

CERRO COPPER PRODUCTS CO.,)
) Civil Action
 Plaintiff,) No. 92-CV-204-PER
)
 vs.) East St. Louis, Illinois
) September 21, 1995
 MONSANTO COMPANY,)
)
 Defendant.)

WATER PCB-SD0000049229

1 (In open Court, 1:18 p.m.)

2 THE COURT: We'll resume with testimony. Okay,
3 Counsel?

4 MR. RICCI: Thank you, Your Honor.

5 Q. (By Mr. Ricci) Mr. Papageorge, at one point when you
6 were considering the issues surrounding the discharges of
7 PCBs to the sewers, you had recommended a program of carbon
8 filtration of the effluent to remove the PCBs?

9 A. I recommended a study of the use of carbon as a
10 filtrate, yes, sir.

11 Q. Carbon was very effective in removing PCBs from sewage
12 effluents, wasn't it?

13 A. Yes.

14 Q. Did that program ever get off the ground, was it ever
15 implemented?

16 A. No.

17 Q. And why was it not implemented?

18 A. It was determined that the amount of carbon containing
19 PCBs would be so large that it posed a disposal problem of
20 itself. And it was perceived that the point that all we
21 were doing was transferring the PCB from a water situation
22 to a solid situation. And it did not appear to solve
23 anything. We were still chasing the problem.

24 Q. Monsanto did, however, employ a carbon filtrate system

1 it?

2 A. Yes.

3 Q. Now, in your involvement in the PCB control program,

4 you also looked at the impact of PCBs in the various

5 products that Monsanto manufactured, is that true?

6 A. I don't understand impact of PCBs on the products, sir.

7 Q. Well, was Monsanto evaluating the wisdom of continuing

8 to maintain certain PCB products in the market place?

9 A. Oh, yes, yes.

10 Q. And you were involved in an evaluation, were you not?

11 A. Correct.

12 Q. And gradually Monsanto eliminated more and more of its

13 PCB containing products, is that a fair assessment?

14 A. Yes, well, again are we talking about numbers of

15 products or pounds of PCBs? The number of products were

16 almost, within a two month period.

17 Q. Within a two month period what?

18 A. Monsanto stopped selling PCBs to applications by our

19 customers.

20 Q. Which applications did you stop selling?

21 A. We stopped selling it to such uses as adhesives,

22 paints, caulking materials, inks, carbonless copy paper,

23 those uses that Monsanto perceived as being open to the

24 environment and those were terminated within a two, three

1 Q. Of what two to three month period, from when?

2 A. Oh, from April to the end of August of 1970.

3 Q. Now, are you familiar with a product that Monsanto

4 manufactured by the name of Pydraul?

5 A. Yes, I am.

6 Q. What was Pydraul?

7 A. Pydraul was the trade name applied to hydraulic fluids

8 used in industry.

9 Q. And did Pydrauls contain PCBs?

10 A. Yes, some of them.

11 Q. Some did and some --

12 A. Most of them.

13 Q. Most of them did?

14 A. Yes.

15 Q. Did there come a point when Monsanto decided to remove

16 PCBs from its Pydrauls?

17 A. Yes.

18 Q. Were you involved in that effort at all?

19 A. Yes.

20 Q. Are you familiar with an individual by the name of

21 Cumming Paton?

22 A. Yes.

23 Q. Who was that?

24 A. At what point in time?

1 THE COURT: You mean he changed?

2 A. Dr. Paton had several jobs in the period '70 to '76 or

3 so that I was associated with him.

4 Q. (By Mr. Ricci) Do you recall him at one point being

5 product manager in the fluids group?

6 A. Yes, it's about 1972 or so.

7 Q. And he also was involved in the decision to remove PCBs

8 from Pydrauls?

9 A. Yes.

10 Q. When were the PCBs removed from the Pydraul products?

11 A. It will began in 1971. As I remember it was completed

12 about 1970 -- early '73 as best I recall.

13 Q. Are you familiar with a Pydraul formulation by the name

14 of Pydraul 29 ELT?

15 A. I'm familiar with the terminology, yes.

16 Q. Is Pydraul 29 ELT a Pydraul that contained PCBs?

17 A. Yes.

18 Q. How about Pydraul 50 E, is that a Pydraul that

19 contained PCBs?

20 A. No.

21 Q. Did those products ever contain PCBs?

22 A. No.

23 Q. Now, the last PCB containing product that Monsanto

24 manufactured before it went out of the business were the

- 1 A. It's correct except it's products, plural, yes.
- 2 Dielectric applications, yes.
- 3 Q. And those were the PCB fluids that were used in
- 4 transformers and capacitors?
- 5 A. Yes.
- 6 Q. Why was it that those were the products that were kept
- 7 on the market place the longest?
- 8 A. Monsanto was informed by its customers in the
- 9 electrical equipment manufacturing business that their was
- 10 no available substitute for the PCB type fluids that would
- 11 give the electrical performance along with the fire safety,
- 12 that combination was not available.
- 13 Q. Isn't it also true, Mr. Papageorge, that Monsanto was
- 14 not as concerned about the release of these dielectric
- 15 fluids into the environment because of the nature of
- 16 transformers and capacitors?
- 17 A. Yes, that was a consideration.
- 18 Q. Those were fairly closed applications, correct?
- 19 A. Yes.
- 20 Q. And they did not present a large risk of release to the
- 21 environment?
- 22 A. Unless they were improperly maintained, yes.
- 23 Q. Do you still have Exhibit 356 up there Mr. Papageorge?
- 24 A. I have it.

1 please.

2 A. I have it.

3 Q. On page three, there's a table three that sets forth
4 PCB concentrations in Mississippi River sediments, is that
5 true?

6 A. Yes.

7 Q. And those sediment samples were taken, at least the
8 Monsanto dock sediments were taken near the outfall of the
9 Village sewer system, is that correct?

10 A. I can't answer that because I don't recall the location
11 of the outfall as it relates to the location of Monsanto's
12 dock. I don't remember.

13 Q. Turn over to the next page, the graph that's there.

14 A. I see it.

15 Q. That graph graphically depicts PCB analyses of river
16 sediments taken from the Mississippi River, is that
17 correct?

18 A. Yes.

19 Q. And if you look at the entries above the level or the
20 identification Village outfall, there are certain PCB
21 levels depicted there.

22 A. I see it.

23 Q. And those of PCB levels depicted in the sediments at
24 the Village outfall, correct?

1 Q. Now, you understood, didn't you, that the effluent
2 going into the Village treatment plant included the
3 discharge from all of the industries in the Village of
4 Sauget, correct?

5 A. As well as the Village?

6 Q. Correct.

7 A. Yes, sir.

8 Q. And yet you concluded when you saw these results that
9 Monsanto was the primary source of the contamination in the
10 Mississippi River sediments, didn't you?

11 A. I concluded?

12 Q. I think -- did you?

13 A. I don't know. I don't know that I -- I understood that
14 as indicating that it came from Monsanto to emphasize the
15 need for control of Monsanto. In other words, I took the
16 conservative approach. This is not to imply that it did
17 come from Monsanto. Took the worst case situation.

