IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS

THE UNITED STATES OF AMERICA,	)	
	)	
Plaintiff,	)	
	)	
v.	)	No. 78C-1004
	)	
OUTBOARD MARINE CORPORATION and MONSANTO COMPANY,	)	
	)	
Defendants.	)	

The deposition of HOWARD S. BERGEN, JR., Deponent, taken at the instance of the Plaintiff pursuant to agreement of counsel, reading and signing of the deposition not waived, before Clifford C. Sheffield, III, and Linda C. Morrison, Deposition Officers, on March 5, 1981, at Suite 1800 Richard Russell Building, Atlanta, Fulton County, Georgia.

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57 Forsyth Street
Atlanta, Georgia 30303
(404) 523-3423

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A P P E A R A N C E S

ELIZABETH STEIN, Esquire
Attorney for Plaintiff

ROSEANN OLIVER, Esquire
PETER JOHN, Esquire
HUGH THOMAS, Esquire
Attorneys for Outboard Marine Corporation

JAMES H. SCHINK, Esquire
Attorney for Monsanto Company and the Deponent

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PROCEEDINGS

HOWARD S. BERGEN, JR.

was first duly sworn and was examined and deposed as follows:

MS. STEIN: Let the record reflect that this deposition is being taken pursuant to agreement of counsel and in conformance with the Federal Rules of Civil Procedure.

CROSS-EXAMINATION

BY MS. STEIN:

Q What is your name, please?

A Howard S. Bergen, Jr.

Q Okay. Could you tell me your business address, please?

A 2300 Parklake Drive, Northeast, Atlanta, Georgia.

Q Okay.

A 30345.

Q Okay. What company is that?

A Georgia-Pacific Corporation.

Q Okay. And could you give me your home address, please?

A 1792 Castleway Drive, Northeast, Atlanta, Georgia, 30345.

Q Okay. Have you ever had your deposition taken before?

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A Yes.

Q Okay. Could you tell me when that was and the name of the case?

A I do not know the name of the case, except it was Lauder versus Radiant Color, and it was about late Fifties or early Sixties.

Q Did that involve any PCB-bearing products?

A No.

Q Have you ever been deposed other than that?

A No.

Q Okay. Have you ever given testimony in court?

A No.

Q Could you give me your educational background, please?

A I'm a B.S. chemical engineer, Washington University 1942.

Q Do you have any graduate degrees?

A No.

Q After you got your degree in 1942, what did you do next?

A I went into the armed services, the Air Force. I came out as a captain.

Q And when did you get out of the service?

A February '46.

Q Then did you go to work for Monsanto?

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A Yes.

Q Okay. And what was the position in your first job at Monsanto?

A I was in the Development Department, specifically working on plasticizers.

Q What division was that in?

A The Organic Chemicals Division at that time.

Q Do you remember when you started that job?

A It was sometime in 1946.

Q Okay. Could you describe briefly what your work was in the Development Department of plasticizers?

A It involved introducing new plasticizers from the Research Department into the marketing area, doing market research, technical service.

Q Could you tell me what a plasticizer is?

A It's a modifier for a resin to induce flow and plasticity.

Q Were any of the compounds you worked on PCB-bearing compounds?

A Yes.

Q Okay. Can you tell me what the uses were, the applications that you intended for these plasticizers and what the compounds were? Was it Aroclor 1242 or 1248, or --

A Well, the Aroclors were a whole series of products, as you probably know, and they went into a multitude of

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different plastic articles. They went into adhesive formulation traffic paints, swimming pool paints, things of that type.

Q Were specific Aroclors used for specific compounds? For example, Aroclor 1242 have been used as a sealant, and Aroclor 1248 as a traffic paint? Was there any kind of correlation like that?

A I can't recall. They went to a lot of different applications. They were so numerous, and many times we didn't know the specific customer application.

Q Could you describe briefly what you mean by "technical services"?

A Technical service is where you relate to the customer and try to teach him about your products, how to use them, or if he has a problem using it, you try to help him solve that problem.

Q And how long were you in the Development Department for plasticizers in the Organic Chemicals Division?

A I don't recall exactly. Those records are all available at Monsanto.

Q Okay. Can you give me a range of years, four or five years, approximately?

A I'd say something like that. Maybe up to eight, seven or eight.

Q After you left that job what was your next employment?

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A In marketing.

Q Also at Monsanto?

A Yes.

Q And what was your job title?

A Well, when I went into technical service, they transferred the technical service function from development to marketing, and then after that I went into field sales in the Los Angeles area.

Q Did that mean you were based in Los Angeles?

A Yes.

Q And how many years were you based in Los Angeles?

A Two and a half years.

Q Do you have the approximate dates?

A '55 to '57.

Q And did you have direct contact with customers in that job?

A Yes.

Q And what kind of contacts did you have with customers?

A The normal sales contacts, calling on them, entertaining them, selling them.

Q Okay. Which products were you selling during the time that you were in Los Angeles?

A Paper chemicals. Paper chemicals, primarily. To some extent, functional fluids. To some extent, chemical

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intermediates. The major effort was in paper chemicals.

Q Could you describe what some of these paper chemicals were?

A Yes. Products we called Mersize, which is an internal size --

Q Is that M-e-r-s-i-z-e (spelling)?

A Right. Scripsets, which were a surface sizing material.

Q Did either of those two Monsanto products contain PCBs?

A No, they did not.

Q Okay. Which functional fluids did you sell? Do you remember?

A Primarily, one was Skydrol.

Q Did you sell any Pydrauls?

A I may have. I don't recall. It was not much, if I did. There was primarily another fellow that handled that out there.

Q Did you sell any Therminol?

