COPY

Superior Court of the State of California
For the County of Los Angeles

TRANSWESTERN PIPELINE COMPANY,	)	
Plaintiff,	)	
vs.	)	Case No. BC 026959
MONSANTO COMPANY and DOES 1 through 200, inclusive,	)	
Defendant.	)	

March 24, 1992

Continuation of the deposition of NORMAN T. JOHNSON, taken on behalf of Plaintiff.

GORE REPORTING COMPANY

Boatmen's Tower, Suite 1175 - 100 North Broadway
St. Louis, Missouri 63102
(314) 241-6750

WATER_PCB-SD0000028340

Superior Court of the State of California

For the County of Los Angeles

Transwestern Pipeline COMPANY, Plaintiff,	)	
v.	)	No. BC 026959
MONSANTO COMPANY and DOES 1 through 200, inclusive, Defendants.	)	

Deposition of NORMAN T. JOHNSON, taken on behalf of Plaintiff, at the Marriott Suites Hotel, 519 Northwest Point, Arlington Heights, Illinois, on the 24th day of March, 1992, before J. Bryan Jordan, certified shorthand reporter and notary public.

WATER_PCB-SD0000028341

APPEARANCES:

FOR THE PLAINTIFF:

Mir Saied Kashani
Shearman & Sterling
21st Floor
725 South Figueroa Street
Los Angeles, California 90017
(213) 239-0300

FOR THE DEFENDANTS:

Mr. Donald F. Zimmer
Bronson, Bronson & McKinnon
505 Montgomery Street
San Francisco, California 94111-2514
(415) 986-4200

WATER_PCB-SD0000028342

INDEX

PAGE

EXAMINATION BY MR. KASHANI 5

EXHIBITS

PLAINTIFF'S EXHIBIT 72 55
Document entitled "Facts About Fire-Resistant Lubricants," TRAN number 001387 through 001394, and a letter from Mr. A. DeLeon, to D. R. Pogue, dated August 1970, TRAN 002454 and 2455.

PLAINTIFF'S EXHIBIT 73 55
Monsanto call report - Organic Division, dated 7/1/71, SCAL number 000182.

PLAINTIFF'S EXHIBIT 74 70
Excerpt of deposition of Norman T. Johnson, 2/16/82, pages 1 through 3 and 59 through 63.

PLAINTIFF'S EXHIBIT 75 73
Excerpt from 1982 Johnson deposition, pages 71 through 75.

WATER_PCB-SD0000028343

PLAINTIFF'S EXHIBIT 76 80
Excerpt of 1982 Johnson depo, pages 116 through 123.

PLAINTIFF'S EXHIBIT 77 85
Monsanto document dated 2/25/70, to W. R. Richard from B. A. Baxter, TRAN number 060453.

PLAINTIFF'S EXHIBIT 78 85
Monsanto document to N. T. Johnson from E. S. Tucker -- Subject: PCB analysis of water samples, Central Foundry plant -- Bedford, Indiana, TRAN number 008718.

PLAINTIFF'S EXHIBIT 79 85
Monsanto document dated 6/22/71 from L. R. Stark to W. B. Papageorge -- Subject: GM Central Foundry oil in environment, TRAN number 042545.

WATER_PCB-SD0000028344

PLAINTIFF'S EXHIBIT 80 93
Letter from Jack T. Garrett to
W. B. Papageorge, dated 2/19/70, TRAN number
002552 and 2553.

PLAINTIFF'S EXHIBIT 81 99
Monsanto document dated 6/11/70 to
D. A. Olson from Paul G. Benignus, Re:
Capacitor Aroclor 1242, TRAN number 008623.

PLAINTIFF'S EXHIBIT 82 99
Document dated 5/31/71 to W. B. Papageorge
from S. Uneno, Re: PCB environmental problem
April status report, TRAN number 046420.

PLAINTIFF'S EXHIBIT 83 99
Document dated May 26, 1970 to Donald L.
McClain from P. G. Benignus, Subject:
Aroclor 1242B, TRAN number 006172 and 6173.

PLAINTIFF'S EXHIBIT 84 99
Document dated 1/25/71 to N. T. Johnson from
T. L. Gossage, Subject: 1970 PCB
expenditures, TRAN number 066446.

WATER_PCB-SD0000028345

PLAINTIFF'S EXHIBIT 85 102
Pages 1, 2 and 13 from the sworn statement of Norman T. Johnson of 9/20/79.

PLAINTIFF'S EXHIBIT 86 109
Monsanto document from W. R. Richard to Toby Bell, Subject: Chlorinated biphenyl in chlorinated terphenyl, TRAN number 060583.

PLAINTIFF'S EXHIBIT 87 114
Minutes of meeting of corporate management committee, 5/11/70, TRAN number 085307 and 085308.

PLAINTIFF'S EXHIBIT 88 117
Notice of deposition of Norman T. Johnson for March 10 and 11, 1992, with attachments.

PLAINTIFF'S EXHIBIT 89 131
Memo from Bergen to Richard, 5/20/70, TRAN number 005571.

PLAINTIFF'S EXHIBIT 90 131
Letter dated 10/26/71 to Mr. K. Mason from W. B. Papageorge, TRAN number 024322.

WATER_PCB-SD0000028346

PLAINTIFF'S EXHIBIT 91 134
Document dated 5/11/70 from John Mason with copies of charts for presentation to CMC, production numbers 300 0540 through 300 0563.

PLAINTIFF'S EXHIBIT 92 134
Monsanto document dated 5/27/70 from W. B. Papageorge to J. R. Durland, Subject: PCB environmental problem, TRAN number 085321 through 085323.

PLAINTIFF'S EXHIBIT 93 142
Excerpt of Johnson deposition in 1982, Page 43.

PLAINTIFF'S EXHIBIT 94 143
Document dated 7/6/70 to D. E. Cavenaugh, from W. B. Papageorge, TRAN number 061984 and 061985.

PLAINTIFF'S EXHIBIT 95 147
Document entitled "Gas Turbine Fluids -- Turbinol," (No date) TRAN numbers 08326 and 003827.

WATER_PCB-SD0000028347

PLAINTIFF'S EXHIBIT 96 154
Monsanto call report -- Organic Division, 9-28-71, TRAN numbers 004374 through 4376.

PLAINTIFF'S EXHIBIT 97 156
Document dated 1/7/63, entitled "Organic Chemicals Division Research Report." TRAN numbers 001300 through 001312.

PLAINTIFF'S EXHIBIT 98 159
Monsanto document dated 11/9/71, call report number 1971-22, TRAN numbers 004380 through 4383.

PLAINTIFF'S EXHIBIT 99 162
Document entitled "Sales Summary All PCB Products, Texas Eastern Transmission - Barton, Alabama, 1954-197. (42 pages).

PLAINTIFF'S EXHIBIT 100 178
Monsanto document dated 9/16/71 from C. L. Bradford to W. Papageorge, Subject: PCB work - status, TRAN number 002477 and 2478.

WATER_PCB-SD0000028348

PLAINTIFF'S EXHIBIT 101 180
Monsanto document from C. L. Bradford to T. L. Gossage, dated 11/17/71, Subject: Chlorinated terphenyls, TRAN number 005029 through 005032.

PLAINTIFF'S EXHIBIT 102 183
Letter dated 1/7/72 to Mr. Ted Harrison from C. Larry Bradford, with attachments, TRAN number 002449 through 2451.

PLAINTIFF'S EXHIBIT 103 187
Monsanto call report number 1972-1, dated 2/8/72, SCAL number 000192 through 194.

PLAINTIFF'S EXHIBIT 104 190
Monsanto call report -- Organic Division, dated 7/24/72, SCAL number 000219 and 000220.

PLAINTIFF'S EXHIBIT 105 192
Monsanto call report - Organic Division, dated 12-6-72, SCAL number 000223 and 224.

WATER_PCB-SD0000028349

PLAINTIFF'S EXHIBIT 106 194
Letter on Monsanto letterhead, dated 6/11/70 to, "Dear Customer:" from N. T. Johnson, SCAL number 000384 and 385.

PLAINTIFF'S EXHIBIT 107 198
Excerpt of N. T. Johnson 1982 deposition, pages 112 through 115.

* * * * * *

WATER_PCB-SD0000028350

Whereupon. . .

NORMAN T. JOHNSON,

of sound mind, having been first duly sworn to tell the truth, the whole truth, and nothing but the truth in the case aforesaid, testified upon his oath as follows, to-wit:

EXAMINATION

BY MR. KASHANI:

Q. Good morning, Mr. Johnson. My name is Saied Kashani. I'm with the law firm of Shearman & Sterling, and we represent Transwestern Pipeline Company in this action that's pending in Los Angeles Superior Court against Monsanto Company. The first thing I'm going to ask you is whether you've ever been deposed before.

A. Yes.

Q. Do you recall approximately how many times?

A. Once. It was two and a half days.

Q. And approximately when was that?

A. I'll would say roughly '80 or '81 and it was for the Outboard Marine case.

Q. And in that case I'm sure you are somewhat familiar with the procedure but at

any case the court reporter will be taking down everything you say in a transcribed form and it will be set up in a volume which you'll have an opportunity to see and you'll have an opportunity to make corrections or changes in the text, if you so desire, although I should tell you that I or even your counsel at some point may comment on the fact that you have made corrections or changes in that text. Do you understand that?

A. Mm-hmm. (Nods head in affirmative manner).

Q. Do you also understand that the oath you just took is the same oath that you might take to testify at a trial before a jury and a judge?

A. Right.

Q. And you are testifying here under penalty of perjury?

A. Right.

THE WITNESS: One point: Testifying before a grand jury was not a deposition?

MR. ZIMMER: No.

WATER_PCB-SD0000028352

THE WITNESS: Okay.

BY MR. KASHANI:

Q. Have you testified before a grand jury?

A. Yes.

Q. Was that in connection with your work at Monsanto?

A. Yes.

Q. Do you recall approximately when that was?

A. '72.

Q. Do you recall if that was a federal or state grand jury?

A. Federal.

Q. And did it have anything to do with PCBs?

A. Yes.

Q. Was that in connection with a case that was filed?

A. No.

Q. Who conducted the investigation?

A. I don't know what you would call them. The -- what do you call them, district attorney or something for the Los Angeles area, plus there was a lawyer from the

WATER_PCB-SD0000028353

Justice Department in Washington.

Q. So it was a U.S. Attorney or district attorney?

A. U.S.

Q. And do you recall approximately the substance of the investigation?

A. It was an inquiry about PCBs.

Q. Were there any charges filed eventually?

A. None.

Q. Without -- I don't know if it's objectionable, but do you recall the substance of your testimony?

A. Broadly discussing PCBs.

Q. Was it in connection with any particular usage of PCBs?

A. No.

Q. Was it in connection with a spill or toxic spill at some place?

A. No.

Q. Do you recall who else testified for Monsanto or otherwise?

A. Nobody else.

Q. Do you know if there was any particular reason why you were the only one

to testify?

A. I was selected by the company to go out and represent them.

Q. Do you recall who selected you?

A. Probably a collection of people.

Q. Who told you to go out?

A. A collection of people.

Q. Who communicated to you that you would be out here testifying, out there testifying?

A. It was really my boss, Howard Bergen at the time.

Q. Is Mr. Bergen still alive?

A. No, he's dead.

Q. Do you recall what Mr. Bergen told you when he said you'll be testifying before the grand jury?

A. Essentially saying that whatever this district is in, the Los Angeles area wanted someone to review PCBs, answer their questions relative to PCBs and just broadly the question of PCBs in the Los Angeles area.

Q. By that, do you mean the use of PCBs in the Los Angeles area?

A. Right.

Q. Do you recall any particular large customers of PCBs in that area --

MR. ZIMMER: Customers of Monsanto.

MR. KASHANI: Of Monsanto.

BY MR. KASHANI:

Q. -- that might have been the target of the inquiry?

A. There was no target. It was very obvious there was no target. They were just inquiring about PCBs in the Los Angeles area. I don't remember any definition of PCBs that they had found. There were a number of customers of PCBs in Los Angeles, and we did not really get into any identification of any one customer or any source of PCB. It was a very broad understanding of what PCBs were, why were they used, industries they would be used in, and I was only testifying about the fluid side of it, although I understood the plasticizer side, but that didn't even come up. It wasn't a part of the inquiry.

Q. You mean, by that do you mean there were no questions about functional fluids?

A. For another reason, there was a question about PCBs and heat transfer fluids, and that related to a competitor who had gotten in the business of recovering biphenyl and then chlorinating it and selling the product also, which was something the government did not know.

Q. Do you recall the name of that competitor?

A. Oh, God. I think we called it Coastal Chemical. Somebody down in Texas.

Q. And did Coastal have any dealings with Monsanto?

A. No.

Q. Do you recall anyone else who you know testified before the grand jury?

A. No, I don't.

Q. Was there anyone else from Monsanto?

A. No.

Q. Did you consult or have a meeting with Monsanto attorneys -- without revealing the contents of that discussion, did you have any meetings with Monsanto attorneys before testifying before the grand jury?

MR. ZIMMER: That's not important and it's also privileged, so you don't have to answer that.

MR. KASHANI: I'm simply asking if a meeting occurred, not to reveal the substance of that meeting.

MR. ZIMMER: Right. Well, whether a meeting occurred, whether ten meetings occurred, same thing. There can be an inference drawn from that that he was prepared or otherwise, and it's not important and it's not discoverable, so let's move on.

BY MR. KASHANI:

Q. Did you have any meetings with anyone from Monsanto to discuss the grand jury testimony at which there were no attorneys present?

A. Other than being told that I was the one selected to go out, I mean basically, the information I had in my brain is what they were looking for, and no one needed to review anything.

Q. And that was when Mr. Bergen told you to go out?

A. Yeah.

WATER_PCB-SD0000028358

Q. Do you recall the substance of what Mr. Bergen told you?

MR. ZIMMER: Asked and answered.

A. I was selected. That's basically it.

BY MR. KASHANI:

Q. And do you recall for approximately how long you testified?

A. About four hours.

Q. Was there a transcript prepared of your testimony?

A. Yeah, one of these fellas.

Q. Did you ever see that transcript?

A. No. You can't have it.

Q. Do you know if Monsanto or its counsel ever obtained a copy of that transcript?

A. You can't.

Q. I assume the answer is no.

A. The answer is no.

Q. At that grand jury investigation were there any questions about Pydraul, P-y-d-r-a-u-l or Pydrauls?

A. I would say there's a good chance they came up in an answer, more than a

WATER_PCB-SD0000028359

question, because the grand jury inquiry was more about polychlorinated biphenyls, PCBs, but when you start talking about applications, then trade names come into question, but --

MR. ZIMMER: Let's try to stick with answering his question which I know is tough sometimes but he asked were there any questions put to you about Pydrauls, and if you don't remember --

A. I don't remember.

MR. ZIMMER: -- you can tell him. If you do, then please, tell him that, also.

A. I don't remember that.

BY MR. KASHANI:

Q. What did you say about Pydrauls?

MR. ZIMMER: Let's wait until there's a question. What did he say about Pydrauls? He just said he didn't remember if there were any questions about Pydrauls.

MR. KASHANI: He said Pydrauls. You can answer.

MR. ZIMMER: He said "may have." We can have it read back, if you like.

BY MR. KASHANI:

WATER_PCB-SD0000028360

Q. If you don't recall, that's fine.

A. See, and I don't. I don't.

Q. Do you recall if Turbinol came up at all?

A. I doubt it.

Q. During the grand jury testimony, was the question put to you or the approximate, not precisely these words, but words to the effect, or a question to the effect, of when Monsanto first became aware that PCBs could pose an environmental hazard?

A. I'm sure that was asked.

Q. Do you remember your answer?

A. Basically, 1968. Based on the Swedish information.

Q. And was the question asked approximately when Monsanto first became aware that PCBs could pose a health hazard to humans?

MR. ZIMMER: Counsel, when you say PCBs, I'm concerned that you are lumping quite a number of different products together. Do you want to define that any further, or you just mean generally?

MR. KASHANI: The grand jury

investigation seemed to be about PCBs generally, so I mean generally.

MR. ZIMMER: Okay, I'm sorry, I don't have the question in mind.

A. Today and then, I knew of no information that suggested that PCBs were or are a health hazard to humans.

BY MR. KASHANI:

Q. In your response to my previous question, you mentioned the Swedish work.

A. Right.

Q. Was that the Swedish work of Jensen, J-e-n-s-e-n?

A. Yes.

Q. What do you recall about that work?

A. They had identified the higher molecular weight polychlorinated biphenyls in the environment.

Q. And was that work published in 1966?

A. No, I believe it was published in '68.

Q. Could you describe the distinction between Araclor and Aroclor or aroclors and a

chlorinated biphenyl?

A. Same; or terphenyls.

Q. Is an Aroclor such as Aroclor 1248 or let's say Aroclor 1242, is that a mixture of different chlorinated, differently-chlorinated biphenyls, or a pure mixture -- or a pure substance?

A. All the biphenyls have a bell curve to them.

Q. Could you explain what you mean by that?

A. You are going to have low chlorinated materials and high chlorinated materials other than in that case of 1242, you are talking about three chlorines on the benzene ring, so you are going to have some 1s, some 2s, predominantly, predominantly 3s, some 4s and some 5s or any others. It is not a pure chlorinated compound of only one level of chlorine.

Q. So if my understanding is correct, an aroclors, Aroclor 1242 will consist of a, consists of a mixture of biphenyls with varying numbers of chlorines on each biphenyl?

WATER_PCB-SD0000028363

A. Right.

Q. When was, do you recall, when was the first time that Monsanto became aware that an Aroclor consisted of, as you described it, a bell curve of varying numbers of polychlorinated biphenyls?

MR. ZIMMER: I'll object, that the witness can only testify as to what he became aware of, not that Monsanto became aware of.

You can answer.

A. You are asking about Monsanto knew. I don't think Monsanto would have known anything until they acquired Swan Chemical which was the original producer of the product.

BY MR. KASHANI:

Q. That was approximately 1929 or 1939?

A. I don't know when the acquisition was made. I remember that I think Swan Chemical started producing these products in 1936.

Q. Was the acquisition before World War II?

A. I don't know. I wasn't there.

Q. Was it before 1960?

A. Yes, because I joined the company at that time and we were selling aroclors.

Q. I don't want to mischaracterize your previous testimony, so I'll reask the question, perhaps, and in a clearer way. My question was, when did Monsanto become aware that the aroclors it was selling consisted of -- let me strike that.

When did Monsanto first become aware that an Araclor that it was selling, or aroclors in general, of those aroclors, each Aroclor consisted of a mixture or as you said, a bell curve of differently-chlorinated biphenyls?

A. I don't know.

MR. ZIMMER: And the same objection in that you are taking the witness's definition and treating it as a truism. He's not here to testify on behalf of Monsanto. This is a discovery deposition, we are trying to obtain his knowledge.

MR. KASHANI: I'll reask the question.

BY MR. KASHANI:

WATER_PCB-SD0000028365

Q. When did you first become aware that the aroclors Monsanto was selling consisted of differently-chlorinated biphenyls or a mixture of differently-chlorinated biphenyls?

MR. ZIMMER: And that misrepresents the definition that he gave you of a bell curve, but you can answer.

A. God, you are talking so many years ago. 1969 or 1970.

BY MR. KASHANI:

Q. All right, let's do a little housekeeping. I notice you brought with you a copy of the amended notice of deposition. This notice requested that you bring certain documents with you to the deposition if any exist and are in your possession. Have you had a chance to look at the notice?

