that purpose.
Q. Your position is that PCBs are not toxic?

Page 66

A. Yeah, that's my position. That's my belief, based on my knowledge of the issue.
Q. Your position is that PCBs are not hazardous to people's health?
A. Not to humans, no. I don't believe so.
Q. Have you expressed that opinion to any of the residents of Anniston?
A. Yes.
Q. Have you expressed that to any of the people who live around the plant?
A. Yes. Anyone who asks me that question, I offer the same answer.
Q. Have you heard other employees of Monsanto express that same opinion?
A. Yes.
Q. Who would that be?
A. Many of the people I work with. Some of the people I met who used to work in the old Aroclor plant, retirees.
Q. Have you heard officers of Solutia express that opinion?
A. I haven't personally, no.

Page 67

Q. Have you heard other people with titles at Monsanto express the opinion to people who live there that PCBs are not toxic or not hazardous to use?
A. I should take a step back. I'll talk Solutia.
Certainly, I have heard the leadership of our company express the same opinion. That based on the studies that have been done and our understanding of those studies, that PCBs pose no long-term health effects to humans.
Q. You heard officials of Solutia say that to similar groups of people from Anniston?
A. I have not heard it said to assembled groups of Anniston, no.
Q. Have you heard them say it to any residents of Anniston at all?
A. Personally, no. I would preface that by saying I'm talking, which is what I assume you're talking about, the executive leadership. When you talk about our local

Page 68

management, our plant manager and site leadership, certainly, I have heard them express that to the community.
Q. Have you heard them express that to assembled groups of people?
A. Yes.
Q. Who would that be and what assembled groups of people?
A. Our plant manager has expressed that opinion. Specific groups, I can't name them all. We don't walk around joined at the hip.
There's been several presentations that him and I have given jointly. There was a group of medical doctors from Jacksonville State University we talked to and we expressed that.
Q. I'm more interested in people from the community.
Who have y'all expressed that to, what groups of people?
A. I don't know who our plant manager has expressed it to specifically in the

Page 69

community. We were over there speaking at functions together.
Personally, I have expressed it to various clubs -- Rotary Clubs, Kiwanis Clubs. There is a leadership of Calhoun County recently, just a week or two. I spoke to a group of about forty individuals, a number of which were from West Anniston.
I was asked that question, and I gave that opinion.
Q. On any of those occasions, was anybody else from the plant there?
A. Yes. There was one other person from the plant at that particular occasion.
Q. Who was that?
A. He was the maintenance manager for the facility, a gentleman named Mike Moseley. He was there because he was part of this leadership of this Calhoun County group.
Q. Have you discussed that position with other people at Monsanto; such as, the plant manager?
A. Yes.

Page 70

Q. Is he aware you're expressing that opinion; that is, that PCBs are not hazardous to humans, to the residents of Anniston?
A. Yes.
Q. Does he agree with your expressing that opinion?
A. As far as I know, he agrees. He has never suggested otherwise to me.
Q. The surface water runoff of the plant, is there anything in place between the plant and Snow Creek designed to prevent PCBs from leaving?
A. Yeah. There's a significant amount of work that's been done to prevent PCBs from moving from the plant site to Snow Creek.
Q. What is that?
A. We talked about much of it -- the cap and cover projects.
Q. I'm talking about the plant area itself right now. I think the cap and cover we talked about has been done with landfills.

Page 71

A. That's correct.
Q. Places like that. Let's limit our discussion for a minute to the plant property; say, the area where the old Aroclor plant used to be and the sewers and ditches and whatnot.
A. Our manufacturing facility itself?
Q. Right.
A. Yeah. There's been a number of activities taken place to help prevent, and our hope is to eliminate the migration of PCBs away from the facility.
I will start out with the old Aroclor manufacturing facility, which had an asphalt cover placed on top of it, to isolate any PCBs from running surface water. The sewer system on the plant site, there is 24-inch and 36-inch sewer system, which we have taken steps to line the inside of that sewer to prevent any legacy sediments that remain in that sewer that may contain PCBs from migrating away from the facility.
We also routed that sewer

Page 72

system to a single small collection point, where it is pumped through an activated carbon filtration system, to remove any trace amounts of PCBs that may remain in the water before it leaves our plant site.
There have been some small sections -- when I say "small," 10- or 20-foot sections, of the sewer system that has been in just bad condition that it's basically collapsed on itself, where we have replaced those sections of sewer.
We have a warehouse facility, where we used to process our Aroclor products. There was a unit called a flaker unit, which was used to turn in the waxy Aroclor products into a flake. We removed that unit. We replaced some ceiling and wall panels on that warehouse.
There are some areas of the floor where we did some cleanup activities. There is a process spelled out in the Toxic Substances Control Act for cleaning up PCBs which have leeched into concrete, using the

Page 73

various solvents. And, then, we conducted that process on certain areas of the floor in our warehouse. That's another activity we did.
There are other areas of the plant site that had layers of crushed rock placed on top of them to help reduce the potential for PCBs to migrate away from the facility. Those are some of the activities.
We are obviously still in the middle of a -- I shouldn't say we are in the middle of an investigation. We just completed a river facility investigation on the plant site. We anticipate the outcome of the corrective measure study or feasibility study that will follow will show that there are some other measures we need to take, and we will take those measures.
Q. Let's -- I'm going to try to start with the first one you mentioned, which is the Aroclor area of the plant.
You have done some testing in that area and found some PCBs in the dirt in

Page 74

that area?
A. There was some testing done in 1988 and '89. Yes, we did find PCBs in the soils around the Aroclor plant.
Q. Do you remember what kind of levels they were in general?
A. It varied. There was -- generally speaking, they were on the order of ten to fifty parts per million. There was a pretty wide range there.
There was one particular location, where we detected PCBs levels about 10,000 parts per million, but it was an isolated hot spot.
Q. Now, what was the situation in the area of the old Aroclor plant when you stood there? Was it grass, was it dirt, was there a building on it? What was it, when you took your job in 2000?
A. When I took my job, there was an asphalt cover.
Q. So the asphalt had already been put on it then?