18 Q. Now, I showed you this document at your deposition and
19 I'm referring to Volume 1 at pages two hundred and two
20 hundred one. I showed this same document and showed you
21 pages three and four which we've been looking at. And I
22 asked you did these results support the belief that you
23 expressed earlier that the Krummrich plant was the source
24 of the PCBs that you were finding in the Mississippi River

1 Village system.

2 A. Primary, not the only.

3 Q. Primary, I think that's what I asked you.

4 A. Oh, okay.

5 Q. You would agree then Monsanto was the primary source of
6 the PCBs in the river settings?

7 A. Single source. Primary source among many sources.

8 Q. It's the primary source, those were your words,
9 correct?

10 A. Yeah.

11 Q. Thank you. Now Mr. Papageorge, during the period from
12 1965 to 1969 you were the plant manager at the Anniston
13 plant, is that correct?

14 A. Yes.

15 Q. And Anniston also manufactured PCBs, is that correct?

16 A. Yes.

17 Q. And the PCBs at the Anniston plant were made were
18 roughly the same production processes as employed with the
19 Krummrich plant, is that true?

20 A. Roughly, yes.

21 Q. Now, there was a blow tank at the Anniston plant,
22 wasn't there?

23 MR. NASSIF: Objection, Your Honor. He's getting

24 in the Anniston plant and the Court has already made a

Trial Transcript, 9/21/95 PM

Page 84

1 we filed and the Court said he was not going to allow them
2 to get into the Anniston plant unless counsel could
3 demonstrate and I believe the Court's words were a special
4 showing. Now we're in a plant down in Alabama, Your Honor.

5 THE COURT: Were are you going, Counsel?

6 MR. RICCI: Your Honor, I believe Mr. Papageorge's
7 testimony will be that the Anniston plant employed a number
8 of processes, even prior to the PCB control program to
9 prevent PCBs from getting into its sewer system. We submit
10 that this information is relevant, first of all, because
11 they were employing the same kinds of production processes
12 at Krummrich but second of all, because the Anniston plant
13 was being much more careful in what it was discharging into
14 the sewers than the Krummrich plant was. It goes to the
15 degree of care exercised by the Krummrich plant which is a
16 factor that the courts have deemed relevant in allocations
17 under super fund.

18 MR. NASSIF: Your Honor, first of all, this is the
19 same argument that was made to the Court in pleadings that
20 they filed with the Court at the time. The Court ruled at
21 that time that our motion in limine would be allowed and
22 only evidence of the Krummrich facility would be presented
23 at trial. Overall company standards would be permitted to
24 be produced but specific operational practices of other

1 Court will not be permitted without a special showing
2 demonstrating specific reasons for such production.
3 There is no specific showing. This is not a negligence
4 case. It's a totally different plant, totally different
5 sewer systems and they make totally different products.
6 The plant at Anniston had one principal product, PCBs. The
7 plant at, Krummrich plant made about a hundred or so
8 different products. It has nothing to do with the sewer
9 system at the Krummrich plant, that is, the sewer system at
10 the Anniston plant, and the procedures that were used
11 there, nothing to do with anything in this case, Your
12 Honor, which is what the Court ruled when he made this same
13 argument the last time.

14 MR. RICCI: Your Honor, can I jump in? First of
15 all, we never responded to the motion in limine. Your
16 Honor ruled on the motion before we submitted our position.
17 So I don't know where counsel is coming up with the fact
18 that the issue has been raised. Second of all, counsel is
19 not a witness and he is not under oath and I don't think
20 it's appropriate for him to testify what the products were
21 at the Anniston plant.

22 Thirdly, we can show, I think we have shown specific
23 reasons for the need to elicit this evidence. They were
24 doing the same things only they were doing them carefully

1 sewers of Krummrich. That's what the case is about.

2 THE COURT: Well, the Court's ruling is as
3 follows, gentlemen. Until there is a showing of why this
4 information may be material or relevant, we are not going
5 to get into plants other than the plant in question. Now,
6 at this point in time. With what has been elicited from
7 this witness, there has not been a showing that the
8 Anniston plant is similar to the Krummrich plant. There
9 hasn't been a showing of any of those things. And simply,
10 any comparisons will not be permitted until there is a
11 showing demonstrating to the Court that there exists
12 circumstances which make that information necessary,
13 material and relevant.

14 Q. Mr. Papageorge, I think you've already testified that
15 the Anniston plant employed roughly the same production
16 process for the manufacturer of PCBs as did the Krummrich
17 plant, is that correct?

18 A. That is correct.

19 Q. And PCBs weren't the only product manufactured at the
20 Anniston plant?

21 A. That's correct.

22 Q. There were a number of products manufactured there?

23 A. Yeah.

24 Q. And the production process for PCBs at the Anniston
Trial Transcript, 9/21/95 PM

1 it?

2 A. Yes.

3 Q. And that sewer system led to a municipal sewer system

4 in the town of Anniston, correct?

5 A. Parts of it, yes.

6 Q. And the PCB parts went into the municipal sewer system,

7 did it not?

8 A. Some of it, yes.

9 Q. Now, the PCB manufacturing process employed some

10 discharges to the sewers in that production, didn't it?

11 A. Yes.

12 Q. Was there a blow tank at the Anniston production

13 process?

14 A. As best I recall, yes.

15 Q. Was there losses of Aroclors from the blow tank to the

16 sewer system at the Anniston plant?

17 A. Not to my knowledge.

18 Q. And you were there from '65 to '69, correct?

19 A. Yes, sir.

20 Q. Now, the Anniston plant also engaged in the washing of

21 rail cars that were used to haul PCBs, correct?

22 A. On occasion, yes.

23 Q. And in washing the rail cars out, there was an effluent

24 generated that had to be disposed of, correct?

1 Q. And that effluent was not discharged in the sewers at
2 the Anniston plant, was it?

3 A. There were two types of effluent. First was the
4 initial drain of any residual material in the car. That
5 was collected and taken to a landfill. The wash with
6 detergent and so on did go into a system that included
7 neutralization to take care of the, of any acidic
8 conditions.

9 Q. The predominant portion of the PCBs in that process
10 would be taken out in the first step, is that correct?

11 A. Yes.

12 Q. And that's what went to the landfill and not to the
13 sewers?

14 A. Correct.

15 Q. Now, the Anniston plant like the Krummrich plant also
16 manufactured phosphorus pentasulfide, is that correct?

17 A. Eventually, yes.

18 Q. It manufactured it while you were there, didn't it?

19 A. Yes.

20 Q. And the phosphorus pentasulfide plant at the Anniston
21 plant employed a PCB containing heat transfer fluid like
22 the Krummrich plant, correct?

23 A. Yes.

24 Q. And when the Anniston phosphorus pentasulfide unit had

1 the sewers, did they?

2 A. No.

3 Q. They put it in drums and they put it in landfills?

4 A. Yes.

5 Q. And why didn't they put it down the sewers,

6 Mr. Papageorge?

7 A. Because it was considered more appropriate to use the

8 easily available Monsanto operated landfill along with

9 other liquid wastes from PCB and just haul it over there.

10 It was a short trip, it was done every day. It was a good

11 practice. Why change it?