A. Yes.

Q. Do you have any documents responsive to the notice?

A. No, I do not.

Q. Do you have any documents in your possession relating to PCBs?

A. No.

WATER_PCB-SD0000028366

Q. Do you have any documents in your possession relating to your employment or at the time you were employed at Monsanto?

A. No.

MR. KASHANI: Let's go off the record for a second.

(Discussion off the record.)

MR. KASHANI: Let's go back on the record.

BY MR. KASHANI:

Q. Mr. Johnson, I've handed you what appear to be two deposition transcripts. The first is from a case called United States vs. Outboard, that's one word, Outboard Marine Corporation, and it's in the United States District Court for the Northern District of Illinois. It's a short, relatively short document, about 28 pages, and it indicates that your deposition was taken on September 20, 1979. Do you recall this deposition?

A. Oh, yes.

Q. Notice the caption says Monsanto Company was a third-party defendant to that suit. Did Outboard Marine sue Monsanto?

A. I don't remember. I guess so. I

WATER_PCB-SD0000028367

don't remember.

Q. But you recall that Monsanto was a party to the lawsuit?

A. Yes.

MR. ZIMMER: He doesn't want you to guess or speculate, so if things come up that you don't know, or don't remember, or don't understand, for that matter, tell him that.

A. I don't understand the legal situation in terms of who was suing whom. It could have been the government suing Monsanto, the government suing Outboard Marine, or the United States Government suing Outboard Marine who in turn sued Monsanto. I don't know. There's three names there and that's all I can tell you. I'm not a lawyer.

BY MR. KASHANI:

Q. I understand. Do you recall roughly what the subject matter of that litigation was?

A. Outboard Marine.

Q. Was it Outboard Marine's use of PCB-containing compounds?

A. Yes.

WATER_PCB-SD0000028368

Q. And did these compounds end up in the environment?

A. Yes.

Q. Did they end up in the water supply near the plant?

MR. ZIMMER: You are talking now about the allegations of the suit.

MR. KASHANI: Yes.

MR. ZIMMER: Not what was proven --

MR. KASHANI: Absolutely.

MR. ZIMMER: Okay.

BY MR. KASHANI:

Q. Was the allegation that PCBs used by Outboard Marine ended up in the water supply and soil around Outboard Marine's plant?

A. Ended up in the soil, but when you say water supply, whose water supply?

Q. The water table or the underground water by the plant.

A. It was found in the harbor of Waukegan, but that was not where they pumped their water for domestic use for Waukegan and to the best of my knowledge, there was never

any PCBs in the water going to the City of Waukegan.

Q. And by "they pumped," do you mean Outboard Marine was pumping?

A. No. The City of Waukegan water department pumped water from Lake Michigan.

Q. The second, longer document that appears to be two volumes, the second volume starts around page 213. This appears to be a deposition that began on February 16, 1982, which was your deposition taken in the same case, United States vs. Outboard Marine. Do you recall this deposition?

A. Yes.

Q. Was it, in fact, the same case?

A. Yes.

Q. Do you know why there was an almost three-year gap between the first deposition and the second?

A. That's not true.

Q. You mean the first it was taken in 1979 and the second in 1982?

A. Not true. I don't understand this. They were taken simultaneously. This one was taken first and then the government

WATER_PCB-SD0000028370

took it right after. Why these dates are different, I don't understand that.

Q. You mean the deposition that's indicated as taken in 1982 was taken first before the deposition that's indicated as taken in 1979?

A. Right.

Q. Were the depositions taken in '82 or '79?

A. That I don't remember.

Q. But they were both taken in the same year?

A. Yes. To the best of my knowledge, this was taken on the first two days and this was taken thereafter when the government asked questions.

Q. You were pointing to the long deposition as taken on the first two days?

A. Right.

Q. And the shorter transcript as being taken thereafter?

A. Right.

Q. All right.

A. Why the difference in dates?

Q. These transcripts were produced to

WATER_PCB-SD0000028371

us from Monsanto. Do you recall when this case began or when it ended?

A. No, I don't.

Q. Other than these two deposition transcripts I have shown you, do you recall being deposed at any other time during the case that related to PCBs?

A. No.

Q. Have you ever given testimony in a courtroom that related to PCBs?

A. No; other than what was stated for the grand jury out in California.

Q. So other than --

A. Go ahead.

Q. Other than these. Niece two depositions or one deposition, it seems, one continuous deposition, those transcripts we have today and the grand jury investigation, have you ever given any sworn testimony relating to PCBs?

A. No.

THE WITNESS: Could we stop for just a minute?

Q. Sure.

MR. KASHANI: Off the record.

WATER_PCB-SD0000028372

(Discussion off the record.)

MR. KASHANI: Back on the record.

BY MR. KASHANI:

Q. Mr. Johnson, do you have a college degree?

A. Yes.

Q. Where did you go to college?

A. University of Illinois.

Q. And what was your degree?

A. In marketing.

Q. When did you receive that degree?

A. 1954.

Q. And do you have any postgraduate education?

A. No.

Q. Where did you -- did you begin work right after graduating?

A. No, I went in the United States Army.

Q. And when were you discharged?

A. 1956.

Q. And what did you do then?

A. Went into the sale of accounting systems.

Q. Do you recall the company?

WATER_PCB-SD0000028373

A. Royal McBee.

Q. And was that in Illinois?

A. Yes, Chicago.

Q. And when did you leave that employment?

A. '57.

Q. And where did you go from there?

A. Mead & Wheeler Company here in Chicago, selling office equipment.

Q. And how long were you at that job?

A. Until 1959, when I joined Monsanto.

Q. And where did you join Monsanto? In which office?

A. I started with Monsanto in a sealants program in St. Louis. Sales training program.

Q. I see. And what sort of instruction did they give you in that program?

A. A broad view of all the products that Monsanto sells, sales training.

Q. Did they tell you anything about PCBs?

A. It was part of the program.

WATER_PCB-SD0000028374

Q. Do you recall what they told you about PCBs?

A. Only where the applications were, definitions of what the products are, provide you with a price list, show you the sales literature and whatever, just to familiarize you with the products that you were going to be going out to sell.

Q. And approximately how long did the sales training program last?

A. The sales training program was for six months, of which two and a half months were working in a purchasing department down at the plant in St. Louis.

Q. During this training program, did Monsanto at any time give any warnings, health warnings or safety warnings concerning PCBs?

MR. ZIMMER: To who?

MR. KASHANI: To the trainees.

A. Not that I remember.

BY MR. KASHANI:

Q. Did they say words to the effect of "be careful not to get the PCB-containing products on your hands or on your skin"?

WATER_PCB-SD0000028375

A. Most chemicals you don't want on your skin and you don't want to leave them there. Therefore, anything that Monsanto would have sold would have fit into that criteria, not necessarily PCBs.

Q. During this training program, did they tell you that PCBs or products containing PCBs could cause liver damage?

A. No.

Q. Did they tell you that PCBs or PCB-containing products could cause chloracne?

A. No.

Q. Did they, during this training program, did they tell you that PCBs might be hazardous to the environment?

A. No.

Q. Did they tell you that PCBs might tend to persist in the environment?

A. No.

Q. Did they tell you to advise your customers of PCB-containing compounds, to take care not to let the PCBs escape into the environment?

A. No.

WATER_PCB-SD0000028376

Q. Where did you work after that training program?

A. I was sent to Indianapolis as a resident salesman, working for a district office in St. Louis.

Q. And what products did you sell at that time?

A. Fine chemicals, plasticizers, resins, functional fluids, intermediates. I think that's it.

Q. Did you sell Pydraul?

A. Yes.

Q. And at that time did the plasticizers contain PCBs?

A. Some plasticizers contained PCBs and those were called aroclors.

Q. During this period you were selling what I'll call straight aroclors?

A. Yes.

Q. And how long were you in Indianapolis?

A. Four years.

Q. Until?

A. 1964, when I was transferred to New York City.

WATER_PCB-SD0000028377

Q. While you were in Indianapolis, to whom did you report? Who was your supervisor?

A. Dave Evans in St. Louis, and then for about the last year and a half, I reported also to a man named Jim Feeks in Cincinnati.

Q. How do you spell Feeks?

A. F-e-e-k-s.

Q. And did anyone report to you?

A. No.

Q. When you were in Indianapolis was one of your customers Outboard Marine?

A. No.

Q. Was one of your customers a company called Johnson, or Johnson Controls, or --

A. No.

Q. And what was your position in New York?

A. Plasticizer industry specialist. Great title.

Q. At that position, were people reporting to you?

A. No.

WATER_PCB-SD0000028378

Q. And who was your supervisor? Whom did you report to there?

A. A fellow named John Lonsberg, L-o-n-s-b-e-r-g.

Q. Was Mr. Lonsberg in New York?

A. Yes.

Q. And how long were you in New York?

A. About two and a half years. Came to St. Louis sometime in early '67.

Q. And what was your position then?

A. Field sales manager for the Functional Fluids Group.

Q. And who was reporting to you then?

A. Approximately ten salesmen.

Q. Do you remember any names?

A. Oh, boy. Sure. Do you want to know them?

Q. As many as you can remember.

A. Oh, my goodness.

A fella named Don Pogue, Don Ericksen, Bob Daminai, George Fague, I think you'd have to show me a list.

MR. KASHANI: Let's go off the record.

(Discussion off the record.)

WATER_PCB-SD0000028379

MR. KASHANI: Back on the record.

BY MR. KASHANI:

Q. I've handed you a list of names --

A. '92. Oh, boy.

Q. I've handed you a list of names of people, some of whom were involved or may have been involved with Monsanto during this period. I'm wondering if you see, recognize any of your salesmen on that list.

A. At that point in time that you are talking about, no one on this list was a salesman for me.

Q. And what period was that?

A. 1967, 1968.

Q. During that period of time, was one of the products your group was selling Turbinol?

A. We knew it as MCS 153 at that time.

Q. And who was the customer?

A. Texas Eastern.

Q. Do you recall who, which or who was, which salesman or which people at Monsanto were responsible for dealing with Texas Eastern and selling Turbinol to Texas

WATER_PCB-SD0000028380

Eastern? I'm sorry, MCS 153?

A. I don't remember the salesman that was located in Houston at the time. However, Turbinol was, or MCS 153 was such a unique product, it was primarily handled by people from the Product Group.

Q. What was the Product Group?

A. The Functional Fluids Group.

Q. Do you mean handled out of St. Louis?

A. Yes. There was a salesman calling on the account, but primary work was done, really, from St. Louis.

Q. Does the name Charles Williams ring a bell in this regard?

A. No.

Q. Or in any regard?

A. No.

Q. What about Dan Stegen?

A. Yes.

Q. Do you recall when he came on board as a salesman in this group, in the Functional Fluids Group?

A. Don Stegen became a part of our group in probably 1972, when the Functional

WATER_PCB-SD0000028381

Fluids Group was merged with the Paper Chemicals Group. Don Stegen had been primarily a paper chemical salesman.

Q. Going back to the period 1967 to '68, did Roger Hatton have some responsibility --

A. Yes.

Q. -- for dealing with Texas Eastern?

A. Yes.

Q. Do you recall who worked with Roger Hatton at that time?

A. From a Product Group point of view, Roger Hatton was the primary contact to Texas Eastern.

Q. Do you recall if there was anyone else who had responsibility for the Texas Eastern account and during '67 or '68, other than Roger Hatton?

A. A number of people were involved, but to say have primary responsibility, it was mainly Dr. Hatton.

Q. Do you remember any of the other people who were involved, the names?

A. I was at Texas Eastern. I visited Texas Eastern with Larry Bradford and Curt

WATER_PCB-SD0000028382

Early, sometime in 1967.

Q. Who was Mr. Early?

A. He was in charge of product development for the Fluids Group.

Q. How do you spell that?

A. E-a-r-l-y.

Q. Oh, one thing I should have said earlier. The heating in this room is somewhat erratic, so if you are ever feeling uncomfortable or want to take a break, just tell me, and is there any reason today why you can't take this deposition in terms of are you feeling all right today and there's no --

A. I'm fine.

Q. So at any time you have a problem with the temperature or need to take a break, just tell me.

Do you know if Mr. Early is still alive?

A. I don't know.

Q. Do you know where he might be living or where he is?

A. I don't know.

Q. Do you know if he's still with

WATER_PCB-SD0000028383

Monsanto?

A. I don't know.

Q. And what was, what were your job duties during this period 1967 to '68?

A. I was responsible for the field salesmen on a functional basis to give them business direction. They were basically still responsible to the district managers in the various locations where they were centered.

Q. Do you recall who was the district manager in charge of Texas Eastern?

A. In the Houston office, it was a man named Dave Bechtold. He was the district manager down there, but most of those district managers really didn't relate to the fluids area. It was something they didn't necessarily deal with.

Q. Do you remember if Mr. Bechtold had anything to do with Turbinol?

A. I doubt it.

Q. Let's move forward. Did you have a change in job description or change in job around 1968 or sometime after?

A. Somewhere in '68-'69, my job

WATER_PCB-SD0000028384

changed to be industry manager for the Industrial Fluids Group.

Q. What were your job duties as industry manager?

A. I was responsible for seven salesmen in the product development area for the Industrial Fluids Group, so I had both Product Group responsibility and field sales responsibility.

Q. What were the duties of the Product Group?

A. To assist the salesmen, create literature, write up marketing plans.

Q. Were they involved with product development?

A. The Product Group, no.

Q. Were you involved with product development?

A. Yes.

Q. And what was your position after that?

A. We were merged with the Paper Chemicals Group and I went back as a field sales manager for the merged group.

Q. And do you recall when that was?

WATER_PCB-SD0000028385

A. Yeah, I would say sometime in late '71, early '72.

Q. Going back to the period from about 1969 to 1971, when you were the industry manager, who would you report to during that period? Who were your supervisors?

A. I reported to Don Olson and then later to Tom Gossage.

Q. Do you know if Mr. Olson is still alive?

A. No, I don't.

Q. What about Mr. Gossage?

A. I don't know.

Q. Do you know where either might be right now?

A. No, I don't.

Q. Do you know if they're still with Monsanto?

A. I don't know.

Q. And did you have a change in job in about '71-'72?

A. Well that's when I said I went to the field sales manager for the merged group.

Q. And who was reporting to you after

WATER_PCB-SD0000028386

that point?

A. There were a number of regional managers, I believe there was three regional managers and now the sales group was probably up to about 20, but it involved paper chemicals, as well as functional fluids.

Q. Do you recall the individuals who were involved with functional fluids?

A. Oh, it's a huge list.

Q. Does it include Larry Bradford?

A. Yes.

Q. Lou Stark?

A. Lou Stark was in Research.

Q. I assume it still included Roger Hatton?

A. Roger Hatton at that time did not report to me, he reported to Frank Langenfeld and was primarily concerned with the aviation side of the business.

Q. Was this in the period 1971-72?

A. A good part of that time, even when from 1967 on, Roger Hatton had more involvement with the aviation side of the business than he did with the industrial side.

WATER_PCB-SD0000028387

Q. And what products were in the aviation side?

A. Skydraul.

Q. Was that a PCB-containing product?

A. No.

Q. And where did you go after being industry manager? I'm sorry, after being in charge of the merged group or working with the merged group?

A. Then I was appointed to be director of product development for the merged group.

Q. Do you recall when that was?

A. Sometime in '72, and I left the company in '73.

Q. Where did you go from Monsanto?

A. I went to a company called Davies-Young in St. Louis.

Q. And what does Davies-Young do?

A. They were primarily in the maintenance chemical area.

Q. Did you ever work for Monsanto again?

A. No.

Q. And why did you leave Monsanto?

WATER_PCB-SD0000028388

A. Personal reasons.

Q. Was that a personal decision?

A. Yes.

Q. What position did you hold when you testified before the grand jury? Were you director of product development then?

A. No. I would have been the industry manager for the Industrial Fluids Group.

Q. Earlier you described Turbinol as a unique product. What did you mean by that?

A. It was, basically, for one customer, we had developed the product for them. It was the only customer we had in the entire world.

Q. You mean for Turbinol.

A. For Turbinol.

Q. Do you know anything about how Turbinol was developed or MCS 153? Oh, let me withdraw that.

Is MCS 153 the same as Turbinol or Turbinol 153?

A. Yes.

Q. Do you recall how MCS 153 or Turbinol 153 -- and for the record, I'll use

WATER_PCB-SD0000028389

the terms more or less interchangeably -- was developed?

A. It was developed jointly with Texas Eastern.

Q. Do you recall when that development began?

A. Before I joined the company. Probably back in 1957, '56. I don't know the exact time frame.

MR. KASHANI: Let's go off the record for a second.

(Discussion off the record.)

(Recess)

MR. KASHANI: Back on the record.

BY MR. KASHANI:

Q. Mr. Johnson, have you, without revealing the contents of any discussions with counsel or privileged communications, have you discussed this case and the deposition you are giving today with anyone else?

A. No.

Q. When and how did you first become aware that you would be giving this deposition?

WATER_PCB-SD0000028390

A. I received a letter from Monsanto.

Q. Who sent the letter or who signed it?

A. Josephine Niblock.

Q. And have you had any discussions with anyone from Monsanto about this deposition?

MR. ZIMMER: Other than counsel of Monsanto?

MR. KASHANI: Yes.

A. No.

BY MR. KASHANI:

Q. Without revealing the contents of any communications, have you met with either Monsanto attorneys, or Mr. Zimmer, or someone from Mr. Zimmer's firms about this deposition?

A. Yes.

Q. When did that meeting take place?

A. Yesterday.

Q. Were there any other meetings with counsel?

MR. ZIMMER: Let's not get into that. You don't need to answer that.

BY MR. KASHANI:

WATER_PCB-SD0000028391

Q. Approximately how long did you meet yesterday?

MR. ZIMMER: Same instruction. It's not important, Counsel. It's privileged. Whether we met for a hundred hours yesterday or the day before, or any other time is really not important.

BY MR. KASHANI:

Q. Were you shown any documents when you met with Mr. Zimmer?

MR. ZIMMER: Same, same is also true of that. What we showed him, how much we showed him, et cetera, it's all privileged.

MR. KASHANI: Well, I'll differ on that. I mean, documents shown to a witness are discoverable under the rules of evidence, and I'm not asking to know what those documents were, I'm simply asking whether Mr. Johnson was shown any documents.

MR. ZIMMER: What an attorney shows his client or a client shows his attorney is sacrosanct, so what, how many, or whether it happened at all, we're not going to be talking about.

WATER_PCB-SD0000028392

BY MR. KASHANI:

Q. Mr. Johnson, are you not answering my questions because Mr. Zimmer has instructed you not to answer?

A. Based on what he said right now, yes.

MR. KASHANI: Let's go on.

BY MR. KASHANI:

Q. Do you recall who was involved in the development of Turbinol at either the Texas Eastern end or the Monsanto end?

A. A fellow named James Farmer, Texas Eastern.

Q. Could that have been Earl Farmer?

A. Earl Farmer, yeah, and Dr. Hatton.

Q. Anyone else?

A. Probably someone in research, but I don't know the names.

Q. Would that have been Lou Stark?

A. I don't know. I don't know if Lou was there at that time.

Q. And do you know how the product was developed or how the product came -- how it was developed?

A. To my knowledge, Texas Eastern

WATER_PCB-SD0000028393

came to Monsanto, wanting to develop a fire-resistant turbine fluid.

Q. I'll just show you two exhibits.

MR. KASHANI: Let's mark these Exhibits, 72 will be the manual and 73 will be the short document, and I'm numbering from Roger Hatton's deposition, is why we're up at 72 and 73.

(Plaintiff's Deposition Exhibits 72 and 73 marked for identification.)