Page 75

A. When I came to the project, yes.
Q. So what you know about that, you know from discussions from other people with Solutia, and in the course of doing your job, they told you what had been done?
A. Yes, plus also reading reports that had been submitted to the regulatory agencies.
Q. And the asphalt cap that you saw there, or the asphalt area you saw there, how big was it?
A. I would say between an acre and two acres probably.
Q. What's under the asphalt? Is it clay cap in addition to asphalt, or is it just asphalt on top of the ground, or what is that?
A. My belief is that under the asphalt, and it's about 6 inches of asphalt, is the old concrete path that the old Aroclor manufacturing plant was built upon.
There may be a layer of minor material to provide some structural

Page 76

stability for the asphalt.
Q. Is the whole area under there, the concrete floor of the old Aroclor plant, some of it used to be a grassy area?
A. My understanding is it's all concrete. I can't tell for sure.
Q. The only reason I'm curious about that is you indicated you did some testing and found some high levels of PCBs under there. I don't visualize you testing concrete.
Can you explain that to me?
A. Certainly. Around the old Aroclor plant, there are grassy areas as well as asphalt roads. Obviously, we can sample through the asphalt.
I should say asphalt roads that have been built since we discontinued the Aroclor operation. But there are some grassy areas around the Aroclor facility. As I said, we can sample some of the old asphalt roads.
Q. Was that area that you then did the samples and found, at least in one case, a

Page 77

very high result, but other cases -- I don't want to characterize them.
A. I characterize 10,000 as pretty high.
Q. Were those areas also capped with this asphalt?
A. Some areas have been capped with the asphalt and others have not.
Q. What was done in the other areas?
A. In some of the areas, we haven't done anything yet. If I could expand on that a little bit, as part of the investigation we did on the plant site, we did what's call a risk assessment.
And that risk assessment looks at the use of the property. It looks at the potential exposure pathways, the routes and time of exposure. The results of that risk assessment -- the risk assessment concluded that any area that had PCBs that was a high occupancy area, which was defined as eight hours a day, any high occupancy area that had PCBs below the level of -- I believe it was about forty parts per million would

Page 78

require no further action from an exposure perspective.
That assessment was reviewed and approved by the regulatory agencies. From a migration perspective, that's something we have to still evaluate. The data we have right now suggests that there is not any significant migration pathways. We need to present that to the regulatory agency still, and they have the final say whether anything needs to be done or not.
Q. There are still areas within the bounds of the manufacturing facility that have significant levels of PCBs that are not capped?
A. I would say detectable levels that are not capped, yes.
Q. What about sewers? The sewers you are referring to, were those the old sewers that were under the old Aroclor plant?
A. Under the Aroclor plant and the largest part of the facility. There was a sewer system that spread out across the

Page 79

whole facility, yes.
Q. It was the same sewer system that was being used at the time the Aroclors were being manufactured?
A. Yes, and it's still being used today.
Q. You found PCBs in that sewer system?
A. What we found was when we sampled the surface water coming from that sewer system, the sources were not even buried underground, we did detect PCBs in the water coming from that sewer system.
That's what led us to take some steps to try and eliminate that migration pathway.
Q. I suppose this question is more just curiosity than anything else.
How do you line a sewer system that's underneath concrete and asphalt?
A. It's an interesting process. The first step obviously -- I will try not to get in too much detail.
You videotape the whole sewer, and you look for those areas where it's

Page 80

appropriate to line it. Basically, what you do is you take this -- it's like a big ball of this -- I will use the term rubbery plastic material. I'm way oversimplifying this.
You use pressurized hot water to push it into the sewer system, and that pressurized water causes the material to just not expand and go in the different directions of the sewer, but the heat literally -- I will use the term melts. That's not what happens.
It literally melts the liner to the side of sewer and creates this almost like a hard plastic around the outside of the sewer. It's basically hot water, plastic, and pushing it through with heat and melting the plastic.
Q. Tell me a little more about this activated carbon system that's being used to treat -- let's talk first about all the water coming off the plant property.
A. It's all the water, all the storm

Page 81

water. There is no processed water. Just storm water.
I apologize. I just flat out forgot your question.
Q. I was talking about the activated carbon system that you put in place.
What water is it processing? Is it all the water off the facility, or is some of it perhaps storm water?
A. It's primarily -- it's not the entire facility. It's primarily what I would define as the southern half of the facility that collects water in the storm sewer system.
Q. Does that include the area around the old Aroclor plant?
A. Yes.
Q. Water that used to run towards the railroad tracks, does it still run that way and not through the carbon?
A. Yes. The water on the northern half of the facility is directed primarily through some concrete drainage features,

Page 82

above ground drainage futures, to one of three different storm water outflows along the northern boundary of the facility, which empties into the 11th Street ditch.
Q. Have PCBs been detected in the plant property on the northern half?
A. There were one or two isolated locations, where we have detected some low levels of PCBs, yes.
Q. Let's talk for a second about the northern half of the property.
What's in place to keep, hypothetically, if PCBs were migrating in the plant, from getting into Snow Creek?
MR. CLARK: Object to the form.
A. For just the northern part of the facility?
Q. (By Mr. Davis) Yes, for purposes of this question.
A. The only thing that's really in place is the gravel and rock. It's primarily crushed gravel that covers most of that area of the facility. That's the only physical

Page 83

thing in place.
There's also a program in place. I should say was in place back in the '90s, where we sampled those outflows regularly to see if any PCBs, as well as other things, were migrating from the facility. Without exception, we never detected PCBs migrating in any of those outflows.
Q. You were sampling water?
A. Yes.
Q. Were you sampling any sediment?
A. The sample would have included any sediment that drained in that water sample, yes.
Q. Let's get back to the carbon system for the south part of the plant.
Tell me what that looks like without looking at it.
A. There is -- it's basically -- the carbon itself is in four different steel tubes. They are about maybe two to three feet in diameter and about twelve feet high.