12 Q. In fact in your deposition you testified that they

13 never intentionally discharged PCBs to the sewers in

14 Anniston while you were there, did they?

15 A. That is correct.

16 Q. And in your deposition you testified that it was

17 obvious that that kind of discharge would show up in the

18 surrounding environment someplace, didn't you?

19 A. At Anniston, yes.

20 Q. Mr. Papageorge, do you recall becoming involved in an

21 incident in Sauget in around 1980 relating to a smoking

22 ditch?

23 A. I became involved as a recipient of some information,

24 yes, sir.

1 A. That's what it turned out to be, yes.

2 Q. And that smoking ditch was brought to the attention of
3 Monsanto by the Illinois EPA, wasn't it?

4 MR. NASSIF: Your Honor, we're now into Section B
5 and I wasn't allowed to go into it yesterday. We had this
6 discussion on it and he's now talking about Creek Sector B.

7 THE COURT: Are we talking about Creek Sector A or
8 Creek Sector B?

9 MR. RICCI: We're talking about B, Your Honor, but
10 for a specific purpose that I think falls within the
11 rulings that the Court has made before.

12 THE COURT: What's the specific purpose?

13 MR. RICCI: I believe this witness is going to
14 testify that when Monsanto became involved in this process,
15 they did some searching to determine whether the
16 contamination that was identified in Creek Sector B was
17 connected to Monsanto. And they identified specific
18 parameters that they would sample for with the
19 understanding that if those chemicals were found that would
20 indicate a connection to Monsanto. And so therefore, even
21 though it is in Creek Sector B a number of the chemicals
22 that we're referring to, they were referring to were also
23 found in Creek Sector A. Therefore, Your Honor, we submit
24 that it's relevant to the contamination that was found at

1 Monsanto.

2 THE COURT: You were saying that Monsanto
3 acknowledged that they found in Creek Sector B products
4 manufactured by Monsanto which were part of the cleanup in
5 this case?

6 MR. RICCI: Not quite. They were brought --

7 MR. NASSIF: It's a long way from that, Your
8 Honor.

9 MR. RICCI: If I may, Your Honor.

10 THE COURT: Go ahead.

11 MR. RICCI: This situation was brought to their
12 attention and they conducted an investigation to determine
13 whether the contamination found in B was connected to
14 Monsanto. In order to do that, they identified certainly
15 contaminants that they wanted to search for to ascertain
16 whether there was a Monsanto connection. A number of the
17 chemicals that were included in that sampling were actually
18 found in Creek Sector A and we submit, Your Honor, that the
19 fact that Monsanto in 1980 said if you find this stuff,
20 that's suggests a connection to Monsanto, is extremely
21 relevant to this case since we did find that stuff in Creek
22 Sector A.

23 THE COURT: But what was found in Creek Sector B?

24 MR. RICCI: What they searched for, Your Honor.

1 chlorophenols, all of which were found in Creek Sector A.

2 I submit, Your Honor --

3 THE COURT: Wait a minute, you are not answering
4 my question. My question is what was found in Creek
5 Sector B.

6 MR. RICCI: Your Honor, we would submit that for
7 purposes of this procedure it's not relevant what was found
8 in Sector B. It's relevant what they were looking for.
9 They said this is the stuff we wanted to look for to
10 determine whether there's a connection to Monsanto. So
11 whether they found it in B or not, I think Mr. Nassif is
12 right, it is irrelevant. But the fact these were the
13 contaminants that they were looking for to determine
14 whether there was a connection to Monsanto is extremely
15 relevant because those same contaminants were found in
16 Creek Sector A.

17 THE COURT: Well, it would hardly be relevant if
18 the findings of Creek Sector B had specific Monsanto
19 products in it since Monsanto is closer to Creek Section A
20 and they would have had to have gone through Creek Section
21 A to get to Creek Section B, right?

22 MR. RICCI: I can go with that, Your Honor.

23 THE COURT: Well, I mean, I think that's the only
24 interpretation on the block.

1 relevancy discussion you just had, the fact that Monsanto
2 concluded that the material in Creek Sector B had not come
3 from Monsanto is what counsel is saying is not relevant.
4 But if it is relevant, whether they did find stuff that had
5 potentially its origins at Monsanto, however it got there,
6 in A or B, may be or may not be relevant. The fact is all
7 they want to introduce in this case was what was tested
8 for. My argument would be, Your Honor, if Monsanto
9 concluded that the material in B was not theirs, I should
10 then be able to go into this and put on evidence that what
11 they found in B wasn't ours and therefore what's in A
12 wasn't ours either. And you would not want me to explore
13 that anymore than what I'm suggesting here.

14 THE COURT: You are absolutely right, I wouldn't
15 want you to explore that.

16 MR. RICCI: And that's why I didn't think I had a
17 shot at getting at what they found. Your Honor, the only
18 thing we want this for, they in effect identified
19 Monsanto's fingerprint by saying if we test for this and
20 find it, that suggests a connection to Monsanto. And we
21 submit, Your Honor, that that information itself is
22 relevant to this case in that many of the contaminants they
23 identified as being part of the fingerprint were found in
24 Creek Sector A.

1 into what's in Creek Sector B, then we have to get into --

2 THE COURT: We're not going to get into what's in

3 Creek Sector B. We can get into the question of are there

4 specific fingerprints as you all -- it's a nice term --

5 fingerprints that identify Monsanto products and you can

6 ask him if those fingerprints were found in Creek Sector

7 A. But you are not going to get in what's in Creek

8 Sector B.

9 MR. RICCI: Okay, but I can get into what the

10 fingerprints were?

11 MR. NASSIF: No --

12 THE COURT: Not for Creek Sector B. You may get

13 into what the fingerprints are for Monsanto products but

14 not for Creek Sector B.

15 MR. RICCI: Okay. I think I understand, Your

16 Honor.

17 THE COURT: Well, I would hope you understand.

18 Thank you, let's go.

19 Q. (By Mr. Ricci) Mr. Papageorge, you recall the incident

20 that I was talking about, don't you?

21 A. I believe I do, yes, sir.

22 Q. At the time of that incident, did Monsanto develop

23 certain chemicals that it felt it could look for to

24 establish a connection between contamination and Monsanto

1 A. Develop chemicals, sir?

2 Q. I may have said that. Let me try again. In the course
3 of that investigation, did Monsanto come up with certain
4 chemicals that it should look for to ascertain a connection
5 to Monsanto products?

6 MR. NASSIF: The investigation he's talking about
7 is into Creek Sector B, Your Honor, he's getting into the
8 fingerprint from Creek Sector B. I will object.

9 MR. RICCI: Your Honor, that's the circumstance
10 that it came up. It's irrelevant if it came up at B or
11 someplace in Utah. The fact of the matter is these were
12 the chemicals that they were looking for --

13 THE COURT: If it's irrelevant, then why would you
14 ask about it?

15 MR. RICCI: It's irrelevant where it came from.

16 THE COURT: Well, then leave that out and ask him
17 if there is a fingerprint.

18 Q. (By Mr. Ricci) There are certain chemicals that you
19 would look for to determine whether contamination could be
20 attributed to the Krummrich plant?

21 A. Yes.

22 Q. And one of those contaminations was PCBs, is that
23 correct?

24 A. That would be one.

1 contaminants was chlorobenzenes?