BY MR. KASHANI:

Q. Now, in showing you these documents, I don't mean to suggest that you saw these documents at the time, or that you wrote them or that you even received a copy, I'm just going to ask you to read the second page of Exhibit 72, and all of Exhibit 73 is just one page, and see if that refreshes your recollection about anyone else who might have been involved in the development of Turbinol.

(Witness peruses said documents)

A. Yeah.

BY MR. KASHANI:

WATER_PCB-SD0000028394

Q. Do you recall anyone else who was involved in the development of Turbinol?

A. No, I don't.

Q. What about document, Exhibit 73?

A. Yes. What about it?

Q. After having read that, do you recall anyone else who might have been involved in the development of Turbinol?

A. No.

Q. Do you recall a fella named O. V. Fletcher, "O" period "V" period Fletcher?

A. Yes.

Q. Was he involved in the development of Turbinol?

A. Not to my knowledge. He was the purchasing agent. And to my knowledge, there was no purchasing agent for, for TransTexas or Transwestern Pipeline.

Q. You've gotten ahead of me.

A. Okay.

Q. Exhibit 73 has, in a previous deposition, been stipulated to be a Monsanto business record and it refers to a call on Texas Eastern Transmission Corporation.

WATER_PCB-SD0000028395

A. Yes.

Q. You just mentioned Transwestern Pipeline.

A. Right.

Q. At any time prior to this lawsuit, were you aware that there was a company called Transwestern Pipeline?

A. I was not.

Q. When you worked at Monsanto, did you ever hear about a company called Transwestern Pipeline?

A. No.

Q. Do you know if Monsanto ever dealt with anyone from Transwestern Pipeline?

A. Not to my knowledge.

Q. Do you know today the position of Transwestern Pipeline compared to Texas Eastern?

A. No, I do not.

Q. So other than what you may have heard during this case and in preparation for this deposition, does Transwestern Pipeline mean anything to you?

A. No, it does not.

Q. What did you mean when you said

there was no purchasing agent for Transwestern?

A. To my knowledge, we dealt, in this case, with Mr. Fletcher, who was director of purchasing for Texas Eastern Transmission Corporation, and he issued the purchasing, the purchase orders. We dealt with him on pricing or anything relating to Turbinol 153. Assuming that everything was going into the structure of Texas Eastern Transmission Corporation.

Q. Do you recall how the Turbinol was shipped?

A. In drums.

Q. Was it shipped to a central Texas Eastern location or to different sites?

A. I don't remember specifically.

MR. ZIMMER: I was just going to ask if you had a particular point in mind but if he doesn't remember he doesn't remember.

BY MR. KASHANI:

Q. I'm going to read the second sentence of Exhibit 73, that paragraph where it says, "Harrison gave us a good bit of Texas Eastern Transmission history, while

WATER_PCB-SD0000028397

Fletcher concentrated on history of Turbinol 153 and his part in the development of the product."

Is it your testimony that so far as you are aware, Fletcher, Mr. Fletcher had no part in the development of Turbinol 153?

MR. ZIMMER: The question has been asked and answered except that it misrepresents his testimony in that he said he did not have his memory refreshed that anyone else was involved in the development. The document speaks for itself. Whether it's true or not will have to be saved for another day. He has not said definitively Mr. Fletcher had no part in the development, he said he wasn't aware of it.

THE WITNESS: Right.

MR. KASHANI: I understand.

MR. ZIMMER: I don't want to interfere, but --

BY MR. KASHANI:

Q. Let me ask a straightforward, a straight question. To your knowledge, then, did Mr. Fletcher have any role in the development of Turbinol 153?

WATER_PCB-SD0000028398

A. I don't know.

Q. When Texas Eastern approached Monsanto and requested a fire-resistant lubricant for the compressors for their turbines, did Texas Eastern specify what the lubricant should be made out of?

MR. ZIMMER: The request calls for --

A. I don't know. I wasn't with the company.

BY MR. KASHANI:

Q. Do you know if Texas Eastern specified that the lubricant should contain PCBs?

A. I don't know. I wasn't with the company at the time.

Q. When was the first time you had a meeting or contact with anyone from Texas Eastern?

A. I believe late 1967 or early 1968.

Q. Was that the visit to Texas Eastern that you spoke about earlier?

A. Yes.

Q. Where did you go?

A. Houston, and then we went to

WATER_PCB-SD0000028399

Dallas and then to El Paso, Texas. It was a three-stop trip.

Q. With whom did you meet?

A. Earl Farmer, and I don't remember the rest of the people that were in the meeting. I remembered the people I was with from Monsanto.

Q. Who was with you for Monsanto?

A. Curt Early and Larry Bradford.

Q. Do you remember meeting with Roland Moore?

A. No, I don't.

Q. Walter Woods?

A. I don't know if we saw him at that meeting. I probably saw Walter Woods at other meetings of the American Society of Lubrication Engineers.

Q. Are you a member of that society?

A. I was then. Monsanto was.

Q. Were you a member of any other technical societies?

MR. ZIMMER: Throughout his tenure at Monsanto?

MR. KASHANI: Yes.

A. Oh, God: I'd say yes.

WATER_PCB-SD0000028400

BY MR. KASHANI:

Q. What about the American Society of Testing and Materials?

A. No, I was not a member of ASTM.

Q. Do you recall the names of any other societies you were a member of?

A. But they were the, primarily like Society of Plastics Engineers, American Die Cast Society, and these were not necessarily individual memberships as much as a Monsanto membership.

Q. So Monsanto was a member but you would attend the meeting sometimes?

A. Yes.

Q. And you would attend on behalf of Monsanto?

A. Yes.

Q. Do you recall approximately how many times you met with representatives of Texas Eastern while you were at Monsanto?

A. I remember the one meeting specifically at their facility. Any other meeting would have been at some of these society meetings.

Q. Was that one meeting in 1967?

WATER_PCB-SD0000028401

A. Right.

Q. During that meeting or at any other time, did you have occasion to see or visit a Texas Eastern compressor?

A. I remember when I was working in Indiana, I made an attempt to visit a Texas Eastern facility and I couldn't get in the fence. A lock was on the gate.

Q. So you've never seen a Texas Eastern compressor?

A. Never been in there, no.

Q. During the period when you were at Monsanto, do you know if Turbinol or MCS 153, at the beginning, was being refined or changed in any way?

A. Ask that again.

MR. ZIMMER: Object to the form.

BY MR. KASHANI:

Q. Let's go back. I'm referring to a period before 1972.

A. Okay.

Q. I'm referring to the period when Turbinol, MCS 153 contained PCBs. Do you recall, was, were there any changes made in the formula in terms of adding things like

rust inhibitors or changing the viscosity slightly, things of that nature?

A. Not to my knowledge.

Q. Do you recall if Texas Eastern ever requested changes in the performance and specifications of the product?

A. Not to my knowledge.

Q. Do you know if during the development of MCS 153, do you know if Texas Eastern requested certain specific compounds to be included in the product?

A. I don't know.

Q. Do you know if Texas Eastern requested certain, only requested certain performance standards or specifications that the product was to meet, such as --

A. I don't know. I don't know the basis on which the product was developed.

Q. Do you know of your personal knowledge prior to 1972, was Texas Eastern aware that MCS 153 or Turbinol contained PCBs?

A. Yes.

Q. How were you -- how do you know that?

A. We never prevented the customer from understanding what the basis was for most of our formulations.

Q. Were your formulations confidential or secret in any way?

A. The final formulation, yes, but broadly, no.

Q. Was Texas Eastern aware of the different aroclors that went into Turbinol 153, to your knowledge?

A. They understood that chlorinated hydrocarbons were used in the system, which are PCBs.

Q. Did they know that it was polychlorinated biphenyls, or simply that it was -- that it contained chlorinated hydrocarbons?

MR. ZIMMER: He just answered that question by indicating that those terms are synonymous.

THE WITNESS: Yes.

MR. KASHANI: Well, all PCBs are chlorinated hydrocarbons but not all chlorinated hydrocarbons are PCBs.

BY MR. KASHANI:

WATER_PCB-SD0000028404

Q. My question is, did Texas Eastern know that Turbinol contained chlorinated hydrocarbons or did they know that it contained PCBs?

MR. ZIMMER: No, the question lacks foundation, because I don't accept your definition as a given. If you want to ask him a hypothetical based on that, he's given you the manner in which he used the terms.

MR. KASHANI: It's not a hypothetical, it's a matter of chemical fact.

MR. ZIMMER: Well, I guess you could ask him about that, but it's a matter of semantics, but --

BY MR. KASHANI:

Q. Do you know if Texas Eastern understood that it contained polychlorinated biphenyls?

MR. ZIMMER: Same objection. It's just not an appropriate question given his prior testimony. I mean, you can clear it up somehow or lay a foundation for the distinction that you are indicating is there.

MR. KASHANI: Let's withdraw the previous question. I'm asking a question.

WATER_PCB-SD0000028405

BY MR. KASHANI:

Q. To your knowledge, was Texas Eastern aware that Turbinol contained polychlorinated biphenyls?

A. To my knowledge, at that point in time, Texas Eastern knew the product contained Aroclor, which it was a polychlorinated biphenyl, which later became called PCBs. If you go back to the history, we were always talking about Aroclor or chlorinated hydrocarbons. You dealt with it as a trade name product.

Q. To your knowledge, was Texas Eastern aware of the chemical composition of Aroclor?

A. Yes.

Q. How do you know that?

A. Well, the literature for Aroclor showed the chemical structures, so you understood what the biphenyl looked like and where the chlorine is. I mean, it wasn't something we did. You could look in the Merck Index and you would know what chlorinated biphenyls are.

Q. But Texas Eastern understood the

product, or Texas Eastern and Monsanto referred to the product as Aroclor? This is in the period before 1972.

A. I would say back in the time of the development of the product, 1956, '57, '58, it probably was talked of as chlorinated biphenyl or Aroclor interchangeably.

Q. When, to your knowledge, when did Texas Eastern -- at approximately what date did Texas Eastern or Monsanto begin speaking of the, of the -- of Turbinol as containing PCBs using the term PCBs instead of Aroclor?

A. I don't know.

Q. Was Texas Eastern considered a large customer?

A. No. But a very worthwhile customer.

Q. Why was it worthwhile?

A. Because it was our only customer on a fire-resistant turbine fluid, and we looked upon it as a, a building entity for, maybe, future systems.

Q. Was it Monsanto's hope to sell -- this is before, let's say, 1970 -- let's say before 1972, was it Monsanto's hope to sell

Turbinol to other -- for use in other compressor applications for use by other companies that used compressors?

A. I would say prior to the Swedish work, which defined Aroclor 1254 and 1260 as a problem for the environment, there was an effort to develop products for the gas compressor, gas turbine industry, but obviously, once the 1254 and 1260 showed up in the environment, and the problems of chlorinated biphenyls, everything stopped.

Q. That was in 1968?

A. Right.

Q. By "everything stopped," do you mean that Monsanto stopped looking for new customers for Turbinol?

A. Right.

Q. And that was because of environmental concerns?

A. Right.

Q. Let's go to 1968. I'm going to go to the long deposition which may or may not be correctly dated as being given in 1982. I'm going to refer you to Pages 159 (sic) to 63 and let's mark pages 59 through 63 as

WATER_PCB-SD0000028408

Exhibit next in order.

THE WITNESS: 159?

MR. KASHANI: I'm sorry, 59 through 63.

Let's go off the record for a second.

(Plaintiff's Deposition Exhibit 74 marked for identification.)

MR. KASHANI: And since this is the first one, why don't we take the first pages, indicating what the deposition is.

(Said pages were included in Exhibit 74.)

MR. KASHANI: Okay, let's go back on the record.

BY MR. KASHANI:

Q. This testimony refers to Dr. William Richard.

A. Right.

Q. And Dr. Keller.

A. Yes.

Q. Was that Robert E. Keller?

A. I don't remember. I don't remember his first name.

WATER_PCB-SD0000028409

Q. Who was Bill Richard?

A. He was Director of Research for the Fluids Group.

Q. Was that in St. Louis?

A. Yes.

Q. And who was --

MR. KASHANI: Off the record for a second.

(Discussion off the record)

MR. KASHANI: Back on the record.

BY MR. KASHANI:

Q. And who was Dr. Keller?

A. To my knowledge, he was an analytical chemist.

Q. Did he work with Dr. Richard?

A. I don't remember if he was a part of the group or if he was a part of Monsanto's research staff. I don't know.

Q. Let me refer you to Page 61, about twelve lines down, where there was a question asked, "That was a surprise to Dr. Richard as far as you recall?" And you answered, "I don't know what would surprise Dr. Richard." Just wondering what you meant by that.

A. Oh, God.

WATER_PCB-SD0000028410

MR. ZIMMER: You mean in response to that question that calls for complete speculation? If you remember what you meant by that answer, tell him. Good God.

A. I don't.

BY MR. KASHANI:

Q. Is Dr. Richard still alive, do you know?

A. To my knowledge, he's dead.

Q. I point this out because I'm trying to get a feel for a gentleman who is no longer with us, unfortunately. Would you say that Dr. Richard was, unflappable? Is that what was meant by this?

A. No.

Q. Would you describe him as an alarmist?

A. No.

Q. Would you describe him as someone who was given to extremes?

A. No.

Q. Was he a competent researcher?

A. Yes.

Q. Would you describe him as an excellent researcher?

A. Yes.

Q. And an excellent scientist?

A. Yes.

MR. KASHANI: Let's go off the record for a second.

(Discussion off the record.)

BY MR. KASHANI:

Q. Let's turn to Page, back on the record, turn to Page 72 to 75 of the same deposition. The deposition is marked as having taken place in 1982.

A. Right.

MR. KASHANI: Let's mark it Exhibit next in order --

(Plaintiff's Deposition Exhibit 75 marked for identification.)

BY MR. KASHANI:

Q. -- and ask you to read Pages 72 to 75.

A. I think you ought to go back to 71.

Q. Sure. Let's add 71.

(Witness peruses said document.)

A. That's the man.

(Witness peruses said document.)

A. Okay.

BY MR. KASHANI:

Q. Do you recall giving the testimony reflected in Pages 71 through '75?

A. Briefly.

Q. Do you have any reason to believe that these pages do not accurately reflect your testimony?

A. To the best of my knowledge, they had to. We had a man like this.

Q. And was that testimony true and accurate?

A. Yes.

Q. This -- and I will not attempt to characterize the testimony, I'll let the transcript speak for itself, but these portions of the transcript refer to an opinion held by Dr. Richard with respect to the discontinuance or finding replacements for PCB-containing products. Do you recall if anyone or who, if anyone, shared that opinion? I'm referring to the period 1968.

MR. ZIMMER: I think that does characterize the testimony, Counsel, because the transcript speaks for itself and it refers to what Mr. Johnson's impression of Dr. Richard's opinion was, so with that caveat.

BY MR. KASHANI:

Q. I'm referring to Page 73 at the bottom, where the answer is, "I would say BIll Richard's attitude was we had to go to work and either discontinue or find a replacement product." Do you recall if, during 1968, who, if anyone, shared that opinion at Monsanto?

A. At the meeting when this came up?

Q. That'll do for a start.

MR. ZIMMER: Well, do you understand the question? He's asking you --

THE WITNESS: I understand.

MR. ZIMMER: -- do you think anyone else other than what you predicted Bill Richard's attitude was, shared that attitude.

A. I would say when Bill Richards made his presentation, everybody sat and listened and absorbed what he had to say. I

WATER_PCB-SD0000028414

don't know that anybody passed judgment to be in agreement or disagreement with Bill Richard.

BY MR. KASHANI:

Q. Do you recall if at a later time, other than that meeting, someone said that "I agree with what Bill Richard said" at the meeting or words to that effect, or voiced a similar opinion?

MR. ZIMMER: What opinion of many that he could have expressed are we talking about?

MR. KASHANI: I think the question is quite clear. I'm referring to the opinion set forth at the bottom of Page 73 of the transcript.

MR. ZIMMER: Well, once again, there's no opinion set forth other than what Mr. Johnson's impression of someone else's opinion was, but you can answer if you understand it.

A. I don't remember anyone being opposed to the recognition of Bill Richard as expressing his concern, and equally, our concern, about the PCBs at that point in time

in the higher chlorinated level, the 1254-1260.

BY MR. KASHANI:

Q. Now you just used the term "PCB in the higher chlorinated level."

A. Right.

Q. Is, do you mean by that, do you mean to make a distinction between a PCB at a higher chlorinated level and an Aroclor with a high number?

A. These are interchangeable. When we referred to something as 1254, it was basically Aroclor 1254. That was the terminology, and if we were talking about Aroclor 1242, it was Aroclor 1242. We didn't refer to it as PCB 1242 or whatever. Aroclor was really the designation we used for the raw material being used in various products. The Swedish work identified 1254 and 1260. When Dr. Richards (sic) came back, those are the two products that he identified as something we should be concerned about.

Q. Did that concern extend to higher chlorinated biphenyls which were included in lower-numbered aroclors? For example, say,

WATER_PCB-SD0000028416

five chlorine biphenyl which is included in Aroclor 1242?

MR. ZIMMER: You are asking now about Dr. Richard's concern?

MR. KASHANI: I think Mr. Johnson said that everyone was concerned.

MR. ZIMMER: No, I think they said he listened attentively to Dr. Richard, and we can have that read back if you like, but --

A. I mean, nobody was opposed to what Bill Richard was saying. Okay?

BY MR. KASHANI:

Q. I understand. What I mean is, at that time was it understood that even a lower-numbered Aroclor contains some higher chlorinated biphenyls?

MR. ZIMMER: You can only ask him what he understood.

A. I don't know.

MR. ZIMMER: Right.

A. I did not know that.

BY MR. KASHANI:

Q. When did you first become aware of that? You personally?

A. Probably in 1969, 1970.

MR. KASHANI: Thank you.

(Discussion off the record)

MR. KASHANI: Let's go back on the record.

BY MR. KASHANI:

Q. Turning to Page 75 of the last exhibit, I'm referring to the first answer that's set out.

"The thing I always told Bill Richard, and he used to write it on his bulletin board, 'There's nothing that man can create that nature cannot destroy except Aroclor,' he said, so we were hell bent out of the PCB business."

Do you recall the first time you said that phrase to Mr. Richard?

A. No, I don't.

Q. Did you coin that phrase?

A. Yes.

Q. Let's go to Pages 117 --

THE WITNESS: This is good. He's jumping.

BY MR. KASHANI:

Q. -- to 122 and that's a split

WATER_PCB-SD0000028418

sentence at the top of 117, so we better start the exhibit on Page 116 and go on to Page 123. I'm going to ask you to start at the question at the bottom of Page 116 and go to the end of the answer at the top of Page 123, if you could read that, please.

(Plaintiff's Deposition Exhibit 76 marked for identification.)

(Witness peruses said document.)

A. Okay.

MR. ZIMMER: He wants you to refer, go all the way --

MR. KASHANI: -- to 123.

THE WITNESS: Oh, my God.

(Witness peruses said document.)

THE WITNESS: Yes, sir.

MR. KASHANI: Back on the record.

BY MR. KASHANI:

Q. Do you recall taking the testimony that's set forth on pages 116 through 123 or more correctly the bottom of 116 to the top of 123?

WATER_PCB-SD0000028419

A. Yes.

Q. And was that testimony true and accurate?

A. Yes.

Q. I'm going to refer you to the -- go to the middle of 116. I'm going to ask you to read that, as well. I'm sorry, I didn't ask you to read that before.

A. Yes, I read that.

Q. As you sit here today, do you know if there was an agenda or minutes or written record of any kind of that meeting in 1968?