Page 84

And the water is pumped from a collection sump, and it goes in the bottom and it works its way through the four carbon towers.
Q. Do you want to take a break?
A. When you get to a good stopping point, if we could take a restroom break, that would be great.
(Recess taken.)
Examination continued by Mr. Davis:
Q. I think that brings us to the warehouse facility and the flaker. When you said the flaker unit, you described a little bit about what that was.
Was that something that had been there ever since the term PCBs were manufactured?
A. Yes. I don't know at what point during the history of PCBs manufacturing, but certainly since early the 1970s.
Q. Describe a little bit more of what was in it and how big it was and where was it?
A. I'll do my best. I don't know much

Page 85

about the flaker unit because that was before my time. The warehouse itself is a large warehouse. I would say it's probably a good two acres in size.
It is located literally catty corner from the old Aroclor manufacturing facility. There is a railroad spur that comes up the western side of that warehouse, where we have historically loaded and off-loaded products. We currently use it to store our drum products that we still manufacture out of Anniston.
It's got a large concrete floor. It sits way up in the air. Metal sides, metal walls.
Q. I think you already told us what you did with that in order to alleviate that warehouse?
A. I won't suggest we are done remediating that warehouse. What we did was we took the things that obviously were approving to be done, and we accomplished those tasks.

Page 86

We still have some data, which we have to -- it's been presented to the regulatory agencies in a report. The question is, do we still need to do anything about what we didn't clean up, where we found the lower levels of PCBs in the concrete, and those questions need to be answered.

We may need to do additional work there or we may not. We have to figure that out.

Q. You mentioned some crushed rock, and I think you mentioned it being put down somewhere to reduce migration.

How does that work? I don't understand that.

A. Basically, when I say "crushed rock," it's really crushed. It's very hard. I won't use "impermeable," but it's a very low permeable surface. Water doesn't readily sink down into it.

The way it prevents PCBs from migrating is that when the water is running

Page 87

across the surface and picking up little sediment particles, it's picking up little particles of that crushed rock, and it's not picking up the underlying or potentially PCB-containing soil particles.

Most of the areas of the plant -- I should say in large sections of the plant that crushed rock layer is up to two feet thick. It's a fairly significant cap.

Q. What's the difference between putting that down and putting clay down?

A. No difference really. Clay would probably accomplish the same thing. Clay, you would obviously want to -- you wouldn't want to leave the clay exposed. It would probably erode much more readily than concrete or these rock surfaces.

So if you did lay down clay, if you wanted to establish a vegetative layer on top, but with the rock and gravel, you don't need to do that.

Q. You mentioned something earlier about

Page 88

the disturbed dirt with PCBs in it, and you may have something else to be done. If I remember right, I remember you talking about -- let me ask you this.

Suppose one has a piece of residential property and one decides to build a swimming pool, and you dig down ten feet to build a swimming pool, and you find in the lower part of that excavation PCBs with a level of one part per million.

What do you understand you've got to do?

A. From my perspective or the perspective -- from my perspective, I would go through a very rigorous regulatory process.

Q. If somebody knew better and if they did what's supposed to be done under the regulations, what are you saying would be done?

MR. CLARK: Object to the form.

A. If somebody was going to put a pool in their yard, we'll use that example,

Page 89

practically speaking, my hope would be they would contact us if their property was in the area for potential PCBs and allow us to check and see if PCBs were present, and if so, allow us to address those PCBs on the property, which we are willing to do.

Just from a process standpoint, you would want to go out and sample the soil, both on the surface and at various depth increments to see how deep the PCBs go. Typically, we are not finding anything greater than a foot deep, but there are exceptions to that rule. Not many, but some.

But you would get that data, and based on the outcome of that data, you would know how to manage that material once you excavated it. If you excavated it and it was greater than fifty parts per million, you would have to go to this hazardous waste landfill or mill.

If you were to excavate it and it was less than fifty parts per million,

Page 90

technically speaking, you could leave it on your property. But the more likely thing, and what we typically do when we come across less than fifty material, and we excavate it, we send it to another type of disposal facility, which is a Subtitle C, which is licensed to accept that type of material. Then, you would build your swimming pool.
Q. (By Mr. Davis) You couldn't leave it on your property on top?
A. Well, it depends on which regulations you are working under. If you are just strictly looking at the PCBs regulations under the Toxic Substances Control Act, anything less than fifty, yeah, we could manage right there on that property.
Once we get into the Resource Conservation and Recovery Act and Circular, now we start conducting risk assessments. And the levels for leaving material on residential properties have been established by the EPA.
The EPA did a risk assessment,