2 A. Well, chlorobenzenes were really not typical of the
3 plant. There are other chemicals that would be more
4 typical, if you wanted to associate it with the plant.

5 Q. Chlorophenols were another one, were they not?

6 A. Yes, sir.

7 MR. RICCI: Your Honor, may I impeach the witness
8 with respect to what was done in Creek Sector B?

9 THE COURT: No, because it's immaterial what was
10 done in Creek Sector B.

11 Q. Would PCBs be a contaminant that would be suggestive
12 of a connection to the Monsanto Krummrich plant?

13 A. Possible suggestion.

14 MR. RICCI: If I may have one moment, Your Honor.

15 THE COURT: Sure.

16 MR. RICCI: No further questions at this time,
17 Your Honor.

18 THE COURT: Cross-examination, please.

19 CROSS-EXAMINATION

20 BY MR. NASSIF:

21 Q. Mr. Papageorge, would PCBs be a possible fingerprint
22 of any industrial area in the country in, say, the 1980s?

23 MR. RICCI: Objection, there's no foundation that
24 this witness can answer that question.

1 Q. (By Mr. Nassif) Mr. Papageorge, when Monsanto began
2 its program, did you become very familiar with the various
3 uses of PCBs? Its PCB control program is what I'm talking
4 about.

5 A. Yes, sir, I did.

6 Q. And you testified a minute ago that there were multiple
7 uses that were eliminated from Monsanto's product line, is
8 that correct?

9 A. That is correct.

10 Q. Can you identify whether or not any of those uses that
11 were eliminated from Monsanto's product line had to do with
12 PCB fluids in industrial facilities, industrial plants?

13 A. Well, certainly the heat transfer and hydraulic fluid
14 applications that were eventually phased out.

15 Q. What types of industrial uses were, was heat transfer
16 fluid used in?

17 A. The heat transfer fluids were the liquids in the
18 systems that conveyed the heat from the furnace source to
19 the use point. For example, if something was being heated
20 that's flammable, you avoid the use of an oil or a gas
21 flame and in order to do that you locate the oil and gas
22 flame remotely, heat the fluid, pump in hot fluid over to
23 the, say the varnish tank or varnish pot and use the
24 varnish, using the heat in that fluid. And when the fluid

1 and circulated back. That's a heat transfer application.

2 Q. Would heat transfer applications be used in a refinery
3 potentially?

4 A. Oh, yes, yes.

5 Q. What about, you identified hydraulic fluids, Pydraul
6 fluid, how is that used in industry?

7 A. There are systems in, say, die casting plants that move
8 ingots and molten metal. To motivate those systems, they
9 use hydraulic fluids. Now, these systems are under high
10 pressure and leaks do develop were you spray the fluid on
11 this red hot molten liquid and in order to avoid any fires,
12 they use the, they used the PCB type fluids which would not
13 ignite when they hit that molten metal.

14 Q. There were several applications within the Krummrich
15 plant where they used both heat transfer and hydraulic
16 fluids?

17 A. Yes.

18 Q. Okay. Now, did you actually have an occasion,
19 Mr. Papageorge, to go to other plants that were not
20 Monsanto plants where heat transfer and hydraulic fluids
21 were used?

22 A. A few instances, yes.

23 Q. Did you, where those customers of Monsanto that you
24 visited?

1 Q. Did you see their applications and how they were used?

2 A. Yes.

3 Q. Now, some of the other applications that you talked

4 about that were not heat transfer or hydraulic fluid uses

5 had to do with carbonless copy paper, did you mention that?

6

7 A. That's one application, yes.

8 Q. What were some of the other open applications that were

9 eliminated?

10 A. Paints and lacquers, varnishes. The caulking around

11 the windows of the glass skyscrapers, the adhesives, both

12 types, the type that adheres at room temperature and the

13 type that requires heat to cause the adhesion. I'm sure

14 there are many others.

15 Q. Was it common in terms of the paints, was it your

16 understanding that these were the types of paints that were

17 used in commercial and industrial settings?

18 A. Yes.

19 Q. Okay. Now, would you expect based on your experience,

20 Mr. Papageorge, the uses and the frequency of use and the

21 time of use, would you expect PCBs to be present in

22 essentially any industrial setting of a major nature?

23 MR. RICCI: Objection, Your Honor, calls for an

24 opinion from this witness. He's not been identified as an

Trial Transcript, 9/21/95 PM

Page 100

1 THE COURT: Sustained.

2 Q. (By Mr. Nassif) Mr. Papageorge, you were asked --
3 based on all the information you received, did you learn at
4 some point in time that there were PCBs as part of the
5 Monsanto testing program in the effluent of other plants in
6 and around the Krummrich plant in the Village of Sauget?

7 A. I received reports to that effect, yes.

8 Q. Did Monsanto find PCBs, report PCBs to you in the
9 effluent of the Cerro Copper plant?

10 A. Yes.

11 Q. Did Monsanto report PCBs to you, if you recall, in the
12 effluent of the Mobil Oil Refinery plant?

13 A. Yes.

14 Q. Did Monsanto find PCBs in the Village sewer system
15 which it attributed to the Rogers Cartage facility?

16 A. Yes.

17 Q. If -- strike that. Now, the reason -- what was the
18 reason why Pydraul and Therminol and the carbonless copy
19 paper and the paint uses and all those other uses, why were
20 they cut off, Mr. Papageorge?

21 A. Well, the whole purpose was to avoid any opportunity
22 for PCBs to enter the environment. That's the bottom line
23 so to speak.

24 Q. Was it Monsanto's understanding that these uses that

1 be in the environment?

2 A. Certainly.

3 Q. Okay. Now, you mentioned transformers or Mr. Ricci

4 asked you about transformers and you said if they are

5 properly maintained. Did you become familiar with the

6 transformer services that were used to maintain equipment,

7 transformer equipment with various plants?

8 A. A few of them.

9 Q. What was your understanding -- what did you come to

10 learn about how transformer servicing operations based on

11 your experience, how they were conducting their practices

12 in terms of environmental control?

13 MR. RICCI: Your Honor, I'll object to that

14 question on grounds of relevance and also on grounds of

15 lack of foundation.

16 THE COURT: The objection will be sustained on the

17 grounds of the lack of foundation.

18 Q. (By Mr. Nassif) Okay. Mr. Papageorge, why -- were you

19 requested by Monsanto to become knowledgeable about how

20 PCBs were getting into the environment?

21 A. Yes.

22 Q. As part of your educational program, did you attempt to

23 understand how the use of PCBs in transformers might get

24 out into the environment?

1 Q. Was that part of Monsanto's consideration in
2 determining whether or not it was going to go out of the
3 business of supplying dielectric fluids for transformer
4 use?

5 A. That was part of it.

6 Q. Okay. Now, did you then take it upon yourself to
7 become familiar with practices associated with the use of
8 transformer, the use of PCB materials in transformers?

9 A. Yes.

10 MR. RICCI: Objection, Your Honor, he's leading
11 the witness.

12 THE COURT: It's overruled.

13 Q. (By Mr. Nassif) Thank you, Your Honor. In the course
14 of familiarizing yourself with the use of PCBs in
15 transformers, did you observe the servicing of transformers
16 by various transformer consulting organizations?