A. There could have been in agenda but certainly no minutes.

Q. Do you recall if anyone took notes?

A. It's possible. I don't know.

Q. Did you take notes?

A. Possible.

Q. Is there a place where you kept such notes? Notes you might take of meetings?

A. Not really.

Q. Do you have those notes today?

A. No. I have nothing.

WATER_PCB-SD0000028420

MR. ZIMMER: What notes, Counsel? He said it was possible that he took notes.

A. I have nothing.

BY MR. KASHANI:

Q. I'm going to refer you to the top of Page 122, where there's a question that reads, "In your initial discussion on the subject with Dr. Richard, was he taking the position that sooner or later various forms of aroclors would be discovered in the environment besides just 1254 and 1260," and you replied, "Yes, in the worst case, that is what he said."

In answering that question, did you understand, I mean answering the question, do you understand the question to refer to the initial meeting in 1968?

A. Yes.

Q. So this initial discussion with Dr. Richard took place in 1968?

A. At that point in time, yes.

Q. During the years that followed after 1968, did you work closely with Dr. Richard --

A. Yes.

WATER_PCB-SD0000028421

Q. -- on the Aroclor situation?

A. Yes.

Q. Did you work with any other researchers or scientists?

A. Lou Stark.

Q. Did you work with Dr. Tucker? E. Scott Tucker?

A. Not really. Scott was more of an analytical type person so he wasn't involved in the business, the day-to-day business of the development of fluids and whatever.

Q. Did you work with Dr. Wheeler, Elmer Wheeler?

A. When required.

Q. Is Dr. Wheeler a researcher or a physician?

A. To my knowledge, he was more of an industrial hygienist.

Q. Was he a physician? Did he have an M.D.?

A. I don't know.

Q. Did you work with Dr. Kelly, R. Emmet Kelly?

A. To the same degree as with Dr. Wheeler. I guess, yeah, he must have been --

I don't know if he was an M.D. or he was some other type of Ph.D.

Q. What about Dr. Jack Garrett?

A. I don't think Jack was a doctor, and I knew Jack, yes.

Q. Did you work with Dr. Garrett on the Aroclor situation?

A. Yes.

Q. Of these researchers, did you work the closest with Dr. Richard?

A. Yes, of those you've mentioned.

Q. Were there any other researchers or scientists with whom you worked closely?

A. Lou Stark.

Q. Beginning after the Swedish work was considered, did Monsanto or people at Monsanto begin researching into and considering the question of whether the lower numbered aroclors degraded completely in the environment?

A. Not to my knowledge.

Q. Are you familiar with any research done by researchers at Monsanto into whether Aroclor 1242 degraded in the environment or was biodegradable?

A. Not to my knowledge.

MR. ZIMMER: I just want to object to the foundation of the question as to whether he could have known any of these things were done, but it's up to you whether you want to pursue it or not.

MR. KASHANI: Sure. I'll lay a foundation.

BY MR. KASHANI:

Q. I'm going to show you three exhibits --

(Plaintiff's Deposition Exhibit 77, 78 and 79 marked for identification.)

(Witness peruses said documents)

A. Okay.

BY MR. KASHANI:

Q. Now referring to Exhibit 79, I notice your name, or I believe that's referring to you, at the top of the exhibit. Does that indicate that a copy of this document was sent to you at or near June 22, 1971?

A. Probably.

WATER_PCB-SD0000028424

MR. ZIMMER: Calls for speculation.

BY MR. KASHANI:

Q. Do you recall receiving this document or seeing this before?

A. No.

Q. Do you have any reason to doubt that the original of this document was not written by Lou Stark at or near June 22, 1971?

MR. ZIMMER: Lacks foundation, calls for speculation.

A. I don't know. Not to my knowledge.

BY MR. KASHANI:

Q. Did these three documents refresh your recollection that you might have that Monsanto was looking into doing research into the question of whether lower chlorinated biphenyls or lower numbered aroclors were biodegradable?

A. The question you are asking now is not the question you asked back relative to 1968. Yes, this work says that there was work going on, but it's based on the dates

you are seeing here, not the question way back where you talked about whether work was done prior to 1968.

Q. I'm sorry, let me rephrase your other question. Do you recall if -- these documents aside, do you recall when Monsanto first began looking into the question of whether the lower-numbered biphenyls or the lower-numbered aroclors were biodegradable?

A. Probably this data right here.

Q. Were you involved in that work?

A. Not directly.

Q. On responding, with your previous answer when you said these data or these dates right here are you referring to the dates of the documents, of Exhibits 77, 78 and 79?

A. Right.

MR. ZIMMER: Let's not leave out the "probably" these dates right here, Counsel, which Mr. Johnson, let me caution you again, if you don't know something, you shouldn't guess or speculate. If you have an estimate, he's entitled to get that, but listen carefully to his questions.

WATER_PCB-SD0000028426

A. I'm basically saying the dates are the indicator.

MR. ZIMMER: He asked you, for example, when did Monsanto first start looking into these matters.

A. I don't know that date.

MR. ZIMMER: That's the dilemma when you say probably these kinds of dates he's going to take that to mean this is when it started. So I'm sorry to interrupt.

BY MR. KASHANI:

Q. Do you recall any time prior to 1972 you, personally, telling anyone at Texas Eastern that -- let me strike that.

Do you recall at any time prior to 1972 you, personally, telling anyone at Texas Eastern about the Swedish work or about the problem of Aroclor 1254 and 1260 persisting in the environment?

A. Only letters that went out to them.

Q. Do you recall those letters?

A. We sent letters to all customers about Aroclor 1254 and 1260, regardless of whether they had products which used those

WATER_PCB-SD0000028427

materials. We made an effort to alert everybody out there of the data that was coming through. We were not interested in hiding anything.

Q. Were those letters concerning 1254 and 1260 sent out soon after the results of the Swedish work was discovered?

A. Yes.

Q. Would that have been around 1968?

A. Or early '69 after we had had time to confirm. The fact that the Swedes found this didn't mean that we accepted it 100 percent. That's why Dr. Richard, whatever, went over there. Then, it was a question of developing test methods or checking their test methods to convince ourselves that yes, what in fact they have found is, in fact, true. And that took a period of time. So that once we had confirmed and recognized the situation, we made every effort to communicate with the customers and the salesmen so they understood what was going on.

Q. And by 1968 or 1969, whenever this time was that these letters were sent out --

WATER_PCB-SD0000028428

MR. ZIMMER: The letters speak for themselves, Counsel. We have them; you know what the dates are.

Wait till he asks you a question.

BY MR. KASHANI:

Q. At whatever time these letters were sent, you were sufficiently confident in the results of the Swedish research and Monsanto's own research to notify the customers that the Aroclor 1254 and 1260 tend to persist in the environment? Is that correct?

A. I would agree.

Q. And was such a letter sent to Texas Eastern?

A. To the best of my knowledge, yes.

Q. And just so I understand your testimony very precisely, what you are saying is that somewhere between 1969 or 1970, a letter went from Monsanto to Texas Eastern alerting Texas Eastern that Aroclor 1254 and 1260 have been found to persist in the environment?

MR. ZIMMER: He did not specify the date that that happened, Counsel.

WATER_PCB-SD0000028429

MR. KASHANI: I'm saying approximately 1969 or 1970.

A. I don't know. I'm sure there's a letter. You've got a copy of that letter, because I remember writing the letters and I'm sure they're in the record, and as far as the dates are concerned, that's something that I can't remember exactly when these things were written, but the effort was made to contact customers either verbally or by letter to alert them to the problems of these products, and again recognize that this was all voluntary. Okay?

BY MR. KASHANI:

Q. I understand. Do you recall or are you aware that Turbinol used Aroclor 1232 and 1242?

A. I didn't know the formulation.

Q. But it's your testimony that even if a customer did not use 1254 or 1260, he still received one of those letters in 1969 or 1970 that alerted customers to the potential environmental problems of 1254 and 1260?

MR. ZIMMER: That mischaracterizes

WATER_PCB-SD0000028430

his prior testimony.

A. I believe the first letters went out to all people using 1254, 1260, or products containing those aroclors, and then sequentially, letters went out, but the salesmen were well aware of the product, salesmen were contacting customers, so they were well prepared to understand what the Swedish data had meant to us.

BY MR. KASHANI:

Q. What were the salesmen instructed to tell customers? Well, let me lay a foundational question. Were the salesmen instructed to tell customers about the problems with 1254 and 1260?

A. The salesmen were aware of the Swedish study, broadly, that some chlorinated biphenyls had been identified in the environment, and if anyone had any questions, to route that back to St. Louis.

Q. The instructions to salesmen were to refer inquiries about environmental hazards or problems with PCBs to St. Louis?

A. Right.

Q. Were the salesmen instructed not

to attempt to answer those questions themselves?

A. The salesmen were not experts. The experts were in St. Louis.

Q. I understand, and for that reason or for that and other reasons, were the salesmen instructed not to attempt to answer those questions, themselves?

MR. ZIMMER: Which questions are we talking about, Counsel?

MR. KASHANI: Questions concerning environmental or other problems with PCBs: The environmental hazards, environmental problems with PCBs, let's say, or aroclors.

A. The suggestion was that they route the questions back to St. Louis.

BY MR. KASHANI:

Q. Let me show you the exhibit next in order.

(Plaintiff's Deposition Exhibit 80 marked for identification.)

MR. KASHANI: Off the record.

(Discussion off the record.)

(Witness peruses said

WATER_PCB-SD0000028432

document.)

A. Okay.

BY MR. KASHANI:

Q. Back on the record. Referring to the second paragraph on the first page of Exhibit 80, where it reads, quote, "I gave Klassen, K-l-a-s-s-e-n, the general party line concerning PCB, its industrial uses and its analysis." Unquote. Do you know what Dr. Garrett, who apparently wrote this document, might have been referring to by "the general party line"?

A. I don't know.

Q. Was there, at the time of this document, February 19, 1970, or thereabouts, was there a Monsanto party line or general party line on PCBs?

A. Mr. Garrett was in the medical department. He wasn't in our group, so if he thinks that there was a party line, I don't know what it was. We didn't have a party line.

Q. Going to the third paragraph -- the paragraph speaks for itself, among the things, it refers to a request from Carl Clay

WATER_PCB-SD0000028433

to discuss the toxicity of Turbinol 153 with Texas Eastern Gas Transmission Corp.

A. Right.

Q. Do you recall any request from Carl Clay to discuss the toxicity of Turbinol 153 with Texas Eastern?

A. No, I don't but if he had a request on the subject of that type he would have gone to Jack Garrett or Dr. Kelly, or Elmer Wheeler.

Q. Do you recall any request from any of the salesmen coming to you or anyone else of which you are aware in Monsanto to discuss either the toxicity of Turbinol 153 or possible environmental hazards associated with Turbinol 153?

A. No. That would all go to the medical department.

Q. What about questions or requests to discuss the environmental, possible environmental hazards with Turbinol 153?

A. When Bill Papageorge came on site, that's where most of it was routed to, to Bill Papageorge or Jack Garrett and they handled those questions.

WATER_PCB-SD0000028434

Q. Do you remember when Mr. Papageorge came on site, as you say?

A. No, I don't. No.

Q. Is it correct to say, then, that after Mr. Papageorge -- I don't want to mischaracterize his position, but I'll use the same words you used. After Mr. Papageorge came on site, questions of this kind, questions about the environmental hazards, possible environmental hazards with PCB-containing products were routed to Mr. Papageorge?

A. Correct.

Q. And what do you mean by Mr. Papageorge is coming on site?

A. He was transferred from a plant site to St. Louis for this position.

Q. What was that position?

A. I don't know what it was defined. I don't know what the title was but I know that anything that we had a responsibility or involvement in environmental issues were routed to Bill Papageorge.

Q. Was his title some kind of PCB coordinator?

WATER_PCB-SD0000028435

A. Don't know. Don't remember.

Q. Let's refer to the last sentence of Exhibit 80; where Dr. Garrett writes, "We cannot give this information to the customer without revealing that it is principally a chlorinated organic."

A. He didn't know what he was talking about.

MR. ZIMMER: Let's wait till he asks you a question.

MR. KASHANI: That's good enough for me.

MR. ZIMMER: Is there a question?

MR. KASHANI: I think it's been answered.

BY MR. KASHANI:

Q. By that statement do you mean that Texas -- that you -- your understanding is that Texas Eastern already knew that the product was a chlorinated organic?

A. They already knew it was a chlorinated biphenyl.

Q. What about the preceding sentence, quote, "In the case of the Texas Eastern request, they want to know what the

WATER_PCB-SD0000028436

decomposition products of Turbinol 153 would be." Having read that, and I'm not assigning anything to that statement, I'm going to ask whether, to your knowledge, Texas Eastern was aware as of the time of this letter of February 19, 1970, what the decomposition products of Turbinol 153 would be.

A. I don't know.

Q. Approximately how long did it take for a request for information from a customer concerning environmental problems, possible environmental problems with PCBs, how long did it take for such a request to be answered by Monsanto?

A. The salesman could give the customer Bill Papageorge's phone number, so if Bill Papageorge was in and available, he could answer the questions immediately. The same thing was true for Jack Garrett or Elmer wheeler in the medical department. I know they would like to talk to people who they can converse with on an equal level but if somebody has some questions, the salesmen were free to give out the phone numbers and say, "Hey, they could even use their own

WATER_PCB-SD0000028437

credit card and make a call to Bill Papageorge and let the customer talk directly to them.

Q. Was there a preference at Monsanto to have questions like that answered in writing or not in writing?

A. If the customer requested it, that probably would be the way to do it, but if the customer was interested in discussing the whole situation, it could be discussed verbally on the telephone.

MR. KASHANI: Go off the record.

(Discussion off the record.)

BY MR. KASHANI:

Q. Do you recall the development of a product called Aroclor 1242-B, that's B as boy, or also known as MCS 1016?

A. No, I don't.

MR. KASHANI: I have a few documents, here. Go off the record.

(Discussion off the record.)

(Plaintiff's Deposition Exhibit 81, 82, 83 and 84 marked for identification.)

(Witness peruses said

documents)

(Discussion off the record.)

THE WITNESS: Yes, sir.

BY MR. KASHANI:

Q. After having looked at these exhibits, I believe, 81 through 84 --

A. Right.

Q. Does that refresh any recollection about MCS 1016?

A. Yes.

Q. What was MCS 1016?

A. As I look at this, it was more finely distilled 1242. That's all I can conclude.

MR. ZIMMER: Right. The only problem is he's not asking you to interpret these documents. His question was, do these papers refresh your recollection about the development of that product.

A. Yes.

MR. ZIMMER: So he doesn't want you to conclude anything from these, but rather, tell him what you remember.

THE WITNESS: Right.

BY MR. KASHANI:

WATER_PCB-SD0000028439

Q. By more distilled, do you mean that the higher chlorinated biphenyls -- I'm sorry, let me take that back. By "more distilled," do you mean that the proportion or amount of higher chlorinated biphenyls was reduced?

A. That's what distillation is.

Q. So MCS -- Let me ask a foundation question. Is MCS 1016 the same as Aroclor 1242-B?

A. That's what this said.

MR. ZIMMER: Again, he's asking you if you know that, not what those documents say.

THE WITNESS: No.

MR. ZIMMER: So don't refer to them when you answer those questions.

A. (Continuing) My answer is, I don't remember that data except for what you have presented.

MR. KASHANI: That's fine.

BY MR. KASHANI:

Q. Could MCS 1016 be used as a substitute for Aroclor 1242?

MR. ZIMMER: The question lacks

WATER_PCB-SD0000028440

foundation, given his testimony up to this point.

You can answer.

A. I don't know.

BY MR. KASHANI:

Q. Let's take as Exhibit next in order, a transcript of testimony also given in the Outboard Marine case. This is a transcript whose first page is labeled September 20, 1979, which I understand may or may not be correct, but that's what the label is.

THE WITNESS: Right.

MR. KASHANI: The exhibit shall consist of the first page, the cover page, and Pages 12 and 13.

(Plaintiff's Deposition Exhibit 85 marked for identification.)

(Witness peruses said document.)

THE WITNESS: Yes.

BY MR. KASHANI:

Q. Do you recall giving the testimony that's been transcribed in those pages?

WATER_PCB-SD0000028441

A. Yes.

Q. Is that testimony, I mean was that testimony true and accurate?

A. Yes.

Q. Referring to the bottom of Page 12, it refers, or read the answer." Yes, we started to reformulate to produce a new product which was based on chlorinated terphenyl, and a lower chlorine content biphenyl, which would greatly minimize or hopefully eliminate the higher chlorinated material, chlorinated biphenyl, that was showing up in the environment. And that product was called "Pydraul A-200 B." Do you recall Pydraul A-200 B?

A. Yes.

Q. What was Pydraul A-200 B?

A. A combination of lower chlorinated biphenyl and terphenyls just as stated.

Q. Could the lower chlorine content biphenyl have -- I'm sorry, was the lower chlorine content biphenyl referred to here MCS 1016?

A. I don't know.

Q. What was the reason for using a

chlorinated terphenyl?

A. The chlorinated terphenyl was not showing up in the environment.

Q. Was it perceived to be environmentally safer?

A. It wasn't showing up in the environment.

Q. Does that make it safer than aroclors that -- I'm sorry does that make the chlorinated terphenyl environmentally safer than aroclors that were showing up in the environment?

A. I can't answer that.

Q. Did chlorinated terphenyl have similar properties to a chlorinated biphenyl?

A. Similar, yes.

Q. Such that a chlorinated terphenyl could be used in some situations as a substitute for a chlorinated biphenyl in a product?

MR. ZIMMER: What chlorinated terphenyl are we talking about, Counsel, before we get any more vague and ambiguous?

MR. KASHANI: Did you understand the question?

WATER_PCB-SD0000028443

MR. ZIMMER: I didn't understand the question, so by virtue of that, he's not going to answer it until we both understand it. Are we talking about the one that's referenced here that was reformulated in Pydraul A-200 B?

MR. KASHANI: Well, without getting into chemical terminology, were there, for a given biphenyl, could there be a terphenyl substitute for that biphenyl?

MR. ZIMMER: The question is vague and ambiguous, calls for speculation.

A. Not directly.

BY MR. KASHANI:

Q. Indirectly?

A. No. Not indirectly, either.

Q. Then how was this substitution arranged for Pydraul A-200 B?

A. It was a matter of reformulation.

Q. What do you mean by reformulation?

A. Well, every product is a formulation, of the products we're talking about. When you get into the Pydraul area or you get into MCS 153, they are not pure chemicals. They're a combination of a great

WATER_PCB-SD0000028444

many things, and how you put this together, including the rust inhibitors, defoamers and whatever, provides you with a given formulation. That's the talent Monsanto had, was to take these various things and understand how they would work and put them together to provide a fire-resistant hydraulic fluid.

Q. So in the proper formulation, a chlorinated terphenyl could be used as a substitute for a chlorinated biphenyl?

MR. ZIMMER: That is not what he said at all, Counsel.

A. No. I would answer you no.

BY MR. KASHANI:

Q. Let's go about this a different way. How was it that you were able to replace Pydraul A 200 with Pydraul A-200 B by using a chlorinated terphenyl instead of a chlorinated biphenyl?

A. Because we recognized the properties of the chlorinated terphenyl and could formulate it to still end up with a formulation that would be a fire resistant hydraulic fluid.

WATER_PCB-SD0000028445

Q. Was this a question of experimentation and development?

A. Yes.

Q. So it's not something that -- it's something that required some time and effort in the laboratory?

A. Lots. Lots of effort.

Q. Is it something that -- well, I'll take that back.

Did Monsanto go to that time and effort because they believed the final result would have fewer or no biphenyls that would persist in the environment? I guess my question is, why did Monsanto go to all this time and effort?