Page 91

and they have determined that levels above one part per million need to be removed in the upper foot of the soil and need to be removed from the property and properly disposed of or properly managed. TOSCA is just a waste management reg, with Circular getting greater exposure.
If I haven't confused you enough, the simple answer to the question is given what we know about today, anything above a part per million needs to be taken off the residential property.
Q. Have you had any involvement with the old limestone beds?
A. My involvement with the old limestone beds, which were -- let me make sure we are talking about the same ones.
They were located -- it's where the runoff from the PCBs manufacturing facility ran into before it left our facility?
Q. Yes.
A. My involvement with the old limestone

Page 92

beds, that's been an area that was identified back in 1999 that required some additional sampling. It wasn't adequately characterized on our first go through with the facility.
We've recently gone out and completed that characterization of that old limestone bed area.
Q. Do you know when those limestone beds were closed?
A. I don't know. I know it was after we closed the PCB manufacturing facility, but I don't know specifically the dates.
Q. What do you know in general about the results of this recent testing?
A. We detected PCBs in the soils. Typically, in that ten to twenty part per million range, but there were some samples that were a hundred parts per million.
Q. The work inside the -- the work at the facility itself in terms of this asphalt cap and in terms of the carbon system and things like that, when did all that get started,

Page 93

about when?
A. The asphalt cap on the manufacturing facility, I don't know when that was put in place. But, as far as the carbon, the system being put in place and lining the sewers, that specifically was done, I believe, in about 1998.
Some of the other actions we discussed were taking place well before that. We laid a lot of the crushed rock over the facility.
Q. Do you know when that was done?
A. I have seen pictures dating back to the mid to late 1980s that show large areas of crushed rock. I assume it was before that.
I would suspect, based on my knowledge of the history of the facility, was in the early to mid 1980s, we dismantled a number of manufacturing facilities. Our P2S5, I don't know what that stands for, but that facility was dismantled, and when those facilities were dismantled, rock was placed

Page 94

over large portions of those areas. That's probably a reasonable estimate of when much of that material was placed.
Q. Anybody told you -- any employees of Monsanto told you what the purpose was of the limestone beds?
A. My understanding was that the PCB manufacturing process, some of the runoff from that process was slightly acidic. I don't know the details, but somehow, small amounts of hydrochloric acid were produced as part of the PCB manufacturing process.
Those limestone pits were designed to partially neutralize that and raise the Ph of that.
Q. Are you familiar with any sumps that were in place -- do you know about any sumps that had anything to do with PCBs at any point in time?
A. There was one sump that was located immediately north -- when I say "immediately," me to you, ten feet north of the PCBs manufacturing facility. That's

Page 95

where we found the 10,000 parts per million sample we had taken.
I don't believe they exist any longer. I have never seen them. I have seen reports saying that the drainage features leading away from the Arocior facility, that there were some traps that allowed the gross PCB product to disassociate itself from the water. It would get the gross stuff.
That gross runoff could be put back into the PCB manufacturing process. We were making a product, where PCBs going out the door was a PCB we didn't make a penny on or ever how much we sold PCBs for.
My understanding was there was an extensive effort to try to capture as much of that runoff as we could so we could put it back in that process and sell it.
Q. Here, I guess, is really what I'm curious about. Prior to the late 1990s -- let me restate it.
Do you understand that at some

Page 96

point in time in the '70s that there was in place any systems to catch or reduce the level of PCBs that might have been leaving either of the dumps?
MR. CLARK: Object to the form.
A. Are you talking specifically the landfills now? Are you back to the manufacturing facility or either location?
Q. (By Mr. Davis) The south landfill or the west landfill. I'll call it "landfill." I don't want to get in a word contest.
A. Other than what I have already discussed with you, as material was placed in the landfills, it was not left exposed. There was a layer of clay, as my understanding.
Q. At some point --
A. That's the only step that I'm aware of that would have been taken. There may have been more, but, obviously, I was in kindergarten back then.
Q. You don't know -- dealing with the west landfill, you don't know whether that

Page 97

was really a landfill operation or a dump operation in the sense you don't know whether it had been covered with dirt or not, do you?
A. No, I don't.
Q. Do you know whether there has ever been up until the very recent past -- let me restate it.
Do you know whether there was ever any effort from the beginning of manufacture up through the 1980s to catch any PCBs that might be leaving the west bank?
A. Well, the west landfill only operated until about 1960. When we transferred that property through a property swap to the Alabama Power Company -- we gave them the west landfill property, and they gave us a piece of property that we wanted to do some construction on.
When that property was transferred, there was a soil cover placed over the top of the landfill. It was

Page 98

probably clay, but that's probably what's in the area. But I can't tell you the specifics of that cover.

And, then, over time, this is my understanding through what I have been told, that landfill became heavily overgrown with vegetation. Those actions would have contributed to -- I should say those actions would have helped reduce the potential for PCBs to migrate from the west landfill.

Were those actions specifically to stop things from migrating in the west landfill? Back in the 1960s, probably not. They didn't have the ability to detect these things in the environment, so you wouldn't know anything was migrating anywhere. And the standards of society back in those days, they didn't warrant you do anything more extensive than that.

However, those steps would have helped reduce the potential for PCBs to migrate.

Q. Is it okay to poison people back in

Page 99

the '50s?

MR. CLARK: Object to the form.

A. I wouldn't identify that we were poisoning anybody back in the '50s.

Q. (By Mr. Davis) Let's don't talk about what's acceptable and what's not.

All I want to know is, do you know of any efforts other than throwing some dirt on top of the west end landfill that were ever made in the '20s, '30s, '40s, '50s, '60s, '70s, '80s to keep PCBs from migrating from the west end landfill into Snow Creek?

MR. CLARK: Object to the form.

A. I'm not aware of any efforts that are taken.

Q. (By Mr. Davis) Now, would your answer be the same on the south landfill, or do you know of some efforts that were taken at some point on the south landfill other than throwing dirt on top of it?