17 A. I recall only one instance where I observed that
18 activity.

19 Q. Was that part of your process of trying to educate
20 yourselves about the potential of PCBs getting into the
21 environment in uses in transformers?

22 A. Yes.

23 Q. What did you do to observe this activity?

24 A. I made a point to be present when a transformer was

1 company to inform me where and when all this would take
2 place so I make it a point to be there and watched the
3 activity.

4 Q. And what did you see?

5 MR. RICCI: Objection, Your Honor. Unless this
6 has to do with Cerro or Monsanto, it has no relevance.

7 THE COURT: The objection will be sustained. We
8 need a foundation to find out where this was, when it was,
9 what the relationship was, et cetera.

10 Q. (By Mr. Nassif) When did it take place,
11 Mr. Papageorge, approximate time period?

12 A. As best I can recall about 1972, 1973, thereabouts.

13 Q. Okay. Do you recall where it took place?

14 A. It was the Ohio Edison, I believe that's the name of
15 the power utility. And it was serviced by a transformer
16 service company out of Akron, Ohio whose name escapes me at
17 the moment. It just doesn't come to me. It's Akron Ohio.
18 It's Transformer Service, Inc. or some such name. I'm not
19 sure.

20 Q. Do you recall the size of the transformer that was
21 service?

22 A. Oh, it was, golly, about -- it's taller than I, it's at
23 least six feet high and about ten feet long and about six
24 feet wide, about that size. I don't remember the rating

1 Q. Were you there through the entire servicing process?

2 A. Most of it. I wasn't there for the final cleaning up
3 and so on. They had to drain the unit, refilled it and
4 buttoned it up and they were in the process of cleaning up
5 things when I had to leave.

6 Q. Was it your understanding that this draining and
7 refilling of the unit was a common practice?

8 MR. RICCI: Objection, Your Honor, lack of
9 foundation. He said he's only seen it once.

10 THE COURT: You may testify if you know, if you
11 know.

12 A. What I don't know, Your Honor, is what Mr. Nassif means
13 by common.

14 Q. (By Mr. Nassif) Okay. Let me rephrase my question.

15 THE COURT: Rephrase your question, Counsel.

16 Q. (By Mr. Nassif) Why were they doing this to the
17 transformer, do you recall, Mr. Papageorge?

18 A. All I know is that the transformer was not performing
19 as it was expected to perform. It did not reach its
20 rating. The fluid was tested and found it deteriorated. I
21 do not know what caused the deterioration but it was a case
22 where it had to been drained and refilled.

23 Q. And you witnessed the draining and refilling of the
24 transformer?

1 Q. Than was done by a transformer -- did they have a term
2 for this, what they called this? Was it called
3 retrofilling or anything like that, do you remember any
4 terminology for this?

5 A. I don't remember anything. That doesn't mean it didn't
6 exist. I just don't recall.

7 Q. And you saw all the steps that they took?

8 A. Yes, sir.

9 Q. And the care that was exercised?

10 A. Yes.

11 Q. And the types of equipment that they used?

12 A. Yes, sir.

13 Q. And what they did with the oil, where it went when they
14 removed it from the transformer?

15 A. Yes.

16 Q. And how the process essentially contained the oils
17 during this removal?

18 A. Yes.

19 Q. Okay. And to the extent that it didn't contain it, you
20 saw that as well?

21 A. Yes.

22 Q. And did anyone tell you at that time that anything they
23 were doing was a new experimental procedure?

24 MR. RICCI: Objection, hearsay.

1 was an experimental procedure or a standard procedure?

2 A. Well --

3 MR. RICCI: Objection, Your Honor, unless he can
4 testify based upon his own knowledge and not what someone
5 told him. It's just another way to get hearsay.

6 THE COURT: All right. You may testify, you may
7 answer the question if you know.

8 A. I think I know, Your Honor.

9 THE COURT: All right.

10 Q. (By Mr. Nassif) Go ahead and answer.

11 A. This followed a meeting I had with the transformer
12 service people and their staff at which we both reviewed
13 approaches that we felt were responsible. So what I saw
14 followed the points we covered in our discussion. I don't
15 know how else to answer that, Your Honor.

16 Q. (By Mr. Nassif) That's fine. And Mr. Papageorge, the
17 meeting that you had was to remove and discuss procedures
18 for controlling releases of PCBs to the environment during
19 the process of removing the fluids and replacing them, was
20 that the purpose of the meeting?

21 A. Correct.

22 Q. And you were there consulting with the power company as
23 to how they might better control releases to the
24 environment in that unloading and refilling process?

1 service company.

2 Q. So you had been called by the transformer service
3 company to be present at a, at this refilling or unloading
4 and refilling so that you could see how they were
5 conducting the operation?

6 A. Yes.

7 Q. As a result of that consultation, did you give
8 recommendations to the transformer service company for
9 changes in the way they were handling their process?

10 A. I didn't see anything that violated what I thought was
11 a good responsible approach. They followed all the kinds
12 of things we jointly agreed was the best way to go about it
13 and they followed it.

14 Q. So at the time that you met with them, you went over
15 some procedures that you thought would be good for them to
16 follow and then they implemented them at the time that you
17 were watching the actual unloading and refilling of the
18 transformer?

19 MR. RICCI: Objection, leading.

20 THE COURT: Overruled.

21 Q. (By Mr. Nassif) Go ahead, Mr. Papageorge.

22 A. Yes.

23 Q. Now, did they express to you that there were, that

24 after they met with you that there were changes that they

1 MR. RICCI: Objection, hearsay.

2 A. Overruled.

3 Q. (By Mr. Nassif) Go ahead, Mr. Papageorge.

4 A. Not in this case, no, sir.

5 Q. Okay. Were you aware or made aware of practices that

6 went on in the filling and refilling of transformers which

7 you had to become familiar with in order to render them

8 advice? Did they make you aware of practices in the

9 industry so to speak in the course of refilling and filling

10 transformers?

11 A. Some of the them, yes.

12 Q. Were you asked, did you make an assessment of those

13 practices?

14 A. I did.

15 Q. And what was your assessment?

16 MR. RICCI: Objection, Your Honor. We still

17 haven't gotten this to anywhere near Sauget, Illinois so I

18 object on grounds of relevance.

19 MR. NASSIF: I can get to Sauget, Illinois, if we

20 need to but I think he is entitled to answer that question.

21 THE COURT: The objection is overruled.

22 Q. (By Mr. Nassif) Go ahead, what was your assessment of

23 the practices that they described to you?

24 A. There was the situation would arise when the PCB type

1 oil type transformer oil in the same tank wagon or truck
2 that they'd haul away with or haul into. This was one
3 point that I emphasized should not be. The mineral oil
4 should not have PCB in it and vice versa. Another was the
5 practice prior to our meeting, at least the way I
6 understood it, of disposing of this in landfills, of the
7 damaged fluid in landfills and I proposed that since there
8 were incinerators available commercially that they dispose
9 of the damaged PCB transformer fluid in these commercial
10 incinerator facilities. Those two examples come to mind at
11 the moment of changes in some past practices.

12 Q. Was it your understanding that mineral oil transformers
13 could become contaminated with PCB containing fluids?

14 A. Oh, yes. They were.

15 Q. And were you concerned of the possibility that the
16 mineral oil fluids could then be disposed in a way where
17 they could get into the environment?