A. To reduce the amount of higher chlorinated biphenyls in our product so that ultimately, we could get to the production of a phosphate ester.

Q. Now, phosphate ester, what is a phosphate ester?

A. Another form of a fire resistant hydraulic fluid.

Q. So phosphate ester have no PCBs, or no chlorinated biphenyls?

WATER_PCB-SD0000028446

A. A phosphate ester is a pure compound, so it's either like tricresylphosphate or some other type phosphate. They are, in themselves, a product. I mean, aspirin is not a pure product, right?

Q. Right.

A. Okay. That's what our Pydraul formulations were, not a pure product.

Q. But a phosphate ester would be a pure product?

A. It would be then formulated into a fire resistant hydraulic fluid.

Q. And the final fire resistant hydraulic fluid which utilized or was formulated with a phosphate ester, would that contain biphenyls, polychlorinated biphenyls?

MR. ZIMMER: At what point in time?

MR. MR. ZIMMER: When we're at the end of the process that you mentioned earlier.

MR. ZIMMER: Well, when is that?

MR. KASHANI: I don't know. Mr. Johnson referred to the use of the terphenyl

WATER_PCB-SD0000028447

as part of a process that would eventually result in a phosphate ester. Now, when we result in the phosphate ester, would there be any polychlorinated biphenyls in that substance, in that product?

A. No, there would not.

Q. And was that the goal?

A. Yes.

MR. KASHANI: Let's go off the record.

(Discussion off the record.)

MR. KASHANI: I'll hand you the next exhibit, Exhibit 86.

(Plaintiff's Deposition Exhibit 86 marked for identification.)

(Witness peruses said document.)

THE WITNESS: Okay.

BY MR. KASHANI:

Q. Do you know what reference to FDA, I believe that's either Section, or a -- I believe that's Section 460. Do you know what that reference is in the handwritten part of this exhibit?

WATER_PCB-SD0000028448

A. I'll clarify it for you. It's 5460. That's an Araclor 5460 he's referring to. Do I know what this is about? No.

Q. Why does the say FDA 5460?

A. That would be Food and Drug Administration, but I don't know the significance of it. I don't know.

Q. Okay. Let me refer you to the first sentence.

A. Right.

Q. Where it says, "F. Fluids will replace chlorinated biphenyls with chlorinated terphenyls to avoid environmental contamination." Unquote.

A. Right.

Q. Was that a correct statement as of the date made, June 19, 1970?

A. It's too broad a statement.

Q. How is it too broad?

A. Because some chlorinated biphenyls would be used, but a large percentage would be replaced by the chlorinated terphenyls.

Q. Okay, thank you.

A. And there's --

Q. I'm sorry?

WATER_PCB-SD0000028449

A. There's a balance, here, and that's what he's really referring to.

Q. A balance?

A. (Nods head in affirmative manner).

Q. A balance of what?

A. You have to go back to the point of when you talk about chlorinated biphenyls, it is not a specific product. It is a family of products, and when he says to replace the product, he doesn't necessarily mean replacing all chlorinated biphenyls. He refers to replacing portions of what we understand the chemistry of chlorinated biphenyls.

Q. Does he mean to replace where possible and where feasible, where if possible and if feasible -- well, let me take that back. He means to replace where possible a chlorinated biphenyl with a chlorinated terphenyl?

MR. ZIMMER: Well --

A. If you could make the formulation work.

BY MR. KASHANI:

Q. And in the case of Pydraul

WATER_PCB-SD0000028450

A-200 B, the formulation did work?

A. It was used by Johnson Motors.

Q. Is the portion of the statement that -- in the first sentence where it says, "Replace chlorinated biphenyls with chlorinated terphenyls to avoid environmental contamination," is that last portion correct? In other words, if it were possible in a product, would replacement of chlorinated biphenyls with chlorinated terphenyls avoid or for that matter, reduce environmental contamination?

A. If you were using and replacing or you were replacing the higher chlorinated biphenyls, yes, because these were the ones that had been identified in the environment.

Q. Thank you. In dealing with PCBs and aroclors after 1968, did Monsanto ever make a distinction between opened and closed applications?

A. For a short period of time.

Q. Do you recall approximately when that period was?

A. No.

Q. What was the distinction between

WATER_PCB-SD0000028451

an opened and a closed application?

MR. ZIMMER: Do you have a product in mind? You said, "These PCBs."

MR. KASHANI: I'm referring to the application, rather than the product, and the customer, basically.

MR. ZIMMER: Okay, do you have an application in mind?

MR. KASHANI: Not specifically, I'm just wondering if there was a general distinction between opened and closed applications. Well, we know that there was. What was the general distinction between opened and closed applications?

A. I think just as you've defined it. A closed system would be, in essence, a closed system. Once the product was put in it, it would stay in it.

Q. Does a closed system refer to a system where the product would not escape into the environment, during normal use?

A. Right.

Q. Would a sealed capacitor be a closed system?

A. As you've defined it, yes.

WATER_PCB-SD0000028452

Q. As Monsanto understood it, would it be a closed system? During the time when Monsanto was making the distinction between closed and open systems?

MR. ZIMMER: Okay, let's ask him for his understanding, not Monsanto's, so we don't get into that problem.

A. If you put a capacitor on this table and it is my capacitor and it never leaves my hand, it is a closed system. Do you understand my distinction?

BY MR. KASHANI:

Q. You mean, if it rolls out of your hand on to the floor it may not be closed?

A. I don't know what happens to it. Then it could be an open system.

Q. Depending on whether it might spring a leak, for example?

A. Or somebody runs over it.

MR. KASHANI: Let me show you the next exhibit, Exhibit 87.

(Plaintiff's Deposition Exhibit 87 marked for identification.)

(Witness peruses said

WATER_PCB-SD0000028453

document.)

A. Okay.

BY MR. KASHANI:

Q. Okay. Referring to the last, I guess dash or something, the second-to-last paragraph where it says, "Terminate sales of all nonbiodegradable chlorinated biphenyls to various noncontrollable end uses," do you know what what was meant, here, by "noncontrollable end use"?

MR. ZIMMER: You are talking about a document that he didn't author.

MR. KASHANI: I understand.

MR. ZIMMER: So just so that's clear for the record, nor is he copied on it.

Do you know what the author meant, here, is the question.

A. No.

BY MR. KASHANI:

Q. Did, you during the period 1968 to 1972, have occasion to use the term or consider the term "noncontrollable end use"?

A. Could have.

Q. Do you know what it could refer to or what it referred to?

WATER_PCB-SD0000028454

MR. ZIMMER: Don't speculate about that. If you know what it referred to, you can answer that, not what it could have referred to.

A. I really don't know what they are implying it to be, here. Let's face it, I didn't put this together and I don't know what they mean by it.

BY MR. KASHANI:

Q. This document is labeled, "Minutes of meeting of the Corporate Management Committee." Who sat on the Corporate Management Committee?

A. Well, here, you've got the names up here.

MR. ZIMMER: No, that indicates who's present, so listen to his question carefully.

A. I don't know.

BY MR. KASHANI:

Q. Were any members, do you know if any members of the board of directors were on the Corporate Management Committee?

A. I don't know.

Q. Do you know how often the

WATER_PCB-SD0000028455

Corporate Management Committee met?

A. I don't know.

Q. Did you ever attend a meeting of the Corporate Management Committee?

A. No. I wasn't on their list. They didn't even call me on the phone.

MR. ZIMMER: Is this a good spot to break?

MR. KASHANI: Sure.

MR. ZIMMER: Why don't we do that.

(Luncheon recess from 12:30 to 1:30.)

MR. KASHANI: Okay, let's go back on the record.

BY MR. KASHANI:

Q. There's some housekeeping. Can we put in as the exhibit next in order the notice of deposition, and this is identical to the one that was served upon Mr. Johnson.

(Plaintiff's Deposition Exhibit 88 marked for identification.)

BY MR. KASHANI:

Q. Mr. Johnson, when were you born?

A. April 8th, 1932.

WATER_PCB-SD0000028456

Q. And what's your current home address?

A. 601 Huntington Commons Road, Mt. Prospect, Illinois, 60056.

Q. And are you currently employed?

A. No. I'm retired.

Q. Do you do any consulting or similar work at this time?

A. No.

Q. Earlier, you had mentioned some letters that went out regarding notifying --

THE WITNESS: I knew he'd find one.

MR. KASHANI: Let's go off the record for a second.

(Discussion off the record)

BY MR. KASHANI:

Q. Okay, earlier, you had mentioned some letters that went out to customers concerning the problems with Aroclor 1254 and 1260. Let me show you what was previously entered as Exhibit 23 to the deposition of Roger Hatton -- I'm sorry, I don't have copies -- and ask you to take a look at that.

A. First, I'd like to see who wrote

the goddamn thing. Okay.

(Witness peruses said document.)

THE WITNESS: He's verbose.

(Witness continues to peruse said document.)

THE WITNESS: Okay.

BY MR. KASHANI:

Q. Was this letter, this exhibit, a letter of the type to which you were referring?

A. Right.

Q. Were there letters of a different type, as well?

MR. ZIMMER: How do you mean, different type?

MR. KASHANI: Letters which had substantively different information in them other than going to simply a different address.

MR. ZIMMER: Well, any letter that isn't this letter is going to have substantively different information in it. I'm not quite sure what you are -- I'm not trying to be obstructive, I'm just, I don't

WATER_PCB-SD0000028458

understand.

MR. KASHANI: Well, let's be specific.

BY MR. KASHANI:

Q. This letter, down near the bottom of the first page, says that certain products, including Turbinol 153, do not contain Aroclors 1254 or 1260.

A. Right.

Q. Do you recall if any letters went out without that statement? Letters of this type stating the other information in this letter without that information?

MR. ZIMMER: Do you understand? Letters without that paragraph.

MR. KASHANI: Without the paragraph referring to Turbinol 153.

A. See, I think, you know, we're caught in a very serious bind, here.

MR. ZIMMER: Well, that may be but his question is, do you know if letters without paragraph number 1, there, that mentions Turbinol 153, were sent.

A. I don't like the question.

BY MR. KASHANI:

WATER_PCB-SD0000028459

Q. I'm sorry?

A. I don't like the question. This is at the point where I understand the bell curve characteristics and was following this kind of thing. Therefore, the statement made here is not necessarily correct to me, based on follow-on information.

Q. Based on information that you --

A. At this point in time, what you are asking is true. The Turbinol 153 would be indicated as not containing 1254 and 1260. The letter, however, this letter would have gone to Texas Eastern, because they bought Pydraul AC.

There had to be follow-on letters where we got into products other than the 54 and 60 that would have defined, again, products that were containing those.

MR. ZIMMER: Okay, Mr. Johnson, let's let Mr. Kashani ask you questions --

THE WITNESS: Ask the questions; okay.

MR. ZIMMER: -- and you respond just to his questions.

THE WITNESS: Okay.

WATER_PCB-SD0000028460

BY MR. KASHANI:

Q. What were you about to say when you said that "you see" (sic)?

MR. ZIMMER: No, that's not an appropriate question. Ask him a question and he'll answer it.

BY MR. KASHANI:

Q. I'm asking what you were about to say when you said "you see." I find that explanation very useful.

MR. ZIMMER: He's not going to answer. He's not going to respond to your -- he's not going to respond to you with a running narrative.

A. I think you've got to ask the question and I can give you a yes or no.

BY MR. KASHANI:

Q. Sure, let's take it a step at a time. First, I want to understand something, so I'll phrase this as precisely as I can.

A. Please do.

Q. If I understand your testimony, you are saying that as a matter of physical reality and fact, the statement contained in the paragraph referring to Turbinol 153 in

WATER_PCB-SD0000028461

this letter, Exhibit 23, dated February 1970, is incorrect.

A. No.

MR. ZIMMER: That mischaracterizes his testimony.

A. As known to me at this point in time, this is correct.

BY MR. KASHANI:

Q. What --

A. As known to Don Olson, who wrote it, is correct.

Q. In other words, to the best of the knowledge available --

A. Right.

Q. -- at the date of the letter --

A. Right.

Q. -- the statement is correct.

A. Correct.

Q. However, what I'm trying to understand is, as a matter of physical reality, known or unknown to the people at Monsanto, it's not correct?

MR. ZIMMER: Wait a minute.

A. Whew.

MR. ZIMMER: Don't say anything

WATER_PCB-SD0000028462

until we clean this up. "A matter of physical reality, known or unknown"? This question is hopeless. Don't answer that.

Try again. He's already said the statement is correct.

MR. KASHANI: No, I mean as I understand, that's not --

MR. ZIMMER: As of this date.

MR. KASHANI: This is known to the best of knowledge of Monsanto as of the date of the letter.

MR. ZIMMER: Well, he can't respond for anybody but himself, and that's what he did already. He said this paragraph as of this date is true.

BY MR. KASHANI:

Q. As you sit here today?

MR. ZIMMER: You go, now go on from there.

BY MR. KASHANI:

Q. Is this paragraph true?

MR. ZIMMER: Which paragraph?

MR. KASHANI: The paragraph referring to Turbinol 153.

A. Based on the knowledge that was

WATER_PCB-SD0000028463

developed later, and that I personally became aware of, I would have to look at that paragraph and say it wasn't absolutely correct. Okay.

BY MR. KASHANI:

Q. That's why I want it clear and that's all I meant to ask.

A. It's the same problem with the Swedes, you know. I mean, the Swedes come and you learn something. We learned something after that.

Q. In other words, you subsequently, after the date of this letter, learned that Turbinol 153 did contain the higher-numbered aroclors?

MR. ZIMMER: No, it actually says was formulated with.

A. Right, and it was not formulated with the higher level aroclors. That's right.

BY MR. KASHANI:

Q. All right, let's take the second point. You mentioned follow-on letters? Do you recall if follow-on letters were sent as Monsanto learned more information?

WATER_PCB-SD0000028464

A. Yes. I wrote letters. You've got to have them.

MR. ZIMMER: He does. Don't let him play coy with you.

What's the question? He confirmed his earlier testimony, yes, there were other letters.

BY MR. KASHANI:

Q. I'm somewhat at a loss, because the next letter we have is from 1972, considerably later, so I guess my question is, do you recall approximately when you might have sent or you sent follow-on letters that further explained the paragraph, the comment there in the paragraph referring to Turbinol 153?

MR. ZIMMER: Well, that question lacks foundation because there hasn't been any testimony.

A. I don't remember any dates.

MR. ZIMMER: That letters went that further explained what was in Paragraph 1, there's only been testimony that he himself authored letters of this type.

MR. KASHANI: I'm referring to the

WATER_PCB-SD0000028465

follow-on letters.

MR. ZIMMER: That's the same thing. That's all he's testified to. It's your term that they were follow-on letters, not his.

BY MR. KASHANI:

Q. What did you mean when you said that there's a bind, here, caught in a bind or words to that effect? We can have the testimony read back if you need to remember that. I'm just wondering what you meant when you said "bind."

A. You have to understand, I'm not a chemist. I didn't study chemistry. I don't purport to be a chemist. My job was selling these things. When you come down to definitions of this or that in the area of chemistry, there are more appropriate people in Monsanto to be asking those questions. Don Olson wrote this letter, and he wrote it based on the information he had at that point in time. It was accurate at that point in time. To go beyond that doesn't make any sense, because then you are looking at another time frame.

WATER_PCB-SD0000028466

Q. At some, at some time -- let me make sure I have the testimony correct. At some time after this letter was written, at some point after this letter was written, you learned that even the lower-numbered aroclors contained or contain higher chlorinated biphenyls.

At that point or sometime after that point, do you recall sending or do you recall Monsanto sending letters to Texas Eastern, explaining that the lower-numbered aroclors in their product might contain, or did contain higher chlorinated biphenyls?

MR. ZIMMER: I think what we've omitted is "the minute quantities of," and we're still comparing apples to oranges --

Let me finish, Mr. Johnson.

MR. KASHANI: There's been no testimony as to quantities. If you want to testify, Fritz, I'll have you sworn in.

MR. ZIMMER: We'll have his testimony read back, too, about minute quantities. That's his language and what you are comparing now is a paragraph that talks about whether a product was formulated with

WATER_PCB-SD0000028467

something, as opposed to whether it might contain minute quantities. It's apples and oranges, and I'm not going to let you put words in his mouth about something that he not only didn't write but has questioned only in this metaphysical --

THE WITNESS: Right.

MR. ZIMMER: -- possibility sense. So you can answer, his question is what?

A. The formulated makes the difference.

BY MR. KASHANI:

Q. I've gone beyond the letter. I'm referring now to a future time, a point clearly after this letter, or as you said, after this letter, at which time Monsanto became aware that even the lower-numbered aroclors contained higher chlorinated biphenyls and at some point Monsanto became aware of this. I'm wondering at that point, do you remember sending or did Monsanto send a letter to Texas Eastern advising Texas Eastern that their product, which contained lower numbered aroclors, contains any quantity of higher chlorinated biphenyl.

WATER_PCB-SD0000028468

MR. ZIMMER: The question lacks foundation and assumes facts not in evidence, in addition to misstating his prior testimony.

You can answer.

A. I don't remember.

BY MR. KASHANI:

Q. Was it Monsanto policy at the time to send out such a letter that apprised the customer of new information?

MR. ZIMMER: What kind of new information?

MR. KASHANI: The new information that the lower numbered aroclor in the customer's product might contain any quantity of higher chlorinated biphenyl.

MR. ZIMMER: And was there a specific company policy to that effect, is what you are asking?

MR. KASHANI: I'm saying, was there a policy to let customers be aware of information of that kind.

A. I don't know if there's a letter that will meet your criteria, but I do know we sent letters.

WATER_PCB-SD0000028469

BY MR. KASHANI:

Q. Okay.

Do you recall whether Monsanto ever developed or tried to develop a substitute for Aroclor 1232?

A. No.

MR. KASHANI: I'll mark these next in order.

(Plaintiff's Deposition Exhibit 89 and 90 marked for identification.)

BY MR. KASHANI:

Q. I'm just wondering if these documents refresh your recollection about Aroclor 1232.

(Witness peruses said documents)

A. Okay.

Q. Referring to the first document, Exhibit 89, did you receive a --

A. Which one is that? Okay.

Q. Does your name at the top indicate that you received a copy of this document?

MR. ZIMMER: It calls for speculation.

WATER_PCB-SD0000028470

A. I would assume it went into my mailbox.

BY MR. KASHANI:

Q. Do you recall any proposal or plan or notion to reformulate Aroclor -- I'm sorry, not reformulate, to -- well, as it says, to come up with a product close to Aroclor 1232 but one which would not crystallize and be essentially biodegradable? And to some extent I'm quoting from the document.

A. No. I have no idea what Aroclor 1236 could be.

Q. This is referring to the second sentence on the second paragraph.

A. Yeah.

Q. Was there no Aroclor named number 1236?

A. Not to my knowledge. I don't know what it meant.

MR. ZIMMER: It's not a quiz. You don't have to no.

THE WITNESS: Beautiful.

BY MR. KASHANI:

Q. Is that "D. A. Olson" on the top,

WATER_PCB-SD0000028471

is that Don Olson?

A. Yep.

Q. Who was Don Olson?

A. He was my boss for a period of time.

Q. Before Mr. Bergen?

A. No, no. Mr. Bergen was promoted and then Don Olson came in to be director of marketing.

Q. Do you remember approximately when that was?

A. Oh, God all mighty. Probably '68, '69, somewhere in that period.

Q. Who is J. R. Savage?

A. I think he had a relationship with Manufacturing, or he was an individual we'd go to as it related to manufacturing.

Q. Is that for John Savage?

A. I think it was Jim, Jim Savage.

Q. Turning to Exhibit 90, reviewing this exhibit, do you remember a time when or do you remember a point at when Aroclor 1232 was discontinued?