MR. CLARK: Same objection.

A. Other than throwing dirt on top of the

Page 100

material as it was placed, no, I'm not aware of anything up until the early 1980s, when some of the environmental regulations began to come into effect, and we began taking steps to understand and address the migration of not just PCBs but other things that may have been migrating from the south landfill.

Prior to that, the only thing I'm familiar with from reading reports is what you just mentioned, putting a couple of inches of dirt on top of it.

Q. (By Mr. Davis) Let me ask you, down at the east water treatment plant, have you been involved with that?

A. The City of Anniston's Choccolocco Creek Freshwater Treatment Plant, yes, I have been involved in it.

Q. Are there high levels of PCBs on that site?

A. "High" is a relevant term. We found PCBs up to a hundred parts per million in some locations.

Page 101

Q. That's high enough that if they're moved, they've got to be moved all the way to the hazardous waste landfill?

A. At those locations, where we found they were greater than fifty, the largest portion of the site is in the one to twenty part per million range, but there are some areas very close to the creek where we found fifty material, yes.

Q. And y'all have done what with regard to that up until now?

A. We have taken a number of steps at the Choccolocco Creek Waste Water Treatment Plant. First and foremost, we characterized the area, so we know what's there and what's not there and where it's at.

Q. Y'all have been investigating?

A. Yes, and that investigation is complete. And that data has been given to regulatory agencies the waste water treatment folks.

We have submitted a work plan, which has been approved by ADEM, to address

Page 102

some stockpiled soils, which were placed on a section of the waste water treatment plant. That water plan has been approved, and we completed a design for addressing those stockpiled soils, which the State and EPA are currently reviewing.

We have also had another work plan approved to conduct the first phase of the plant expansion. That is talking phase at the Choccolocco Creek waste water treatment plant. That work has been completed. Within the next week or two, we will be mobilizing some people down there to complete the second phase of that plant expansion.

Q. Complete the second phase of what kind of expansion?

A. Just to give you a little history of what's taking place at the Choccolocco Creek Waste Water Treatment Plant, the waste water treatment plant itself began a project back in late 1990s -- '98, '99, to expand their capacity. They were violating their state

Page 103

issued permit levels for discharging in the Choccolocco Creek, and they had to expand their plant to get back within what the regulations allowed them to discharge.

They subsequently went out and began building that plant expansion. In the course of conducting that plant expansion, they excavated about 60,000 cubic yards of PCB-containing soil and placed it on a large stockpile on the eastern bank of Snow Creek.

ADEM found out about this, and the reason ADEM wasn't aware of this in advance was because the contractor there did not bother to get the appropriate permits to conduct this work. So this was done without the knowledge of the State, without the knowledge of the EPA, and without the knowledge of Solutia.

Q. Didn't get the permits from whom?

A. From the State of Alabama. They needed specific construction and storm water management permits, and they did not get those permits.

Page 104

Q. Not permits to move PCBs?

A. Right.

Q. Construction permits?

A. Exactly. They also at that time -- I'm not going to get into a whole lot of finger pointing here. But they also had a letter from ADEM informing them of the potential for PCBs at present in Snow Creek and in areas adjacent to Snow Creek. That letter was in their contractual documents with the contractor.

They chose to ignore it. Nonetheless, they created this stockpile of dirt. The State found out about it. The State took -- I will use the term "punitive measures" against the contractor and the Anniston Waterworks Sewer Board for not paying attention to what they were told by the State.

Nonetheless, we were approached by the Water Board and by the State and asked to become involved and start working with the Water Board to address the soil

Page 105

that had been excavated and to help them complete that expansion.

So when I talk about phases of the plant expansion, that is the plant expansion I am talking about.

Q. Okay. The PCBs that were found there are in the flood plain of Snow Creek and Choccolocco Creek; is that right?

A. Yes. And, in fact, you are right on both cases. That is right where Snow Creek and Choccolocco Creek come together.

Q. Y'all put those PCBs there, right?

MR. CLARK: Object to the form.

A. I would not -- I would certainly agree that some of the PCBs at that location are a result of our discharges from our manufacturing operations. As we discussed earlier, PCBs were used for a wide variety of purposes, for many different industries, and it would not be unexpected for some of those PCBs to have migrated through the creeks and waterways also.

Q. (By Mr. Davis) But y'all put most of

Page 106

PCBs down there?
MR. CLARK: Object to the form.
A. It would be difficult to quantify. I would limit my statement that certainly some of the PCBs are likely discharges from our facility, which is why we are working with them to address them.
Q. (By Mr. Davis) When did those soils first get found with PCBs?
A. I first became aware of it in early 2000, maybe April or May of 2000.
Q. Other than characterizing and investigating and thinking about it, what has actually been done to solve the problem?
A. As I said, we worked with the water board to complete the first phase of their plant expansion, and some of that material -- all of that material was less than fifty parts per million, so we were able to manage that material on the facility itself. It's in a pile that's got a big plastic cover over the top of it.
We also went to a large

Page 107

stockpile that was placed next to Snow Creek, and that had a large plastic cover placed over the top of it. Now it's established a pretty significant vegetative cover on top of it also.
Other than that, the steps we have taken have been geared towards arriving at the final remedy for that particular site, which involves the work plans we submitted and been approved and designed for the stockpiled soil, and there will certainly be more work that needs to be done.
Q. So far, what y'all physically accomplished is y'all put a sheet of plastic over it?
MR. CLARK: Object to the form.
A. We took appropriate steps to prevent PCBs from migrating from those excavated soils. One of those steps was to put plastic over the top of the stockpiles.
Q. (By Mr. Davis) What were the rest of those steps?