18 A. Exactly. Had nothing to do with performance in the
19 transformer. Performance would not affect it. It was the
20 eventual disposal problem that we were facing.

21 Q. Okay, Mr. Papageorge, I asked you about Mobil and
22 Cerro and the Village. Is it your understanding that when
23 Monsanto made a test of the effluent of all of the various
24 industries in the Village of Sauget that they found PCBs in

1 A. That's my understanding, yes, sir.

2 Q. And the levels varied, didn't they?

3 A. They did.

4 Q. Okay. Now, this contamination problem that you talked

5 about that had to do with transformers, of the equipment

6 that was used to change out the transformers contaminating

7 what might not have been mineral oil contaminated fluids,

8 then contaminated with PCBs, was that ever anything that

9 was experienced in the hydraulic fluid area, to your

10 knowledge?

11 A. Not quite like that, no.

12 Q. Was there a different way that it happened where

13 hydraulic fluid could become contaminated with PCBs in your

14 experience?

15 A. Hydraulic fluid --

16 Q. The Pydraul fluids that we had talked about.

17 A. Yeah, the hydraulic fluids I was familiar with already

18 contained some PCBs and the care that had to be taken was

19 during the changeover from the PCB type to the non-PCB type

20 to avoid the replacement flow from being contaminated.

21 Q. Okay. Were chlorinated phenols, Mr. Papageorge, were

22 they also fairly widely used in industry, chlorinated

23 phenols?

24 A. Yes, sir.

1 between the Anniston plant and the Krummrich plant. The
2 Krummrich sewer system went to -- did the Krummrich sewer
3 system go to a treatment plant, is that your understanding?

4 A. Yes, sir.

5 Q. Now in the situation at Anniston, was the municipal
6 system, do you have any understanding as to whether the
7 effluent from the Anniston plant, the material that you
8 said went into the sewer, did that ultimately go to a
9 treatment plant for treatment?

10 A. Yes. The sewer system, yes.

11 Q. Was it the same type of industrial treatment facility
12 as at the Village of Sauget?

13 A. Well, this was a municipal waste treatment system, from
14 homes and offices and a little bit of industry.

15 Q. And does that treatment system, was it your
16 understanding that the Monsanto Krummrich plant employees
17 understood that their material as it went to the sewer was
18 going into a treatment plant had been built by the industry
19 in the area for treating?

20 A. Yes, definitely.

21 Q. And do you know as you sit there whether the treatment
22 plant, the treatment plant in Anniston was at all identical
23 to the treatment plant that the material from the Krummrich
24 plant was receiving when it went, when it left the

1 A. I don't know the differences but the wastes were
2 different.

3 Q. Okay, the wastes coming into the treatment facilities
4 were different?

5 A. Yes.

6 Q. So one treatment facility -- is it possible -- do you
7 know in the treatment facility at the Village of Sauget was
8 designed to take care of the wastes that were being
9 generated within the Village of Sauget?

10 A. Yes.

11 Q. Do you know, Mr. Papageorge, if Rogers Cartage --
12 strike that. Did Rogers Cartage carry waste materials from
13 Monsanto?

14 A. Not to my knowledge.

15 Q. Now, the fact that Monsanto used a Rogers trailer in
16 that one memo, does that change your knowledge at all about
17 whether Rogers Cartage carried waste for Monsanto Company?

18 A. No, because I pictured hauling waste as kind of
19 over-the-road hauling to some eventual disposal site
20 whereas I understood this report about the use of the
21 trailer was an in-plant movement, within the plant fence.

22 Q. When Monsanto made its test of the Village effluent,
23 did it find a particular result relating to one or the

24 other Village industries that was that they considered at

1 they considered to be significant?

2 A. Well, I recall a high number finding and sample that
3 was associated with the Rogers Trucking Company's
4 activities.

5 Q. Okay. Would that have been, was it your understanding
6 that that was a measurement of the effluent coming from the
7 Rogers Company facility into the Village sewer system?

8 A. That's my understanding, yes, sir.

9 Q. Did Monsanto after receiving that result in the 1970s,
10 did Monsanto take steps to reduce the discharges of the
11 PCBs from the Rogers Cartage facility in any way that you
12 recall?

13 A. I recall that Monsanto had the cleaning out of Rogers
14 trucks, tank trucks by Monsanto people on Monsanto
15 property.

16 Q. Was this at a time that Monsanto Company was involved
17 in its PCB control program?

18 A. Yes.

19 Q. Now, do you know what direction the sewer would flow
20 from the clean out area at the Monsanto facility,

21 Mr. Papageorge?

22 A. Not today, I don't.

23 Q. Okay. In all of the documents that you received, all

24 of the information that you received, Mr. Papageorge, did

1 Monsanto was discharging PCBs in Dead Creek Segment A?

2 A. No.

3 Q. Did anyone ever tell you through all the PCB control

4 programs and all the efforts that were undertaken that

5 Monsanto, that they believed Monsanto was discharging PCBs

6 in Dead Creek Segment A?

7 MR. RICCI: Objection, hearsay, Your Honor.

8 THE COURT: Overruled.

9 Q. (By Mr. Nassif) Go ahead, Mr. Papageorge.

10 A. No.

11 Q. Mr. Papageorge, is benzene lighter than water?

12 A. Yes.

13 Q. If benzene was in water, would you expect it to be

14 floating?

15 A. Yes.

16 Q. When we're talking about benzene being in a waste

17 stream from any plant, what types, can you quantify, what

18 kinds of levels are we talking about?

19 MR. RICCI: Objection, Your Honor, calls for

20 speculation, no foundation.

21 THE COURT: I'm going to sustain that objection.

22 Q. (By Mr. Nassif) Mr. Papageorge, when Monsanto -- let

23 me ask you this. Are PCBs heavier than water?

24 A. Yes.

1 stream?

2 A. Yes.

3 Q. Did Monsanto attempt to do studies to determine PCBs

4 movement in water?

5 A. Well, there were sampling programs that attempted to

6 determine the path that the PCBs in the water and sediment,

7 what have you, took in a sewer line. Is that what you had

8 a question about.

9 Q. Yes, were those the studies done at the Krummrich

10 plant?

11 A. Yes.

12 Q. And based on the studies that were done at the

13 Krummrich plant, was it your understanding that it was

14 possible or did those studies show that PCBs -- strike

15 that. Would the PCBs have to come in contact for the, with

16 the benzene in order for there to be any chance, however

17 small, of any absorption or however you describe it, of the

18 PCBs with the benzene?

19 MR. RICCI: Objection, Your Honor, calls for an

20 opinion from this witness.

21 MR. NASSIF: Your Honor, he has asked this witness

22 the question of whether or not benzenes could, solvents

23 could trap PCBs and carry them along. And now I'm asking

24 him would they have to come in contact and he says there's

1 THE COURT: You may answer the question if you
2 know.

3 A. Yes, sir. In order for the PCBs to be dissolved by the
4 Benzene, the two must come in contact with each other.

5 Q. (By Mr. Nassif) Now, when we're talking about PCBs
6 being dissolved with the benzene, would there have to been
7 a lot of benzene that comes in contact with it? Would they
8 have to be in a situation where they are in contact for a
9 long or short period of time? Do you have any idea how
10 those dynamics would take place or do you really not know,
11 Mr. Papageorge?