A. No. Could have been.

Q. Do you know of any reason why

WATER_PCB-SD0000028472

Aroclor 1232 might have been discontinued?

A. Because probably there was no use.

MR. ZIMMER: Let's not speculate, Mr. Johnson. You already said you didn't remember when it was, so reasons for it would be pure speculation.

A. (Continuing) I don't know.

BY MR. KASHANI:

Q. Okay, let's go to the next two exhibits in order.

(Plaintiff's Deposition Exhibit 91 and 92 marked for identification.)

(Witness peruses said documents)

THE WITNESS: A fantastic document.

MR. KASHANI: We can go off the record for a second.

(Discussion off the record.)

BY MR. KASHANI:

Q. Turning to document 91 or Exhibit 91.

A. This one (Indicating)?

Q. The long one. Number -- if we

turn to the page that's numbered C543, which I think is the fourth page of the document, at the top, it says, "Action to achieve objectives," number one says, quote, "Market nonbiodegradable chlorinated biphenyls only for closed system applications where control is possible." And then 2 says, "Phase-out of all noncontrollable applications replacing with biodegradable chlorinated biphenyls or other satisfactory products." I'm sorry, I only meant to read 2.

Do you know what was meant by "noncontrollable applications" in this context?

MR. ZIMMER: The question lacks foundation as to what this document even is.

You can answer if you know what whoever wrote it meant.

A. It's the same problem that you had on that whatever thing came from the --

BY MR. KASHANI:

Q. Corporate management committee?

A. Corporate Management Committee. I mean his definition, I don't know what he's meaning.

WATER_PCB-SD0000028474

Q. While you were at Monsanto, did you ever use or hear the expression "closing the loop"?

A. Yes.

Q. And what did that mean?

MR. ZIMMER: Asked and answered previously.

A. You asked me the question about a capacitor. To me, a capacitor sitting in my hand is a closed unit. If it goes into a land fill, is it a closed unit? If it gets run over by a bulldozer, is it a closed unit? Everybody's definition could be different, and it's hard to define for me, for all the applications that were involved, what one person would call a closed system someone else may call not a closed system. A capacitor is a closed system, sitting in my hand just like this coffee cup is a closed system.

MR. ZIMMER: I think he actually asked you about a slightly different term.

THE WITNESS: Okay.

MR. ZIMMER: But I'll let him follow up.

WATER_PCB-SD0000028475

BY MR. KASHANI:

Q. Well, I can repeat the question. Maybe I wasn't clear, speaking clearly. I was saying what did the term "closing the loop" means.

A. Nothing would leak out.

Q. Is there a distinction between closing the loop and a closed system?

A. Closing the loop would refer to the manufacture of the product. Any spillage would be collected, any spillage would be reclaimed and recycled back into the system.

Q. Could customers close the loop, as well as a manufacturer?

MR. ZIMMER: Calls for speculation. Doesn't that entirely depend on what product? Or I don't under --

THE WITNESS: Who's the customer? I mean, does your car leak oil? Huh?

MR. ZIMMER: Let's let him ask the questions.

BY MR. KASHANI:

Q. Let's take that as an example. I mean, if a car leaks oil, let's assume that the car uses PCB-containing transmission

WATER_PCB-SD0000028476

fluid, which I don't know if that application was ever used, but assume it does. If the car leaked, am I correct in assuming that it would not be a closed system? It leaks all over the road.

MR. ZIMMER: Oil, or transmission fluid.

A. The PCB-containing transmission fluid. You can answer that yourself.

MR. ZIMMER: It's an incomplete hypothetical.

BY MR. KASHANI:

Q. No. Would closing the loop in that context refer to putting a catch basin or some kind of trap under the leak, catching the leak, and then pouring the leaked transmission fluid which contains PCBs back into the system, back into the car?

A. Mm-hmm.

MR. ZIMMER: Same objection.

BY MR. KASHANI:

Q. I'm sorry, is the answer "Yes"?

A. How about building a transmission that has no capacity to leak?

Q. Would that be a closed system?

WATER_PCB-SD0000028477

A. Once you put it in there, it wouldn't at one time come out.

Q. And is that what makes it a closed system?

A. I would think so.

Q. But if the system inevitably leaks, would you close the loop if you installed some basin that could retrieve all of the leaked fluid and pour it back into the system so that none escapes into the road or into the environment, but some leaks out of the motor into that base in, would that be closing the loop?

MR. ZIMMER: Incomplete hypothetical again. It's tough to say. You are talking about people.

BY MR. KASHANI:

Q. Well, if you did have a leaky system that leaked, a leaky motor that leaked PCB-containing fluid, how would you close the loop?

A. That's something over which I have no control.

MR. ZIMMER: Let him ask his expert that. This is not your field. These

WATER_PCB-SD0000028478

are all --

MR. KASHANI: I'm trying to get a definition of a term.

MR. ZIMMER: Well, he's told you already how he uses the terms. You've got a document here that gives its own definition of closing the loop. If you want to ask him some questions about that, whether he agrees with it or not, fine, but these hypotheticals about transmission fluid and the like have nothing to do with this.

BY MR. KASHANI:

Q. Well, let's go to Exhibit 92. In the fourth paragraph reads, quote, "The expression 'close the loop' refers to our program of educating the customer regarding the control and disposal of PCBs and providing a service for the return of contaminated aroclors for recovery or eventual high-temperature incineration and stack gas scrubbing."

Do you have anything -- would you add anything to that definition of close the loop? Would you add or subtract anything to that definition?

WATER_PCB-SD0000028479

A. It looks like Papageorge had defined it pretty well.

Q. Were you involved in any efforts with Johnson Motors or Outboard Marine to reclaim their used PCB containing fluids? I think they used Pydraul.

A. To my knowledge, internally they reclaimed PCBs from certain pits, or Pydraul A 200 from certain pits and they ran it through their own filtration system and discharged it back into the reservoirs of the die cast machines.

Q. I'm sorry, I didn't catch the last word.

A. Recharged it back into the die cast machines.

Q. Oh, die cast. I'm sorry. Do you know why they did that?

A. To save money.

Q. Was that the only reason?

MR. ZIMMER: Calls for speculation, lacks foundation.

A. To save money.

BY MR. KASHANI:

Q. Let's go back to the long

WATER_PCB-SD0000028480

deposition, page 43.

MR. KASHANI: Let's mark that the next next exhibit.

(Plaintiff's Deposition Exhibit 93 marked for identification.)

MR. KASHANI: This is the deposition that's dated on the first page 1982.

BY MR. KASHANI:

Q. Now, referring to the second question and the answer to that question on the page, the question that starts, "Would it be fair to say, then, as of," et cetera and the answer that starts, "The intent was not to see fluid," et cetera, was that your testimony?

A. Yes.

Q. And was that true and accurate?

A. Yes.

Q. Okay, thank you.

Do you recall advising customers of PCB-containing products to be careful so as to minimize or avoid leaks of the products into the environment?

A. Sure.

Q. Do you recall ever giving such a warning to Texas Eastern?

MR. ZIMMER: Him, personally?

BY MR. KASHANI:

Q. You, personally.

A. Not me, no.

Q. Do you know if anyone at Monsanto gave such a warning to Texas Eastern?

A. It's speculation on my part because I wasn't at the meetings.

MR. KASHANI: Let's introduce another exhibit, number 94.

(Plaintiff's Deposition Exhibit 94 marked for identification.)

(Witness peruses said document.)

THE WITNESS: Okay.

BY MR. KASHANI:

Q. This letter contains some statements, advice about preventing leakage and spillage, and proper maintenance. Do you know if a letter such as this was ever sent by Monsanto to Texas Eastern?

WATER_PCB-SD0000028482

A. I don't know.

Q. Would this advice have been well taken for Texas Eastern? Let me take that back. Should Texas Eastern have followed this advice?

MR. ZIMMER: Well, he didn't author this letter, nor is he copied with it.

MR. KASHANI: I'm not suggesting that he was. I mean, this letter refers to certain procedures for control and housekeeping to prevent leakage, to prevent spillage, for good maintenance, to avoid leakage of aroclors. Do you think that this advice was applicable to Texas Eastern while they were using a PCB-containing product?

MR. ZIMMER: Well, it also doesn't break down which Aroclor is used by this customer, but you can answer, Mr. Johnson, if you, if you know.

A. Essentially, this kind of information was supplied to all customers as what we call the "PCB problem" was building.

BY MR. KASHANI:

Q. And this is the advice to avoid spills and prevent leaks?

WATER_PCB-SD0000028483

A. This kind of thing would be presented verbally in discussions with the customer. It didn't require letters.

Q. Do you know of your personal knowledge at any time when this advice was presented verbally or in writing to Texas Eastern?

A. I don't know.

Q. What do you know about Texas Eastern's compressors and turbines?

A. What about them?

Q. Do you know how they work, or did you know -- let me rephrase that. During the time 1968 to '72 did you know how they worked?

A. Reasonably.

Q. Did you know what they used a lubricant for, the Turbinol for?

A. For lubricating the bearings in the turbine and probably in the compressor, and whether they were using reciprocating compressors or centrifugal compressors, so it may have made a difference in the oil that was being used.

Q. Did you know, and this was

WATER_PCB-SD0000028484

referring back to the period 1968 to 1972, or let's just say before 1972, did you know that the lubricant came into contact with the gas stream, natural gas stream?

A. To my knowledge, only if you had leakage getting by the seals.

Q. What seals? What seals are these?

A. If it was reciprocating compressor, it was getting by the rings.

Q. Is this a seal between the mechanical part that puts the pressure on the gas stream and the gas stream, itself?

A. Right.

Q. And if that seal leaks, then Turbinol could leak into the gas stream?

A. I would expect so.

Q. And this is based on your knowledge prior to 1972?

A. Yes.

Q. Okay. Did you know, again referring to the time period before 1972, what could cause leakage into the gas stream, leakage of Turbinol into the gas stream?

MR. ZIMMER: Other than what he just told you?

WATER_PCB-SD0000028485

A. I was never at a compressor site; only the one where I couldn't even get through the fence.

MR. ZIMMER: Why don't we take a short break before we go to another exhibit.

MR. KASHANI: Sure.

(Recess)

(Plaintiff's Deposition Exhibit 95 marked for identification.)

BY MR. KASHANI:

Q. Okay, we marked another exhibit, which is in front of you.

A. 94?

Q. No, 95.

A. Oh, 95.

Q. Now, this document was produced to us by Monsanto. This is as is. I mean, there doesn't appear to be a date on it, or author?

(Witness peruses said document.)

A. Okay.

Q. Do you know approximately when this document was written?

WATER_PCB-SD0000028486

A. No.

Q. Do you know who wrote it?

A. No.

Q. Can you identify the handwriting at the top?

A. No.

Q. Nope.

Let's go to the third paragraph of the first page. I'm going to ask you some questions based on your knowledge, not based on what you know today, but based on your knowledge in the period 1968 to 1972, and based on that knowledge, would you say that the second sentence, "Gas turbine lubricant systems are closed loop," would you agree with that statement?

MR. ZIMMER: Well, the question is premised on a document which he's already testified he didn't write.

MR. KASHANI: I understand.

MR. ZIMMER: So I presume that you are asking him for his use of the term "closed loop" as opposed to whatever this author might have had in mind.

MR. KASHANI: I'm asking whether

WATER_PCB-SD0000028487

Mr. Johnson agrees with that statement based on the knowledge he had in the period 1968 to 1972.

A. I was never in one of your pumping stations; okay? This almost looks like data that was supplied by Texas Eastern. They're the ones who knew the operation.

Q. What about the second -- well, the third sentence: "Any Turbinol 153 that might possibly leak past seals and into the gas stream is removed with other liquids in regularly installed knock-out traps." Do you agree with that statement, based on your knowledge of 1968 through 1972?

MR. ZIMMER: Based on his prior testimony, there's no way that he can answer that.

MR. KASHANI: Well, if you do not have enough knowledge at that time to agree or disagree or have an opinion, that's, you know, that's your answer, but I'm responding if based on your knowledge then and assuming you have an opinion, you have enough knowledge to agree or disagree, do you agree or disagree with that statement?

WATER_PCB-SD0000028488

MR. ZIMMER: Well, the problem, Counsel, is that's a big assumption because he just told you he was never in one of these pumping stations; so it lacks any foundation at all. I mean, I'll let him answer if he has sufficient knowledge to say, but I think it's pretty far afield to ask him to agree or disagree with something that presumes quite a bit of information.

A. Well, you are asking me to comment on their maintenance, and I was never in the station to see.

BY MR. KASHANI:

Q. Did you ever personally inquire of Texas Eastern as to their maintenance and how -- what they -- let me take that back. Did you inquire into their maintenance of the compressors in the pipeline and turbine, specifically, as it relates to preventing leakage of Turbinol 153?

A. No, I did not.

Q. Of your personal knowledge, do you know if anyone at Monsanto ever asked anyone at Texas Eastern about Texas Eastern's maintenance as it relates to preventing

WATER_PCB-SD0000028489

leakage of Turbinol?

A. I do not.

Q. Did you personally ever offer or suggest to Texas Eastern that with or without Monsanto's assistance Texas Eastern adopt a reclamation program to reclaim leaked Turbinol similar to the reclamation program that was -- used for Pydraul?

A. I do not.

Q. Do you know if anyone at Monsanto ever suggested to anyone at Texas Eastern that they reclaim or adopt some kind of reclamation program to reclaim leaked Turbinol?

A. It's possible but I don't know.

Q. Do you know anything about the manufacture of Turbinol 153?

A. No, I do not.

Q. Do you recall during the period 1968 to 1972 how it was manufactured in the context of the rate of manufacture? And let me supply some background which you can take whether I'm not stating this as fact, I'm just saying it so you can understand the thrust of my question. There are certain

WATER_PCB-SD0000028490

products chemical or otherwise that are manufactured continuously. I mean, they continually come off an assembly line eight hours a day, or 24 hours a day or whatever, and there are certain products that you would set up the equipment or set up the plant, the chemical plant, run it for a few hours or days, or a week, and at the end of that time you have enough product for a year or two years or whatever, you don't have to run it continuously. Do you recall if Turbinol 153 was a product that Monsanto manufactured continuously or a product that Monsanto manufactured from time to time?

A. It was a batch process.

Q. By "batch," do you mean that they would -- what do you mean by batch? Let me ask that.

A. You make a thousand gallons, you make 500 gallons, you make 250 gallons, you make whatever quantity you want, within the limits of the vessel.

Q. You mean the receiving vessel?

A. Right.

Q. And --

WATER_PCB-SD0000028491

A. The mixing vessel.

Q. Where the different components are mixed?

A. Right.

Q. And do you recall how long it took, approximately, to make, say, 5,000 gallons?

A. No, I don't.

Q. Was it days, weeks, months?

A. I don't know. I don't know.

Q. Do you recall if it was, took a great deal of time to set up the equipment to make a batch of Turbinol?

A. I don't know.

Q. From the point of view of sales, is this something that -- would Monsanto inventory Turbinol 153 or make it on an as-needed, as-ordered basis?

A. The volume was small, so you could make it almost as needed, although the batch size might be a little larger than the order so you might have a few drums left over in inventory.

Q. Do you recall any time when Monsanto had, say, over a hundred drums of

WATER_PCB-SD0000028492

Turbinol in inventory?

A. Not to my knowledge.

Q. How much is in a drum, by the way?

A. 55 gallons. 54.

MR. KASHANI: This is another exhibit.

(Plaintiff's Deposition Exhibit 96 marked for identification.)

BY MR. KASHANI:

Q. Do you recognize this type of document? Not necessarily this particular one, but this type of document?

A. Oh, sure.

Q. What is it or what type of document is it?

A. Call report. It says right up there. That's it.

Q. And what was the purpose of call reports?

A. Communications by Don Stegen to the appropriate people in St. Louis, and copies going to Roger Hatton. So you define who it's going to, then you define the action you are requesting or the activity at the

WATER_PCB-SD0000028493

account. We even did this to make it easy for people. See, we told them how to do it.

Q. Is that up on the left where it says, "Dictate in sequence"?

A. Yes.

Q. I'm just referring to the second page where it looks like a paragraph, at least there's an indent. It says, "Several phone calls later, it was determined that we could, one, make new Turbinol 153 on beds, and 2, ship it on Wednesday night," and would such a process, in other words, making the Turbinol in one day on a Wednesday and shipping it that same day, be consistent with how you described the batch process for Turbinol?

A. Right.

Q. Okay. Thank you.

I refer you to Exhibit 18 of the deposition of John Frederiksen, which was previously taken in this case.

MR. ZIMMER: Are you providing copies of these to the reporter, or have we referred to those from prior cases?

MR. KASHANI: I've not. Let's go

WATER_PCB-SD0000028494

off the record for a second.

(Discussion off the record.)

MR. KASHANI: This is Exhibit 97.

(Plaintiff's Deposition Exhibit 97 marked for identification.)

MR. KASHANI: On the record.

BY MR. KASHANI:

Q. I'm going to refer you to the first number page, whip is actually the fourth page of the document, the fifth, actually, but it says "number 1" at the top corner. This is Page TRAN 001304, which is the number down at the bottom right-hand corner.

In the middle of that it refers to a formulation for MCS 153 and it states that "MCS 153 consists principally of Aroclor 1242 and Aroclor 1232." Is that correct, so far as your knowledge is?

A. I never had access to formulations.

Q. Did you ever have any reason to believe that that is not correct?

A. It's a Monsanto document. No

WATER_PCB-SD0000028495

reason to believe it's not correct.

Q. Do you recall if at any time Monsanto replaced the Aroclor 1242 in MCS 153 or Turbinol 153 with MCS 1016, also known as Aroclor 1242 B?

A. I don't.

Q. Do you know if Monsanto ever replaced the Aroclor 1232 in Turbinol 153 with any substitute or any reformulated product?

A. Not to my knowledge.

Q. Do you know if Monsanto ever replaced either/or both of the aroclors in Turbinol 153 with a chlorinated terphenyl?

A. No, I don't.

Q. Do you know if Monsanto ever undertook any research, testing, or trial and error, as it were, to -- with the goal of replacing the aroclors in Turbinol 153 or MCS 153 with chlorinated terphenyl?

A. Could have. I don't know.

Q. Do you know who might know that information?

A. Probably Lou Stark. Bill Richard, but it wouldn't help you.

MR. KASHANI: Let's take a short break.

(Recess)

BY MR. KASHANI:

Q. Let me ask a follow-up question from before. Do you recall approximately the first time you personally became aware that the Texas Eastern compressors could leak Turbinol down into the gas pipeline?

A. Probably in March or April of 1982.

MR. ZIMMER: What are you referring to?

THE WITNESS: That (Indicating).

MR. ZIMMER: Okay, you should describe "that" for the record.

A. It was after this deposition. The question -- I had a phone call from the attorney, and he asked about something that was published in the Wall Street Journal that PCBs had shown up in the gas transmission system in New York City and he asked me if I had any idea where it came from and I said, "To the best of my knowledge, it was probably a Texas Eastern pipeline somehow had gotten

WATER_PCB-SD0000028497

fluid into the pipeline system and had blown it all the way to New York. So it really came down to a main problem. Something had happened in their system.

BY MR. KASHANI:

Q. Were you aware at any time prior to 1972 that Turbinol could leak into the pipeline from one of the compressors?

MR. ZIMMER: He just said it was 1982. Is that what you meant?

MR. KASHANI: I'm saying '72.

MR. ZIMMER: Asked and answered.