Page 108

A. As I said, the rest of those steps were to go out and work with the contractor; such that when they constructed additional excavation that those soils were managed properly so they did not erode and be released into the waterways.
By characterizing the areas, we know where those areas are, and we can proactively address those before they need to be excavated to complete the plant expansion.
Q. How much of the PCBs in the flood plain at the treatment plant have y'all moved out of the flood plain?
A. Very little. Maybe a thousand cubic yards of material that was less than fifty parts per million.
The bulk of the material that was generated is still there. As I also said, there is a process in place that is well underway to address those with some level of finality.
Q. Y'all have known that fish in

Page 109

Choccolocco Creek had high levels of PCBs in them since the late '60s or early '70s, haven't you?
MR. CLARK: Object to the form.
A. I don't know when we became aware of the presence of PCBs in the fish in Choccolocco Creek.
Q. (By Mr. Davis) Can you tell me when the process of trying to do something about it started?
MR. CLARK: Object to the form.
A. The process was begun back in the early 1980s, when we began taking steps that began with the EPA's assessment at the facility, to understand what the issues were at our facility, what different constituents may be migrating, which PCBs turned out to be the primary one migrated from our facility.
That initial assessment done by the EPA in 1983 has been the foundation upon which everything we have done today has been based upon.

Page 110

Q. (By Mr. Davis) It's gotten all the way to where this pile of PCBs that were up to a hundred parts per million down at the intersection of Snow Creek and Choccolocco has a big, old plastic cover on it, right?
A. I apologize. I didn't hear the first part of your statement. When you are moving into a process such as this, the initial thing that's very well spelled out in both the circular regs and it passes the common sense test real easily is you start at the potential source.
You don't want to conduct work in the downstream areas, when you still have a source feeding those downstream areas. You end up chasing your tail and making no progress.
We started at the facility. We essentially eliminated the migration of PCBs away from the facility. And from the late 1990s, we are actively working to address that.
Q. When are you going to be finished?

Page 111

A. We will finish when we are done.
Q. When is that going to be?
A. I don't know. What's important is that -- you have to look at this as two different ongoing processes here.
There is a process where the EPA -- primarily EPA now, but in the past, it's been ADEM, has looked at the data we generated and said these areas -- and I can be more specific if you want to me.
These areas need to be addressed now. These areas have levels of PCBs, which, we believe, the regulatory agencies, present a short-term risk to the human health environment. We want you to do something about those now. We have done that, and we are in the process of doing that.
There is another part of the process, which says these areas have lower levels of PCBs. We do not believe they pose a short-term risk to the human health in the environment. We believe they may pose a

Page 112

long-term risk.
Those areas, we will collect the data and will be addressed -- they will not be addressed right away. We have completed where we can, and, unfortunately, due to the ongoing litigation in Anniston, there is a number of legal roadblocks that have been placed in front of us.
But where we can get access to those properties, we have addressed those. If more are found, we will address those also. The long-term risk to the environment will be done in accordance with the process that is installed by the regulatory agencies. We will collect the data, much of what has been directed. We will analyze that data to determine what the risk levels are to the environment.
If the data suggests we are exceeding those risk levels, we will evaluate what measurements need to be taken. Some of that has been taken also. As far as when the whole process will be done, it's

Page 113

more important the process be done thoroughly and correctly for the short-term risk than it be done now.
Q. I appreciate all that. I just want to know when -- and let me give you some guidelines by which we can talk about what I mean by that.
How long is it going to be before the fish in Choccolocco Creek, if I go out there and get a bushel basketful of them and take them home and eat them, that I'm not going to be eating fish with those levels? How long will that be?
A. I don't know.
Q. Five years, ten years, twenty years, thirty years, fifty years?
MR. CLARK: Object to the form.
Q. (By Mr. Davis) Do you have any judgment on that?
A. I don't know. That's part of our investigation process. I will tell you that there's some areas at the mouth of the Choccolocco Creek, where it enters lower

Page 114

Lake Martin, where we see PCBs levels in most species of fish. There is one exception, the striped bass.
Q. I'm not talking about averages now. My question is -- I'm looking for the date in the future, and you can tell me based on your judgment and experience, that I can go to the Choccolocco Creek and pull a basketful of fish, take them home, and feed my family and my friends, and nobody is going to eat a fish over the FDA limit.
And you can't tell me whether that's going to be accomplished in the next five or ten or fifteen or thirty years.
MR. CLARK: Object to the form.
A. I can tell you, in my opinion, in some parts of Choccolocco Creek, you can do it now. There are other areas of Choccolocco Creek, where we are seeing low levels in the fish fall, but we do not have enough data yet.
When there will be more that fit the FDA consumption limit, whether

Page 115

that's by natural reduction in the levels or whether we need to go proactively and reduce that, whatever the answer to that -- that question will be answered as part of our remedial investigation process that we are undertaking under the EPA.
Q. (By Mr. Davis) The question of how long it will take will be answered?
MR. CLARK: Object to the form.
Q. (By Mr. Davis) To get my bushel basket?
A. I told you there are certain areas of the creek where you could get your basket right now.
But in the areas where that is not the case, and there are areas like that, I do not have a good answer to that question. I don't have an answer. It will take as long as it takes.
We will keep doing this work until we have the answer to those questions. You have to collect a data of certain quality and quantity to be able to answer