12 A. Well, I can't give you specific numbers but the
13 physical chemistry that I'm aware of involving is
14 solubility of one material in another will tell me that it
15 is a function of amount and time and temperature as well as
16 the properties of the two, but it doesn't take a lot of
17 benzene to pick up what it can and hold on to in the way of
18 PCBs. Benzene would be present in water and not be
19 visible. It's that small. In other words, we talk about a
20 layer floating. It could be such a small amount that it's
21 not visible and yet it's there. And if it ever came in
22 contact with the PCBs, somewhere along the system, it would
23 pick up some PCBs up to its saturation point and no more.

24 Q. Would there be any way, could you quantify what it

1 A. Could I at this point in time?

2 Q. Yes.

3 A. No.

4 Q. Without knowing all the conditions that you talked
5 about, could you even tell if it picked up anything or how
6 much or give any other type of report?

7 A. I would be very surprised if in water there are PCBs in
8 benzene and the benzene hasn't picked up some PCBs.

9 Q. Where would they be picking up the PCBs,
10 Mr. Papageorge, where would the benzene be in contact with
11 the PCBs in a situation like that?

12 A. Well, there would be PCBs, say, on sediment. And if
13 sediment is exposed to the benzene and the PCBs prefer the
14 benzene rather than the sediment so you get this transfer
15 of material from one media to another.

16 Q. Would the sediment be at the bottom of a stream
17 potentially?

18 A. Most of it will settle out but there's still some
19 sediment that is so small that it dispersed throughout the
20 water layer.

21 Q. Are we talking about theoretical amounts or are we
22 talking about measureable numbers back in the time period
23 of the sixties and seventies?

24 A. Sixties they were theoretical. In the seventies, the
Trial Transcript, 9/21/95 PM

1 with time so you have some evidence where it's actual
2 rather than theoretical.

3 Q. Would the, what did the sampling program tell us about
4 the movement of or Monsanto's attempts at the sampling
5 program at the Krummrich plant? What did it tell us about
6 our ability to detect PCBs in the sewer system?

7 A. It not only told Monsanto but all the laboratories in
8 the world ran into this. It told us that analyzing for
9 materials like PCBs is extremely challenging. In spite of
10 the sophisticated instruments and all, it still depends on
11 getting a good sample, a representative sample. And the
12 way PCBs behave, clinging to the walls of containers or
13 clinging to sediment, being absorbed by some other
14 chemicals, it makes the taking of a sample very important
15 and yet difficult to do so that you feel confident that the
16 sample you have is really representative of what's there.

17 The analytical method itself, even the best
18 laboratories in the world looking at the same sample
19 invariably came up with a different number, the number
20 itself. So the analytical chemists had to agree amongst
21 themselves that things are reasonably close or no, we're
22 too far apart and let's go back and redo it.

23 So even to this day, that discussion does take place,
24 how do you sample, where do you sample, how do you analyze,

1 sample, there are two ways that I know of. One is to
2 measure the area under the curve that is plotted by the
3 machine and you compare that area with the area of the
4 standard. And if you know how much standard you have, you
5 can do a little arithmetic and say it's half or a fourth or
6 what have you.

7 The other procedure used by some laboratories is to
8 measure the height of each of the peaks of the curve and
9 you compare those heights with the heights of the standard
10 sample and you quantify. No chemist will tell you that
11 these are exact numbers but that's the best estimate they
12 can come up with.

13 Q. Did the results of the sampling of the Monsanto sewer
14 system vary with the location of the samples, is that your
15 understanding?

16 A. That is one of the problems where you do grab a sample
17 that is typical.

18 Q. And was it your understanding that Monsanto was ever
19 able -- Mr. Ricci asked you about Monsanto's steps to
20 arrive at accurate sampling. Was it your understanding
21 that Monsanto was ever able to satisfy itself that it had
22 arrived at a sampling method that was accurate?

23 A. No, they arrived at the sampling method that they felt
24 was better than the other methods tried, must have be half

1 Q. How long a period of time are we talking about that we
2 were involved in that program, Mr. Papageorge?

3 A. Three, four years. Several years.

4 MR. NASSIF: If I could have a minute, Judge?

5 THE COURT: You bet.

6 Q. (By Mr. Nassif) Mr. Papageorge, were you aware that
7 the, at one time that the area that's referred to as Dead
8 Creek used to extend through the Monsanto property?

9 A. Eventually I was aware, yes, sir.

10 Q. Okay. Is it your understanding that that area was
11 filled in before Monsanto Company began manufacturing PCBs
12 at the Krummrich plant?

13 A. It was.

14 MR. NASSIF: Okay. I don't have any further
15 questions, Your Honor.

16 THE COURT: Mr. Ricci, please.

17 REDIRECT EXAMINATION

18 BY MR. RICCI:

19 Q. Mr. Papageorge, you never saw a transformer serviced at
20 the Cerro Copper facility, did you?

21 A. No, I did not.

22 Q. You don't have any idea how that service went, do you?

23 A. I do not.

24 Q. Now, you indicated that Rogers Cartage did not haul
Trial Transcript, 9/21/95 PM

1 A. That's my understanding, yes, sir.

2 Q. But they did haul waste materials within the Krummrich
3 plant, correct?

4 A. I only know of that one instance that appeared in one
5 of the exhibits here.

6 Q. So we know it happened at least once?

7 A. Well, that one time is all I'm aware of.

8 Q. Okay. Now, you indicated that you had some knowledge
9 of the Sauget waste water treatment plant. How did you
10 come to get that knowledge?

11 A. At discussions with the Krummrich plant personnel and
12 it was something I gradually picked up as I looked at
13 reports regarding the PCB presence and we'd get into
14 discussions on how it worked, who managed it, these kind of
15 things.

16 Q. Do you know when the Sauget waste water treatment plant
17 was built?

18 A. No.

19 Q. Did you have any role in the design of the Sauget waste
20 water treatment plant?

21 A. No.

22 Q. Do you know when Rogers Cartage opened up its terminal
23 in the Village of Sauget?

24 A. I do not.

1 reviewed if you ever came across any information that
2 Monsanto was discharging PCBs into Dead Creek, do you
3 remember that?

4 A. Yes.

5 Q. Did you ever ask anybody whether Monsanto was
6 discharging into Dead Creek?

7 A. No, that would not have been a rationale question at
8 the time.

9 Q. The purpose of the sampling that Monsanto conducted in
10 the Mississippi River was that determine the extent to
11 which PCBs were being released in the environment, correct?

12 A. That is one intent, yes, sir.

13 Q. Did Monsanto ever do any sampling of Dead Creek at the
14 time of the pollution control program?

15 A. No.

16 Q. Now, you talked about the problems that existed back in
17 the late sixties, early seventies with analysis of PCBs.

18 Monsanto was pretty much on the cutting edge of the
19 resolution of those problems, wasn't it?

20 A. We'd like to think we were, yes, sir.

21 Q. I'm sure. You testified under cross-examination to the
22 behavior of PCBs in water streams that contained benzene.