A. I don't know how tight a system you have.

BY MR. KASHANI:

Q. Do you know if anyone at Monsanto was aware or told you that he was aware prior to 1972 that Turbinol could leak into the pipeline from one of Texas Eastern's compressors?

A. I was never told that.

MR. KASHANI: I have another exhibit.

(Plaintiff's Deposition Exhibit 98 marked for

WATER_PCB-SD0000028498

identification.)

(Witness peruses said document.)

BY MR. KASHANI:

Q. Now, this is a call report that refers to a visit to Columbia Gulf Transmission Company --

A. Mm-hmm.

Q. -- not Texas Eastern.

A. Mm-hmm.

Q. And I refer you particularly to the last paragraph on the first page which continues on to the second page.

MR. ZIMMER: Do you want him to read the whole thing?

MR. KASHANI: That's not necessary, but he's certainly welcome to if he wants to.

(Witness peruses said document.)

A. What are you referring to, then?

BY MR. KASHANI:

Q. I'm referring to that last paragraph in the first page, going on to the second page, where it's stated, "It was

WATER_PCB-SD0000028499

emphasized again that the Turbinol 153 loss is through the compressor seals into the pipeline."

Does that trigger a recollection or refresh any recollection that anyone at Monsanto might have been aware, prior to 1972, that Turbinol used in a natural gas compressor, not necessarily Texas Eastern, could leak into the pipeline?

MR. ZIMMER: Okay, before you answer, Mr. Johnson, first of all, he can't speak to what anyone at Monsanto knew, he can speak to what he knew.

Secondly, you didn't ask him about any natural gas compressor system before, you asked him about a Texas Eastern. With those caveats, he can answer, if this refreshes his recollection or not.

A. I had never heard anything about this kind of leakage in a gas transmission line.

BY MR. KASHANI:

Q. Until 1982?

A. Right.

Q. At any time prior to 1972, were

WATER_PCB-SD0000028500

you personally aware that, let's start with any natural gas compressor using Turbinol 153 could leak Turbinol somewhere other than into the compressor? I mean into the ground, into the pipeline, leak Turbinol 153 out of the system?

A. No.

Q. Prior to 1972, were you aware that a Texas Eastern compressor could leak Turbinol out of the compressor?

A. No.

Q. Or the turbine?

A. (Witness shakes head in negative manner.)

Q. Do you recall approximately how often Texas Eastern would order Turbinol --

A. No.

Q. -- for a given compressor?

A. No.

MS. KASHANI: This next document I'd like to mark Exhibit next in order, 99.

(Plaintiff's Deposition Exhibit 99 marked for identification.)

MR. KASHANI: And this is my only

WATER_PCB-SD0000028501

copy, and unfortunately, I have marked the top of the first page in the top right-hand corner, the 16, and the circle, and the crossed-out number and the circle, and I'll just ask you to ignore those. This document was provided by Monsanto. It's a multipage document. Each page says at the top, "Sales Summary."

BY MR. KASHANI:

Q. I show you this document and I'm going to refer in particular -- well, let's just look through the document.

A. But you don't have a copy to work with.

MR. ZIMMER: He knows it by heart.

A. (Continuing) So this is by location?

BY MR. KASHANI:

Q. Yes.

A. And we provided it, Monsanto provided it, you are saying?

Q. Yes.

(Witness peruses said document.)

A. Okay, I can tell what's here,

WATER_PCB-SD0000028502

but --

BY MR. KASHANI:

Q. Let's start at the beginning. I'm going to go through every page.

MR. ZIMMER: By any chance, are we going to refer to the Corona station?

THE WITNESS: That's what started it all, right.

MR. ZIMMER: I'm talking about how we haven't even discussed that station today, but let's proceed. Where do you want to start?

MR. KASHANI: On the first page.

BY MR. KASHANI:

Q. The first -- correct me if my interpretation is wrong, but the first page seems to indicate a sale of 34,600 pounds of Turbinol 153 for the Barton, Alabama, compressor station.

MR. ZIMMER: Well, he's not going to disagree or agree with your interpretation until we lay a foundation for the document so that he can interpret it. If he wrote it, was copied with it, used these kinds of things routinely, I don't know the answer to

WATER_PCB-SD0000028503

those questions, either, but we don't have him on record saying anything about that.

BY MR. KASHANI:

Q. Have you seen documents like this before?

A. No.

Q. Well --

A. I mean, I might see the sales in a different form, but I would not see it has a piece of paper like this.

Q. I'm going to refer you to --

A. Now you got it.

Q. Plaintiff's Exhibit 8 from the Frederiksen deposition --

A. Right.

Q. -- and copies of the exhibit. Are these a form you are familiar with?

A. There you go. Right.

Q. Now, unfortunately, I don't have a copy of this, so --

A. This is December 1962.

Q. Does this document --

A. It says "Direct number 2," and it was dated December 1962, and it's page was 461.

WATER_PCB-SD0000028504

MR. KASHANI: For the record, Mr. Johnson is referring to document TRAN number 085045. It's Plaintiff's Exhibit 8 from the John Frederiksen deposition.

BY MR. KASHANI:

Q. Now, does this document indicate sales from the fluids to Texas Eastern?

A. Yes.

Q. Okay, I'm sorry, I'm going to have to --

A. Okay.

(Pause)

Q. I'm going to refer to document TRAN 085061 now --

MR. ZIMMER: Is this a portion of the Frederiksen exhibit?

MR. KASHANI: Yes, it's a portion of Exhibit 8 from John Frederiksen's deposition.

BY MR. KASHANI:

Q. I'm going to refer you to the line that begins, "Transwestern Pipeline."

A. Mm-hmm.

Q. And I'm going to ask you if this indicates sales of MCS 153 to Transwestern

WATER_PCB-SD0000028505

Pipeline for the year 1968.

A. Right.

Q. And how much was sold?

A. 39,740 pounds.

Q. And do you have any reason to believe that that many pounds of MCS 153 were not, in fact, sold to Transwestern Pipeline in 1968?

A. I don't dispute that it may have been sold and invoiced, but I would suspect it was purchased by Trans, or Texas Eastern.

Q. It was purchased by Texas Eastern for use by Transwestern?

A. Yeah. Because there was never any buying entity, to my knowledge, for Transwestern Pipeline. This would indicate a "Ship to" location, so obviously, it was purchased and shipped directly to there, but where the purchase order came from, I suspect it came from Texas Eastern.

Q. Let's go back for the record. Are you referring to the first column of numbers --

A. Right.

Q. 739844?

WATER_PCB-SD0000028506

A. Right.

Q. On the line that says "Transwestern Pipeline," that indicates a shipment location?

A. Right.

Q. And the line as whole further indicates that the MCS 153 was shipped to Transwestern Pipeline, or --

A. It, you know, this is either a purchase entity number or it's a "Ship to" location number. In this case, this Texas Eastern number shows Houston, so that would be the total corporation of Texas Eastern and the volume shipped to them; okay? The next number would show that this is Texas (sic) Western Pipeline and they were given a separate number, but it does not define who issued the purchase order.

Q. To your knowledge, did Texas Eastern handle all the of --

A. To the best of my knowledge, yes.

Q. -- of Turbinol for Transwestern?

A. Right.

Q. Were you aware that Transwestern had only one compressor on its, on its

WATER_PCB-SD0000028507

pipeline?

A. No.

Q. Let's turn to document TRAN 085062. There's a line here that refers to Texas Eastern Transmission, Corona, New Mexico. I'm not sure if it's legible, but is that -- does this document indicate any shipments of Turbinol 153 to Texas Eastern at Corona, New Mexico, for the year 1969, or is it legible?

A. Yeah, it says that what was shipped to Corona, New Mexico, was purchased by Texas Eastern, or that was what the location was called, Texas Eastern Transmission, Corona, New Mexico.

Q. Okay, and turning to document TRAN 085064 --

A. December '72.

Q. Is that '72 or '71?

A. Well, maybe it is a "1". I'd say a "1," yes.

Q. On this document, there's a line that reads, "Transwestern Pipeline, Corona, New Mexico."

A. Oh, down here (Indicating).

WATER_PCB-SD0000028508

Q. Does that indicate, does that line indicate a shipment of fluid to Transwestern Pipeline at Corona, New Mexico, for the year 1971?

A. Yes.

Q. How many pounds were shipped?

A. That was last year's sales.

Q. Year to date?

A. Year to date. Didn't show any.

Q. What about the previous year, 1970?

A. It showed 20,000 pounds.

Q. Sales goal -- what about the previous year?

A. 32,600.

Q. So does this document indicate that 32,600 pounds of fluid was shipped to Transwestern Pipeline at Corona a New Mexico in the year 1970?

A. Right.

MR. ZIMMER: The document speaks for itself. I'll just object to the foundation again, since he hasn't testified that he prepared it. But you've already answered, so --

WATER_PCB-SD0000028509

BY MR. KASHANI:

Q. Okay, so looking at, taking these documents as a whole, can we conclude that in 1968, 39,740 pounds of MCS 153 was shipped for use by Transwestern Pipeline?

A. Mm-hmm.

Q. And in 1970, another 32,400 pounds was shipped for use by Transwestern Pipeline?

A. Right.

Q. And do you have any reason to doubt that the fluid shipped in 1970 was also Turbinol 153, based on document TRAN 085064?

A. That was Turbinol 153. This is all Turbinol 153.

Q. Okay.

A. It's scratched out, see.

MR. ZIMMER: Except for that. The heading "Turbinol 153" is --

A. Obliterated.

MR. ZIMMER: And it's been asterisked next to it, and again, I don't know who authored this. It's tough to tell what that means.

MR. KASHANI: I think on the original, that's a highlighting.

WATER_PCB-SD0000028510

THE WITNESS: A highlighter pen.

MR. KASHANI: A highlighter pen, and when it's produced, it comes off as a slash, but in the original, it's a highlighting.

MR. ZIMMER: It could be.

BY MR. KASHANI:

Q. In any case, do these documents indicate that Transwestern for its compressor at Corona, New Mexico, or -- let me rephrase that.

Do these documents indicate that approximately 30,000 pounds of Turbinol 153 was purchased for use at the Corona compressor in 1968 and then another 30-odd thousand pounds was purchased for use in 1970?

MR. ZIMMER: Well, the documents can indicate whatever you conclude they do, Counsel. They speak for themselves and you don't need this witness's help in determining that. He's interpreted it for you as far as he's familiar with them. Now we're getting to jury argument.

MR. KASHANI: I don't think

WATER_PCB-SD0000028511

there's anything controversial about this.

MR. ZIMMER: I don't think so, either. You've already gotten the answers from him.

MR. KASHANI: I'm laying a foundation for the question. If you are willing to stipulate that these sales were made, I don't think there's any doubt that sales were made.

MR. ZIMMER: I'm not willing to stipulate sales were made. He'd testified that the documents tell him what they tell him, and they can tell you what they tell you.

MR. KASHANI: Well, I'll just go on to the next question.

MR. ZIMMER: All right.

BY MR. KASHANI:

Q. Are you aware that the Turbinol was used -- back up.

Are you aware that the compressor was filled with Turbinol to capacity to serve as lubrication for the compressor?

A. I mean, I don't know what capacity the reservoirs have, and I don't know how

WATER_PCB-SD0000028512

much to fill them. I have no detail on that.

Q. Do you know --

A. Is there only one turbine compressor there? Just one.

Q. At Corona, yes.

MR. ZIMMER: Just let him ask you the questions.

BY MR. KASHANI:

Q. The compressor at Corona was first installed in 1968, and these documents indicate there was a purchase of 30,000 pounds of Turbinol, presumably to fill the compressor. In 1970, there was a purchase for another 34,000 pounds for the same compressor. During the period 1698 or 1972 did the question ever arise or did you ever consider where the fluid was going?

MR. ZIMMER: Before you answer, the question assumes multiple facts not in evidence, it lacks foundation. That's enough for that one.

You can answer.

A. I never took the time to go through every individual purchase, and certainly, we are not responsible for

WATER_PCB-SD0000028513

whatever maintenance is performed at a facility, and they're going to order the fluid they need to run their system. We were not a policeman, and I'm not sure the customer would ever let us in.

BY MR. KASHANI:

Q. Did you ever ask anyone at Texas Eastern why it kept ordering more Turbinol for the same compressor?

MR. ZIMMER: Once again the question assumes facts not in evidence about, quote, "the same compressor," close quote."

You can answer, "Did you ask anyone?"

A. No.

BY MR. KASHANI:

Q. Did you ever ask anyone at Texas Eastern where all the Turbinol was going?

A. I was only to Texas Eastern once.

Q. Do you know if anyone at Monsanto ever asked anyone at Texas Eastern where all the Turbinol was going?

A. I don't know.

Q. To your knowledge, did anyone at Texas Eastern ever met with or deal with

WATER_PCB-SD0000028514

anyone at Transwestern, as opposed to Texas Eastern, with respect to purchases of Turbinol?

A. Not to my knowledge.

Q. To your knowledge, was there ever any communication between Monsanto and Transwestern relating to Turbinol?

A. Not to my knowledge.

Q. Do you recall when the decision was made to stop sales of Turbinol 153? I mean PCB-containing Turbinol 153?

A. I guess somewhere in '71 or '72.

Q. Do you recall who made that decision?

A. Who made the ultimate decision on that? No.

Q. Do you recall who initially suggested that we, that Monsanto stop selling Turbinol 153?

MR. ZIMMER: I'm sorry, did you say who initially suggested that.

MR. KASHANI: Yes, who initially suggested that.

A. At that point, we were going out of the business, and we would have been going

WATER_PCB-SD0000028515

to a phosphate ester, and Texas Eastern was one that we were going to stop selling. It was their choice to go to a phosphate ester, and the final ramifications of all that, I don't know.

BY MR. KASHANI:

Q. Do you mean to say that Texas Eastern originally suggested to Monsanto that Monsanto stop making PCB-containing Turbinol?

A. No, we did.

Q. You said it was their choice to go to a phosphate ester?

A. Go to a replacement product.

Q. Was it Texas Eastern or Monsanto which initiated the demand or the request for a replacement product, a non-PCB containing replacement for Turbinol?

A. Monsanto decided to terminate the production of Turbinol 153 and offered a phosphate ester replacement for Texas Eastern to consider.

Q. Do you recall whether there was a gap in time between the time when Monsanto made the decision to terminate production of Turbinol 153 and the time that Monsanto

informed Texas Eastern that Monsanto would no longer produce Turbinol 153?

MR. ZIMMER: Could we have that read back?

THE WITNESS: Yeah, that's a tough question.

THE COURT REPORTER:

"Q. Do you recall whether there was a gap in time between the time when Monsanto made the decision to terminate production of Turbinol 153 and the time that Monsanto informed Texas Eastern that Monsanto would no longer produce Turbinol 153?"

A. To my knowledge, there was no gap in time.

MR. KASHANI: Let's introduce a new exhibit, Exhibit 100.

(Plaintiff's Deposition Exhibit 100 marked for identification.)

BY MR. KASHANI:

Q. Let me refer you to the last page of this exhibit, the paragraph numbered "4," where it states, quote, "On Turbinol 153, we do not plan to approach Texas Eastern until

WATER_PCB-SD0000028517

we have received approval from General Electric for use of one of our new NC esters in gas turbines." Unquote.

A. All right.

Q. Does this in any way change your recollection, which was the basis for the answer to a previous question?

A. No, it doesn't.

MR. ZIMMER: What question, what recollection?

THE WITNESS: The one he asked --

MR. ZIMMER: The one just a moment ago, or -- that's what I'm --

A. Okay.

MR. ZIMMER: I just find it remarkable that we continue to look at documents that the witness neither authored nor is even competent on.

BY MR. KASHANI:

Q. There seems to be a difference in the answer to my question in my previous question and this document. It may be simply one of semantics and something that can be easily explained, which I imagine it is. But this document seems to suggest that there was

WATER_PCB-SD0000028518

a delay in informing Texas Eastern that Turbinol 153 would be discontinued until such time as General Electric approved the use of the new -- of Monsanto's new NC ester.

MR. ZIMMER: Counsel, this document may very well suggest that, and you are going to be entitled to explore that with the author of this document, Mr. Bradford. This witness has already testified that that paragraph which he neither authored nor read before today has changed his recollection, so why don't we move on to something that he might know about?

BY MR. KASHANI:

Q. What's an NC ester?

A. Nonylcumyl.

Q. Does that product contain PCBs?

A. No. It's a phosphate ester.

Q. Let's refer to the next document.

MR. KASHANI: This is 101.

(Plaintiff's Deposition Exhibit 101 marked for identification.)

BY MR. KASHANI:

Q. Did you and Mr. Bradford write

WATER_PCB-SD0000028519

this document on or about November 17, 1971?

A. I see my name, but I doubt it. I think Larry wrote it.

Q. Referring to the last paragraph on the first page, where it says, "To our knowledge, there is no approved fire resistant lubricant that can directly replace Turbinol 153. The best candidate would be a straight phosphate ester but for a reasonable changeover, General Electric, the turbine manufacturer, should first approve the product and then Texas Eastern would probably require 5,000 hours running time before agreeing to the switch."

And then going on to the second page -- well, you can read that.

(Witness peruses said document.)

A. Okay.

Q. Do you recall if General Electric had approved Monsanto's phosphate ester for use in Texas Eastern's compressors as of the date of this document?

A. I don't know.

Q. Do you have anything to add to

WATER_PCB-SD0000028520

what's written here, other than saying the document speaks for itself?

MR. ZIMMER: Well, what do you mean, anything to add? He said he probably didn't write it. Do you mean other than that?

MR. KASHANI: Yeah, the document suggests to me, and it can have different meanings to you.

MR. ZIMMER: I don't care what the document suggests to you. We could spend the whole day talking about what documents suggest to you. This witness told you he didn't, he probably did not write this, that Mr. Bradford did, so asking him an open ended question as if he agrees with everything that's in it and does he have anything more to add to it, is just silly. It's a waste of his time.

BY MR. KASHANI:

Q. Referring to the fourth paragraph that suggests that, "As of that time, General Electric had not approved the phosphate ester replacement" --

MR. ZIMMER: That's your spin on

WATER_PCB-SD0000028521

what it says, and you correctly pointed out a moment ago, the document does, indeed, speak for itself.

BY MR. KASHANI:

Q. Do you recall whether that was the case at that time?

MR. ZIMMER: Asked and answered moments ago when he said that as of this date, November 17, 1971, he did not know whether General Electric had approved a straight phosphate ester lubricant for use in its turbines. Maybe I ought to take over for the reporter. I simply have --

MR. KASHANI: I think you should be sworn.

MR. ZIMMER: I'm not testifying at all. I'm simply recanting for you what he has said because apparently you are not listening.

MR. KASHANI: Let's go to a new exhibit, 102, which consists of three pages.

(Plaintiff's Deposition Exhibit 102 marked for identification.)

(Witness peruses said

WATER_PCB-SD0000028522

document.)

BY MR. KASHANI:

Q. Did you receive a copy of the letter dated January 7, 1972, and the attachment?

A. It says I did.

Q. Do you recall the reason -- why did Monsanto ask that Texas Eastern sign a -- sign what is referred to as the special undertaking before Monsanto would supply anymore Turbinol 153 to Texas Eastern?

MR. ZIMMER: The question lacks foundation and calls for speculation.

You can answer if you know.

A. It was my understanding that Texas Eastern did not want to switch to another fluid and wanted to remain on Turbinol 153.

BY MR. KASHANI:

Q. And what was the reason for the special undertaking?

MR. ZIMMER: Same objection, and it calls for a legal conclusion.

Go ahead.

A. I going to --

MR. ZIMMER: I didn't think there

WATER_PCB-SD0000028523

was an answer.

THE WITNESS: I didn't answer.