Page 116

those questions. We do not have that quantity of data yet.
Q. Is it correct that the State of Alabama is unable to pull a bushel basket of fish out of Lake Martin itself and have them all be below FDA standards?
MR. CLARK: Object to the form.
A. You're correct, if they were to go out there and pull a bushel of fish, that there is a good probability that they would find some fish that exceed that fish consumption level. That is the average.
Q. (By Mr. Davis) We are still talking about my bushel now.
A. I'm answering the question, yes. There are some fish that would be a low percentage, but, certainly, the larger fish are still above that limit, yes.
Q. So you don't really know a place on Choccolocco where I can pull a bushel basket and not find one or more in that bushel basket?
A. Not on Choccolocco Creek. I fully

Page 117

expect you would find at least one.
Q. Then, let's take a different standard of analyzing when we are going to be finished with this.
When is the time period going to occur when a child can walk around in the dirt in his yard and his neighbors's yard in the area -- let's just say within a mile of that plant, that Solutia plant in Anniston, Alabama, and not walk across any dirt containing PCBs?
MR. CLARK: Object to the form.
A. The answer to that question is it's going to take a lot longer than it should. We have offered for every property that we believe there's a potential for PCBs to be present, above the EPA's cleanup standard, one part per million -- actually, we use the ten parts per million because that's the EPA's short-term cleanup goal.
We have offered to sample each and every one of those properties. Due to the ongoing litigation, both this case as

Page 118

well as other legal proceedings, we have not been able to get access to those properties.
It would happen a lot quicker if we could get access to these properties to sample them and find these properties with PCBs to clean up and get access to clean them up. The schedule is not being hindered by our not willing to do it; it's being hindered by people not allowing us to do it.
Q. (By Mr. Davis) Name a single residential piece of property that you cleaned up below ten parts?
A. I can name thirteen.
Q. Below ten parts?
A. Let me take that back. You said below. There have been none that are below ten parts per million yet.
Q. You have been there how many years?
MR. CLARK: Let him finish.
A. If I could finish my question. The process the EPA established -- this is not a process we established. The process the EPA

Page 119

established, initial efforts were needed to find those properties that exceeded ten parts per million and clean those properties up.
And we have done that where we have been allowed to do that by the property owner. You are talking about properties that are below ten parts per million.
There are a streamline risk evaluation completed by the EPA that says you need to go -- this is all part of the consent decree that we have signed with the EPA, and we are waiting for a federal judge to decide if it's worthy of his signature or not. We don't know yet.
As soon as he signs that, we will then initiate a program and go out and complete our sampling of these properties and start cleaning up the properties below one part per million and above the one part per million.
Q. I'm a little confused. You're telling me that the EPA is saying you do not clean

Page 120

up properties between one part and ten parts unless you get a certificate of something?
A. I'm telling you the EPA has told us to focus our efforts on the properties that are greater than ten.
Q. You have time to do more than thirteen pieces of property in three years, don't you?
MR. CLARK: Object to the form.
Q. (By Mr. Davis) Couldn't you finish?
A. Absolutely.
Q. Are you doing it now, or are you waiting on the consent decree?
A. In most cases, we have to wait for people to give us access to their property.
Q. You know some properties that you have tested that you have not been told you cannot go on, and you have not been told you cannot clean up that are between one and ten where you haven't done a lick and a snake in terms of cleaning up; isn't that right?
MR. CLARK: Object to the form.
A. You're focusing on a very narrow piece

Page 121

on a much larger issue.
Q. (By Mr. Davis) You're exactly right, sir. I'd like you to answer my question.
A. The answer to your question is there's a wide variety of issues that need to be addressed. This a large site. I don't think anybody will debate that point. It includes the manufacturing facility. It includes landfills. It includes forty miles of creek. It includes almost 8,000 acres of flood plain and waterways to that flood plain.
You just can't sit down and decide you're going to go out and take care of everything at one time. You have to prioritize your efforts.
And we have been asked and we agreed with the EPA to prioritize our efforts on these subsets of properties. We are getting to a point where our ability to complete that effort is essentially stopped because we cannot get to anymore properties. We cannot get access to those properties,

Page 122

which is why we are now transitioning into those other properties. Yes, we will get them cleaned up in very short order.
Q. My question is, don't you know of properties that you have already tested that are between one and ten parts per million that you have permission to go ahead and clean up, and you ain't done it?
A. No, there's no property between one and ten that we have permission to clean up yet.
Q. Because you haven't gone out and asked permission.
There have been properties that you have been permitted access to that nobody says you can't clean up that are between one and ten that you haven't been able to clean up; isn't that right?
MR. CLARK: Object to the form.
A. If we had a choice between cleaning up a property that has two parts per million and a property that has fifteen parts per million, we have been told to focus our

Page 123

resources on cleaning up the property that has the fifteen parts per million.
Q. (By Mr. Davis) I didn't ask you what your reason was or what your excuse was. I'm asking whether or not that's correct.
MR. CLARK: Object to the form.
A. What I am saying, there is a process we have been asked to undertake, and we are undertaking that process.
Q. (By Mr. Davis) I want an answer to my question. My question is, isn't it true that there are properties that you have tested, residential properties, that are between one part and ten parts that you know of that nothing is standing in the way of you cleaning it up other than perhaps your time availability, and you haven't cleaned them up?
MR. CLARK: Object to the form.
A. It's more than a time availability. The answer to your question, there are properties between one and ten parts per million that we know will need to be cleaned

Page 124

up that we have not cleaned up.
Now, the reason for that occurring is not that we are neglecting it or we are ignoring these people. That is not the case.
We are doing what is the prudent thing to do and what the EPA has asked us to do. We have been focusing our efforts on those properties that are more important to get cleaned up sooner, rather than later, because of the higher level of exposures.
To suggest we are ignoring a certain segment of the community is completely misleading and mischaracterizes our efforts.
Q. (By Mr. Davis) In the first place, I didn't suggest anything.
A. I think you are suggesting that, but please continue with your questions.
Q. All right. What's the Miller property?
A. The Miller property is a section of

Page 125

property, about four acres in size, that is located just outside our fence line, along 10th Street in Anniston. It's a property we own.
Q. Did you acquire it recently?
A. I don't know the exact time we acquired it. It was in the late 1990s, I believe.
Q. What was that property used for before you acquired it?
A. I believe it was an old foundry property, if I'm not mistaken.
Q. There are dozens and dozens of houses that y'all have acquired from former residents around the plant; is that correct?
A. Yes, I would agree with that.
Q. Would you agree that you have total and complete access to those properties?
A. Can you repeat the question?
Q. Would you agree that you have total and complete access to those properties, the ones you now own?
A. Yes.