23 There were a series of questions that Mr. Nassif asked of

24 you and you answered. Would the behaviors be the same in
Trial Transcript, 9/21/95 PM

1 A. Probably not in actual numbers, if you will, but in
2 type of behavior, yes.

3 Q. What do you mean not in actual numbers?

4 A. The solubility of PCBs in benzene can be different than
5 the solubility in xylene. I don't know those numbers.

6 Q. But the behaviors that you described would be
7 basically the same?

8 A. The process is the same, yes.

9 Q. Now, you talked about the discharge of PCBs into the
10 environment in the sixties and I think you used the word
11 theoretical as opposed to actual under cross-examination.
12 Do you recall that testimony?

13 A. My notes fail me.

14 Q. Unfortunately my notes fail me too. I can't be any
15 more specific about that. I'll try and come back to it.

16 Mr. Papageorge, there were actual losses of PCBs into the
17 sewers prior to, say, '69 but you just couldn't measure
18 them, is that a fair statement?

19 A. Yes.

20 Q. Now, Mr. Nassif asked you about discharges of PCBs into
21 the Village sewer system by industries other than Monsanto,
22 do you recall that questioning?

23 A. I do.

24 Q. And you I think testified that there were a number of
Trial Transcript, 9/21/95 PM

1 identified as discharging PCBs into the sewers, is that
2 correct?

3 A. Yes.

4 Q. In fact when Monsanto discovered that sampling they
5 deemed that the only significant quantity of PCBs coming
6 from other Village industries was from the Village, isn't
7 that true?

8 A. For that one sampling period, yes.

9 Q. And the PCBs that they attributed to coming into the
10 Village, they attributed to Rogers Cartage washing the
11 trailer?

12 A. At that time, yes.

13 Q. And that would be a trailer that was used to haul
14 Monsanto's PCBs, correct?

15 A. Well, I don't know what the Rogers Trucking firm hauled
16 in addition to Monsanto so I kind of hesitate saying with
17 certainty that that's true.

18 Q. Were there other companies that manufactured PCBs in
19 the area of Sauget?

20 A. No, but there were other potential sources of PCB
21 fluids that the Rogers people might have been hauling for
22 others.

23 Q. You don't know any others besides Monsanto that they
24 hauled for, do you?

1 Q. Were you involved in the decision to bring the Rogers
2 trailers over to Monsanto to wash them?

3 A. No.

4 Q. Now, Monsanto was aware prior to the time that it
5 brought the Rogers trailers over that Rogers was washing
6 these trailers, wasn't it?

7 A. Yes.

8 Q. And they just let Rogers wash it at the Rogers terminal
9 until they discovered that Rogers was putting PCBs into the
10 sewer, is that a fair statement?

11 A. That's close. They let the Rogers people wash out
12 their trucks until they analyzed and found this high
13 concentration of material than led them to be concerned and
14 took over that washing duty.

15 Q. So Monsanto took it over and brought it into its own
16 plant?

17 A. Right.

18 MR. RICCI: Your Honor, at this time could you
19 offer some documents into evidence that I neglected to
20 offer at the time of my direct?

21 THE COURT: Sure.

22 MR. RICCI: Your Honor, at this time I'd like to
23 offer Plaintiff's Exhibit 356, 316, 401, 340-A, 284, 391,
24 413 and 406 into evidence.

1 MR. RICCI: I'm sorry, strike 406. I didn't use
2 406. I withdraw 406.

3 THE COURT: All right. Objection?

4 MR. NASSIF: Just a minute, Your Honor, I just
5 wanted to make sure I have them here in front of me.

6 THE COURT: Okay.

7 MR. NASSIF: You're not offering Plaintiff's
8 Exhibit 316 in that group, are you?

9 MR. RICCI: Yeah, that was in there.

10 MR. NASSIF: Your Honor, we will object to 316
11 that was a document which Mr. Papageorge did not, was not a
12 carbonee on and the Court sustained our objection to the
13 document, this witness being crossed on that document. So
14 we will stay with our objection on Plaintiff's Exhibit 316
15 and we will not object to the rest of the documents.

16 THE COURT: All right. 356 -- all but 316 will be
17 admitted into evidence. 316 will not be admitted. It was
18 never identified.

19 MR. RICCI: Thank you, Your Honor.

20 THE COURT: Okay.

21 RE CROSS EXAMINATION

22 BY MR. NASSIF:

23 Q. Mr. Papageorge, at the time that the sample results

24 were received regarding the PCBs and the waste streams of
Trial Transcript, 9/21/95 PM

1 Cartage situation, was it your understanding that these
2 other waste streams that had PCBs in them, putting aside
3 the Rogers Cartage one which we already said went into the
4 Village sewer, was it your understanding that these other
5 waste streams ultimately get into the Village sewers and go
6 to the treatment plant and that's why we were analyzing
7 them?

8 A. Yes.

9 MR. NASSIF: Okay, I have no more questions, Your
10 Honor.

11 THE COURT: Anything further?

12 MR. RICCI: I'm sorry, I have one more, if I may.

13 THE COURT: Okay.

14 FURTHER REDIRECT EXAMINATION

15 BY MR. RICCI:

16 Q. Mr. Papageorge, in the course of this PCB sampling
17 program, one of the issues that Monsanto grappled with over
18 time is where the best place to sample was to get the best
19 picture of Monsanto effluent, is that correct?

20 MR. NASSIF: I'm going to object to this.

21 Obviously beyond the scope of the questions I asked this
22 witness.

23 THE COURT: Overruled. You may answer.

24 A. Would you repeat the question?

1 involved with one of the issues that Monsanto was grappling
2 with was where was the best place to sample to get a good
3 picture of the total discharge from Monsanto's plant,
4 correct?

5 A. Correct.

6 Q. And ultimately they determined that the best place to
7 sample to get a true picture of Monsanto effluent was the
8 influent point of the waste water treatment plant, wasn't
9 it?

10 A. Yes.

11 MR. RICCI: Okay, I have no further questions.

12 THE COURT: One more?

13 FURTHER RECROSS-EXAMINATION

14 BY MR. NASSIF:

15 Q. Mr. Papageorge, do you know why it was ultimately
16 decided that the best place to sample would be the influent
17 to the waste water treatment plant?

18 A. I do not no the specific reasons.

19 Q. Was at the time that that was decided, was Monsanto
20 still having difficulty sampling sewers in its own facility
21 to determine levels of PCBs?

22 A. Yes.

23 MR. NASSIF: Okay, that's all, Your Honor.

24 THE COURT: Anyone else? All right, sir. Have a
Trial Transcript, 9/21/95 PM

1 INDEX

2 PLAINTIFF'S WITNESSES: DIRECT CROSS REDIRECT RECROSS

3

WILLIAM PAPAGEORGE

4 By Mr. Ricci 77 121
By Mr. Nassif 97 127

5

PAUL HEISLER

6 By Mr. Koch 130

7

8 PLAINTIFF'S EXHIBITS Marked Received

9

284		127	
10 316		denied	
340-A		127	
11 356		127	
391		127	
12 401		127	
413		127	
13 546	Memo	151	
688	Memo	138	denied
14 705	Memo	144	denied
708	Memo	147	denied

15

16

17

18

19

20

21

22

23

24