MR. KASHANI: I'll withdraw the question.

BY MR. KASHANI:

Q. Do you recall if Monsanto asked any other customers of PCB-containing products to sign something similar to the special undertaking attached to Exhibit 102 as a condition of receiving further supplies of PCB-containing product?

A. The dielectric transformer industry, or manufacturers.

Q. Was that General Electric and Westinghouse?

A. Yes, plus a bunch of others.

Q. Did they -- do you recall if they signed the undertaking?

A. Yes. It's my understanding they did.

Q. And after they signed, they continued to receive PCB-containing products?

A. (Nods head in affirmative manner).

MR. ZIMMER: Who is "they"? Are you talking about each and every one of them?

WATER_PCB-SD0000028524

A. The customers who signed the undertaking? Yeah, it was my understanding yeah, those that signed were.

BY MR. KASHANI:

Q. Do you recall about what time that occurred, this special undertaking with the dielectric industry?

A. I would say it was simultaneously with this, this letter.

Q. And do you recall how long it was that Monsanto continued to supply PCB-containing products to dielectric customers who signed the special undertaking?

A. It was after I left the company so I don't know when it was finally stopped.

Q. Was it at least until 1973 when you left the company?

A. Yes.

Q. Do you recall the various meetings and discussions that took place between Monsanto and Texas Eastern after the date of the letter which is Exhibit 102, I believe, in which Monsanto's agents were trying to persuade Texas Eastern to buy Monsanto's replacement product for Turbinol 153?

WATER_PCB-SD0000028525

MR. ZIMMER: Do you have any particular meetings in mind, or --

MR. KASHANI: I have a number of documents. I'm not sure if you want to -- I'm not sure if I want to take Mr. Johnson's time going through every document.

A. I wasn't there.

BY MR. KASHANI:

Q. I'm going to show you document 103.

(Plaintiff's Deposition Exhibit 103 marked for identification.)

BY MR. KASHANI:

Q. This document has previously been stipulated to be a Monsanto business record, and it refers to a meeting that took place between Monsanto personnel and Texas Eastern personnel on January 14, 1972, and I don't mean to suggest that you received a copy of this particular document but I'm wondering if you recall this meeting's taking place or hearing about it.

A. Was this a meeting after this request for a meeting?

WATER_PCB-SD0000028526

Q. Yes, it was, the meeting -- the letter is dated January 7, 1972. That's Exhibit 102.

A. Did this meeting take place on Friday?

Q. If the letter refers to January 14th, then the meeting --

A. So this is the meeting.

Q. The meeting in Exhibit 103 is also January 14th, 1972. And my question is, did you hear about this meeting?

A. The only thing I heard was there was a problem. I guess we had some kind of an impasse.

Q. What was the problem?

A. The hold harmless letter.

Q. The problem was that Texas Eastern would not sign it?

A. Right.

Q. How was that a problem?

A. To our knowledge, there was replacement products out there not quite as good as Turbinol 153 but they could go to those products and eliminate the use of polychlorinated biphenyls.

WATER_PCB-SD0000028527

Q. Were these products provided by companies other than Monsanto?

A. Yes.

Q. Were these products available prior to January of 1972?

A. Yes.

Q. You said it was a problem. Was it, to your knowledge, was it the expectation or hope of people at Monsanto that Texas Eastern would sign the hold harmless letter and continue to receive PCB-containing Turbinol 153?

A. No.

Q. Then how was it a problem that they refused to sign the letter?

MR. ZIMMER: He said he heard that it was a problem.

A. We would have preferred they went to the phosphate ester.

Q. You mean Monsanto's phosphate ester?

A. Right.

Q. So it was a problem that they did not sign Monsanto's replacement product?

A. No, that's not true. I don't know

WATER_PCB-SD0000028528

what they selected.

Q. Do you recall anything about Monsanto's replacement products with phosphate esters?

A. Right.

Q. Which I believe we've referred to as MCS or Turbinol 1228, or Turbinol 1221 -- I'm sorry, or Turbinol 1221?

A. I wouldn't have known the particulars.

MR. ZIMMER: Yeah, the question also assumes facts not in evidence.

MR. KASHANI: Number 104.

(Plaintiff's Deposition Exhibit 104 marked for identification.)

BY MR. KASHANI:

Q. Referring to Exhibit 104 which has also been stipulated to be a Monsanto business record, and going down to the second-to-the-last paragraph on the first page, where it states, "Woods brought up one critical question. What responsibility would Monsanto take if the Environmental Protection Agency told Texas Eastern to stop using

WATER_PCB-SD0000028529

Turbinol 153 immediately?"

Do you recall hearing from anyone at Monsanto or Texas Eastern about the time of this call report of Exhibit 104, which is approximately August of 1972, August 3rd, 1972? Do you recall hearing anything about Texas Eastern asking about what responsibility Monsanto would take if the EPA told Texas Eastern to stop using Turbinol 153?

A. I don't know what Monsanto's responsibility would be.

Q. Do you recall hearing that Texas Eastern made this inquiry?

A. No.

Q. Do you know if Texas Eastern asked at any time if Monsanto would take any responsibility if any government agency told Texas Eastern to stop using a PCB-containing product?

A. Not to my knowledge.

Q. Do you know if any other customer of a PCB-containing product asked if Monsanto would take any responsibility if the governmental agency, if a governmental agency

WATER_PCB-SD0000028530

asked that customer to stop using the product?

A. I think you are asking me about the hold harmless letter.

Q. The hold harmless letter seems to go from Texas Eastern to Monsanto. I was wondering if any customer of PCB-containing product asked Monsanto if Monsanto would take any responsibility, or in a sense, hold the customer harmless.

A. Not to my knowledge.

MR. KASHANI: I refer you to document 105, or Exhibit.

(Plaintiff's Deposition Exhibit 105 marked for identification.)

BY MR. KASHANI:

Q. I'm going to refer specifically to -- first of all, I'm going to ask, did you receive a copy of this call report? Let me ask based on your initials, or the initials "NEJ" --

A. I see the initials, but at this point, my job was not really involved in this area anymore because I was working in that

WATER_PCB-SD0000028531

product development area.

MR. ZIMMER: Let's answer his question. He said, "Did you ever receive a copy of this call report?"

A. Who knows. Big organization. Don't know.

MR. ZIMMER: He can read your initials on there, as well as you can.

THE WITNESS: Oh, I know. I know.

BY MR. KASHANI:

Q. Down in the first numbered paragraph, number 1, Mr. Frederiksen, who wrote this document, refers to fluid incineration, and the second sentence says, "I think we should offer to incinerate the last remaining amounts of fluid Turbinol 153, within limits, free of charge." Do you recall if Monsanto ever offered to Texas Eastern to incinerate or otherwise dispose of any of Texas Eastern's Turbinol 153?

A. Not to my knowledge.

Q. Do you know if Monsanto ever made such an offer?

A. Not to my knowledge.

Q. In the second numbered paragraph,

WATER_PCB-SD0000028532

it says, "Because of the added expense of having to flush the system prior to the initial fill of the 1122, I feel we should offer TE some amount of flush fluid at no charge." Do you know if Monsanto ever offered Texas Eastern flush fluid?

A. I don't know.

Q. When Monsanto made the decision discontinue production of Turbinol 153, was a decision made to sell out the remaining inventory of Turbinol 153 before discontinuing sales?

A. I doubt that.

Q. Do you recall any discussions about what to do with the inventory?

A. Through that period, our inventories were kept very, very, very low.

MR. KASHANI: Let me show you Exhibit 106.

(Plaintiff's Deposition Exhibit 106 marked for identification.)

MR. KASHANI: This is in the form as produced by Monsanto to us. I'm going to refer you to the third paragraph, and I'm

WATER_PCB-SD0000028533

wondering if this in any way changes or refreshes your recollection about what, if anything, was done with the remaining inventory of Turbinol 153, if any, when the decision was made to stop sales of Turbinol 153.

A. This refers to a mix of products. Okay?

BY MR. KASHANI:

Q. I understand that it doesn't refer to Turbinol.

MR. ZIMMER: The question is, does it change your testimony that you gave them a moment ago?

A. No.

MR. ZIMMER: Okay. That's the answer.

BY MR. ZIMMER:

Q. When the decision was made to drop Turbinol 153, at that time did Monsanto have a replacement phosphate ester available for sale?

A. I believe so.

Q. Was a phosphate ester approved by General Electric at that time?

WATER_PCB-SD0000028534

A. Somewhere in that sequence, I'm sure they submitted it to GE and got an opinion back.

Q. Do you recall when, if ever, General Electric finally approved the replacement products?

A. No, I don't.

(Discussion off the record.)

BY MR. KASHANI:

Q. During the time you worked at Monsanto, do you recall ever telling anyone at Texas Eastern that Turbinol 153 or PCB-containing products could cause liver damage?

A. No.

Q. Do you know of your personal knowledge of anyone at Monsanto ever telling anyone at Texas Eastern that Turbinol 153 could cause liver damage?

A. Not to my knowledge.

Q. Do you know of any written letter from Monsanto to Texas Eastern stating that Turbinol 153 could cause liver damage?

A. No.

Q. Do you recall ever telling anyone

WATER_PCB-SD0000028535

at Texas Eastern that Turbinol 153 or PCB-containing products could cause chloracne?

A. No.

Q. Do you know of your personal knowledge if anyone at Monsanto ever told anyone at Texas Eastern that Turbinol could cause chloracne?

A. No.

Q. Do you know of any written documents that --

A. No.

Q. -- state that Turbinol could cause chloracne?

MR. ZIMMER: If it helps, we've done these already, earlier today.

BY MR. KASHANI:

Q. At any time prior to today, has anyone at Monsanto told you or suggested to you that PCB-containing products could cause liver damage?

A. Before today?

Q. Before today.

A. No.

MR. KASHANI: Let's mark another

WATER_PCB-SD0000028536

exhibit, 107.

(Plaintiff's Deposition Exhibit 107 marked for identification.)

BY MR. KASHANI:

Q. At any time prior to today, has anyone at Monsanto ever told you that PCB-containing products could cause chloracne?

A. Yes, I was aware of that.

Q. How did you become aware of that?

A. Through the medical people.

Q. Do you remember when it was that they told you that?

A. '67, '68, somewhere in that time frame.

Q. And do you recall who it was that told you that?

A. Our medical people.

Q. Was it Dr. Kelly?

A. Either Dr. Kelly or Elmer Wheeler.

Q. Do you know if Dr. Wheeler is still alive?

A. No, I don't.

Q. Did you relay that information to

any customers of PCB-containing products other than Texas Eastern?

A. Probably.

Q. Do you recall which customers you told?

A. Not really. Just a recognition that -- if people got PCB-containing products on their clothes, or on their sleeves or gloves, they were, if it had been on for a long period of time, it would defatten their skin and they might be susceptible to something like chloracne.

Q. Do you recall telling that to anyone at Johnson Motors?

A. No, I don't.

Q. Do you recall telling that to anyone at Outboard Marine?

A. That's the same.

Q. Same company?

A. Could have. I don't know.

Q. Did you have any, while you were at Monsanto did you have any dealings or knowledge of dealings with NCR?

A. Yes.

Q. Did you know that NCR was at one

WATER_PCB-SD0000028538

time a large customer of Aroclor 1242?

A. Yes.

Q. Do you recall a meeting which took place at some time in 1970 with representatives of NCR to discuss the biodegradability of Aroclor 1242?

A. Not offhand.

Q. Do you recall at some point substituting another product for the 1242 sold to NCR?

A. Yes.

Q. Do you recall what that product was?

A. You are referring to NCR in Dayton, Ohio?

Q. Let me refer you back to Exhibit 92, and I have a copy here if you don't have one handy.

A. Oh, I'm sure -- there's 92.

Q. Referring to the fifth paragraph from the top --

A. Yes.

Q. Is that -- we'll start with NCR in the United States.

A. Okay.

WATER_PCB-SD0000028539

Q. Do you recall their receiving a substitute product for Aroclor 1242?

A. Yes.

Q. Was that product HB 40?

A. Yes.

Q. And was that substitution done in approximately 1970?

A. Oh, absolutely not.

Q. When did that substitution take place?

A. I don't know. I don't have the dates, and I think it would be important to have the dates.

MR. KASHANI: Let's just take a break for a second.

(Pause)

BY MR. KASHANI:

Q. Let me refer you back to Exhibit 87.

A. This is 92. You are saying --

Q. Yeah, we're done with 92.

A. Let's see if I can find 87. Okay. Oh, that was --

Q. I'm not suggesting that you've seen this or anything, but --

WATER_PCB-SD0000028540

A. Right.

Q. -- does this refresh your recollection as to when Monsanto substituted another product for Aroclor 1242 sold to NCR? And I'm referring in particular to the third paragraph with the dash in front of it, or actually the first paragraph.

A. Right.

Q. Sorry.

MR. ZIMMER: Do you understand what his question is? He doesn't want you to confirm what's in this paper, he just wants to know if it jogs your memory at all.

THE WITNESS: Right.

(Witness peruses said document.)

BY MR. KASHANI:

Q. Does it refresh your memory?

A. Yes.

Q. Oh, I'm sorry.

A. I'm sorry, I didn't --

Q. And your memory having been refreshed, do you recall when it was that Monsanto substituted another product for Aroclor 1242 sold to NCR, beginning with NCR

in the UK?

A. NCR in the UK happened earlier than NCR in the U.S., but the dates, I can't tell you. I don't remember.

Q. Taking the later date, when NCR, when the substitute product was sold to NCR in the U.S. did that occur before or after Monsanto discontinued sales of Turbinol 153?

A. I don't know. If you have documentation, maybe I can look at it.

Q. What is HB-40?

A. A hydrogenated biphenyl.

Q. Does it contain polychlorinated biphenyls?

A. No, it's a hydrogenated biphenyl.

Q. Is it a pure compound?

A. 40 percent hydrogen.

Q. I mean, is it a single compound or a mixture of compounds? I mean, is it a pure substance or a formulation, to use your terminology?

A. I don't know. It probably says 40 percent and there's some that's 30 percent, some at 20, but the predominance is 40 percent hydrogen on the biphenyl. That's

probably right, because we made an HB-20.

Q. Do you recall the reason why Monsanto stopped selling Aroclor 1242 to NCR?

MR. ZIMMER: You mean that it was replaced with HB-40?

A. To get out of the PCB business.

BY MR. KASHANI:

Q. Was it because of environmental concerns?

A. Sure.

BY MR. KASHANI:

Q. Who else was involved in, who else in Monsanto was involved in the NCR account?

A. NCR was primarily a plasticizer account, and for whatever reason, I ended up with the responsibility to handle the replacement of the 1242. So other people I think there was Cumming Paton at one time, and Tom Gossage, Dr. Richards (sic), that's about it.

Q. Do you recall the individuals who were involved on the NCR end?

A. No, I don't.

MR. ZIMMER: Counsel, forgive my interruption, but are we going somewhere with

WATER_PCB-SD0000028543

this? We're talking about a completely different company that bought carbonless copy paper. I'm puzzled.

(Discussion off the record.)

MR. KASHANI: If I can take a five-minute break, and then about five more minutes after that.

(Recess)

BY MR. KASHANI:

Q. I refer you to Pages 113 to 115, and so I get the complete pages, 112 to 116.

A. Is that in that big deposition, you mean?

Q. Yes. I think I can find it right here.

MR. KASHANI: Mark that the next exhibit.

(The document referred to had been previously marked Plaintiff's Deposition Exhibit 107 marked for identification.)

(Witness peruses said document.)

THE WITNESS: Didn't we talk about

WATER_PCB-SD0000028544

this before?

BY MR. KASHANI:

Q. Approximately. We did go on from Page 116, so they'll be somewhat similar.

A. Okay.

Q. Was that the testimony you gave at the deposition in 192?

A. Yes.

Q. And is that true and accurate?

A. I believe so.

Q. After -- at some point, Monsanto substituted HB-40 for Aroclor 1242 for NCR. After that point, or during that process or afterwards, did you personally tell any other customer of either Aroclor 1242, or of a product which contained Aroclor 1242, that Monsanto was substituting another product for Aroclor 1242 sold to NCR?

A. It had no relationship at all. The NCR application was a chemical application, and not a physical application like a fluid.

Q. Were they using -- but were they using the same product, Aroclor 1242?

A. Yes.

WATER_PCB-SD0000028545

Q. So is the answer to my previous question "No"? The question is, did you tell any other customers about the substitution process or that another product had been substituted for Aroclor 1242 sold to NCR.

A. HB-40 was not fire resistant.

Q. I understand.

A. Okay.

Q. I'm not suggesting that HB-40 could be a substitute for Aroclor 124 in all applications, I'm just asking whether you told other customers --

A. No.

Q. -- that the substitution had taken place.

A. No. No.

Q. Do you know if anyone at Monsanto told any other customers, including Texas Eastern, that the substitution had taken place?

A. No. It doesn't relate.

MR. KASHANI: Okay, thank you, very much.

Let's go off the record for a second.

WATER_PCB-SD0000028546

(Discussion off the record.)

MR. KASHANI: We have stipulated that either a copy or an original of the transcript will be sent to Mr. Johnson for his review, for him to make any corrections and for his signature. Mr. Johnson will have thirty days to review and/or sign the transcript, and if Mr. Johnson does not make any corrections or does not sign the transcript, an unsigned or uncorrected copy of the transcript -- I'm sorry, Mr. Johnson does not sign the original or make any corrections within thirty days, then an unsigned and uncorrected copy of the transcript may be used in all the same as a signed original in all respects. So stipulated?

MR. ZIMMER: So stipulated.

(Whereupon, at 5:05 p.m., the deposition was concluded.)

WATER_PCB-SD0000028547

COMES NOW THE WITNESS, NORMAN T. JOHNSON, and having read the foregoing transcript of the deposition taken on the 24th day of March, 1992, acknowledges by signature hereto that it is a true and accurate transcript of the testimony given on the date hereinabove mentioned.

_____

NORMAN T. JOHNSON

Subscribed and sworn to before me this _____ day of _____, 1992.

My Commission expires: _____

_____

Notary Public

WATER_PCB-SD0000028548

STATE OF MISSOURI)
SS:)
CITY OF ST. LOUIS)

I J. Bryan Jordan, Licensed Certified Shorthand Reporter in and for the State of Illinois, duly commissioned, qualified and authorized to administer oaths and to certify depositions, do hereby certify that pursuant to agreement in the civil cause now pending and undetermined in the Superior Court of the County of Los Angeles, State of California, to be used in the trial of said cause in said court, I was attended at the Marriott Suites, in the City of Arlington Heights, State of Illinois, by the aforesaid witness and by the aforesaid attorneys, on the 24th day of March, 1992.

The said witness, being of sound mind and being by me first carefully examined and duly cautioned and sworn to testify the truth, the whole truth, and nothing but the truth in the case aforesaid, thereupon testified as is shown in the foregoing transcript, said testimony being by me reported in shorthand and caused to be

WATER_PCB-SD0000028549

transcribed into typewriting, and that the foregoing pages correctly set forth the testimony of the aforementioned witness, together with the questions propounded by counsel and remarks and objections thereto, and is in all respects a full, true, correct and complete transcript of the questions propounded to and the answers given by said witness; that signature of the deponent was not waived by agreement of counsel.

I further certify that I am not of counsel or attorney for either of the parties to said suit, not related to nor interested in any of the parties or their attorneys.

Witness my hand and notarial seal at St. Louis, Missouri, this 31d day of April, 1992.

My license expires May 31, 1993.

J. Bryan Jordan

Certified Shorthand Reporter

State of Illinois

License No. 084-003255

WATER_PCB-SD0000028550