Page 126

Q. Other than putting plastic over the top of the dirt on those areas, what have you done to clean up the PCBs on those properties?
A. There's two separate programs that I would refer to. The first set of residential properties we purchased was a number of properties. I believe it was thirty. I could be a little off on that number.
Residential properties on what we call the east side plants near the defense plant. Those particular properties have been cleaned up. The houses were erased, and we placed a cap and cover on it.
I want to say maybe twelve or thirteen properties that we have acquired over the last year and a half as a result of a legal settlement. Four of those properties -- I believe that's the correct number, four or five, had greater than ten parts per million, and we have cleaned those properties.

Page 127

Some of the properties, we did not find PCBs, and we have not done anything with those properties. But there are also some, four or five, that contain between one and ten parts per million. We have not cleaned those yet either.
Q. What is the current situation of this Conservation Core Project on Choccolocco Creek?
A. The current status of that project is we have negotiated an agreement with a non-profit organization to go out and establish this conservation corridor and work with the property owners along the creek and establish this conservation corridor.
But that agreement has not been signed and no transactions have taken place.
Q. Do you agree if you find PCBs dispersed outside Monsanto's property at hazardous levels that you now have a revision to warn the people who might be affected by that?

Page 128

MR. CLARK: Object to the form.
A. Perhaps you could better define "hazardous levels" for me.
I agree we have an obligation to keep the community informed of what we find in our investigations and what we are doing to address it. We are actively doing that because they are the stakeholders. They have a stake in the outcome of this process.
Q. (By Mr. Davis) Would you agree if a time period existed when Monsanto knew there were hazardous levels of PCBs around its plant and the community did not, that Monsanto had an obligation to warn the people in the community or even, to use your phrase, keep them informed?
MR. CLARK: Object to the form.
A. Once again, it's difficult to answer because I don't know what you are defining as "hazardous."
I would agree to the extent that Monsanto knew or Solutia knows about

Page 129

PCBs in an area, where something needs to be done about it, that the company should inform the community of that information.
Now, if I'm reading into your question, stop me and I will stop talking. But you have to have the knowledge that there is an issue before you can notify people of an issue. You have to have the ability to detect it, to know it's migrating from the facility, to know there are rules and regs established by society, which, as reflected through governmental laws, say this stuff here is not appropriate to be here.
Once that is the case, yes, you should let people know that and allow them to have a voice in what's done about it.
Q. (By Mr. Davis) Then, you would agree, for example, if Monsanto had known in the late '60s or early '70s that PCBs at Choccolocco Creek were above the FDA limits and also knew that the -- let me rephrase.
You would agree, then, that if

Monsanto knew that the PCBs in the fish in Choccolocco Creek were above the FDA limits, they had an obligation to warn people about those levels?

MR. CLARK: Object to the form.

A. The simple answer to your question is yes, but you've taken something and placed it back in the time frame of the '60s and early '70s. To best to my knowledge, there were no FDA levels that could be exceeded, much less technology to detect levels, where the current FDA levels are set at.

To the extent you develop knowledge and develop an understanding of what's taking place in the community and have a baseline of regulations to compare that against, then, certainly, you have an obligation not just to inform the community but invite them to have a say in the process.

Q. (By Mr. Davis) Your answer would be the same, if in the early '70s or mid '70s or whenever that information was available

to them, right?

A. To the extent that any regulations existed, and you had the knowledge that this was going on. Once again, you get into the ability to detect and know what's going on there.

But back in the '60s and '70s and beforehand, the ability to detect PCBs, the levels we can detect them at today, there's orders of magnitude difference.

MR. DAVIS: That's all the questions I have. Thank you.

(The deposition of CRAIG BRANCHFIELD, was concluded at approximately 12:50 p.m., on April 25, 2003.)

* * * * * * * * * * * *

REPORTER'S CERTIFICATE

* * * * * * * * * * * *

STATE OF ALABAMA
COUNTY OF JEFFERSON

I, Laura E. Durden, Notary Public in and for the State of Alabama at Large, do hereby certify that on April 25, 2003, pursuant to notice and stipulation on behalf of the Plaintiffs, I reported the deposition of CRAIG BRANCHFIELD, who was first duly sworn to speak the truth, the whole truth, and nothing but the truth, in the matter of Antonia Tolbert, et al., Plaintiffs, v. Monsanto Company; et al., Defendants, Civil Action No. CV-01-C-1407-S, now pending in the U.S. District Court for Northern District of Alabama, Southern Division, that the foregoing 131 typewritten pages contains a true and accurate transcription of the

examination of said witnesses by counsel for the parties set out herein.

I further certify that I am neither of kin nor of counsel to the parties to said cause, nor in any manner interested in the results thereof.

This 1st day of May, 2003.

Laura E. Durden
Notary Public
State of Alabama at Large