A I may have. A small --

Q What was your next job after you were in field sales in Los Angeles?

A Product Manager in plasticizers in St. Louis.

Q And how long were you in that job?

A Approximately six or seven years.

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Q This would be approximately 1957?

A Right. To '63.

Q To 1963?

A Somewhere in there, yes.

Q Okay. What were the responsibilities of the Product Manager for plasticizers?

A Responsible for the sales and the whole product market function of that product area.

Q Did you train sales people, have seminars for them?

A Yes. We had -- We would do training of salesmen along with our Application Research Department, and we also had tech service people that reported to me.

Q And these technical service people who reported to you had direct customer contacts; is that correct?

A Yes.

Q And they would report back to you on problems or questions that customers had about the various products in the plasticizers group?

A Yes.

Q Do you remember what the training consisted of, the sales people? Did you describe the products and the components of the products? Did you describe the products, the components of the products, the intended applications?

A Yes.

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Q Okay. What other things did you discuss in the training of sales people?

A The training directly was not under my direct supervision. It was under the Application Research Director primarily.

Q Who was that?

A That was Mr. Joe Darby.

Q Have you ever had any management training?

A Yes.

Q Okay. Was that at Monsanto?

A Yes.

Q Could you describe basically what those courses were?

A Well, we had many of them. I don't recall all of them. Numerous ones.

Q Did you have any management philosophy, for example?

A I don't know what you mean by "management philosophy."

Q Let me ask it another way. Did you have training in how to deal with your sales force, relationships with them?

A We had training in the manager's job.

Q Did you also get training in instilling a sense of loyalty to the company and the people that were employed under you?

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A No.

Q All right. If you remember any of these courses, could you describe them briefly?

A I can't remember.

Q Okay. After 1963 was your next job then with Monsanto also?

A Yes.

Q Okay. And what was that position?

A Director of Sales.

Q For what organization?

A This was a group of products. I had paper chemicals, functional fluids, petroleum additives, rubber chemicals, resin intermediates.

Q About how many people were in the sales force?

A I don't really recall.

Q Now, this was Director of Sales for --

A For products. We had a Director of Field Sales and a Director of Product Sales.

Q Okay. And this was again in the Organic Chemicals Division?

A That's correct.

Q And how long were you in that position?

A Until approximately June of '68. I think that was the date. June or July.

Q And to whom did you report as the Director of

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Product Sales in the Organic Chemicals Division?

A As I recall, I had several different bosses during that time. I think I reported to Jim Lawler for a while.

Q Jim --

A Lawler. L-a-w-l-e-r (spelling). And then also to Ernie Robeson.

Q And what were their titles?

A Ernie Robeson was the Director of Marketing for the Organic Division, and I forget exactly what Lawler's title was at that time. Assistant Director of Marketing, or something like that.

Q Can you name some of the products for which you were responsible as Director of Product Sales?

A Yes. In the paper chemical area it was the Mersize and the Scripsets primarily. In the petroleum additive areas it was things like Santopoid and Santopour, products like that which were engine oil additives or gear oil additives. The functional fluids included the Skydrol, Pydrauls, Therminols. The resin intermediates included thalic anhydride, malaic anhydride, the fumaric acid products like that.

Q Was the person with primary profit responsibility to higher levels in Monsanto for the products in this group?

A Yes, that's correct. At that particular time we were on a matrix type organization, and there was what

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they called a Product Director who reported to the General Manager, and he really had the total profit responsibility because he pulled together the manufacturing side and the marketing side and the whole R and D and everything else.

MS. OLIVER: That's in the period '63 to '67?

MS. STEIN: I think till '68.

THE WITNESS: I think approximately during that period, yes.

BY MS. STEIN:

Q Who was the Product Director during this time?

A Mr. Joe Cresce.

Q How do you spell his last name?

A C-r-e-s-c-e (spelling).

Q Okay. And I believe you said that the Product Director reported to a Product Manager; is that correct?

A The Product Director reported to the General Manager.

Q The General Manager. Okay. And who was the General Manager?

A We had a couple during that period of time, and I'm not exactly sure of the time, but there was a Mr. Bob Morris, and there was a Mr. Howard Minckler, and there was a Mr. -- About that time I'd say it was either Morris or Minckler.

Q Did you have any relationship with the product

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manufacturing group in the Organic Chemicals Division?

A Yes, occasionally.

Q Could you describe what kind of contacts or relationship you had with the manufacturing?

A It pertained primarily to items of either productic levels, quantities, or specifications, or quality, or something like that.

Q Did you work directly with someone in the manufacturing group on those kinds of questions?

A Yes. They were generally either plant managers or manufacturing superintendents.

Q And did you work with the people, the plant managers or the manufacturing superintendents, at the facilities where PCBs were manufactured during this time?

A Yes. That was a very small part of the whole business, a very small part.

Q Could you draw a chart for me that delineates the relationship between you and the sales personnel in the -- during the time that you were the Director of Product Sales in the Organic Chemicals Division?

A You mean Product Manager?

Q No. You said you --

A The Director of Product Sales. Okay.

Q Yes.

A Prior to June '68?

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Q Right.

A Right. Okay. I believe that was the way it was at that time.

(Drawing was then marked as Plaintiff's Exhibit Bergen 1 for identification.)

THE WITNESS: I might explain that the dotted line is -- Sometimes there were two Product Directors, and sometimes there were three during that period of time. Mullendore was the third one. He came in a little later. I'll put his name down there.

BY MS. STEIN:

Q Mullendore?

A Mullendore. Mullendore. He came in and cut, and actually we traded groups back and forth a couple of times.

Q You sort of switched responsibilities?

A We switched responsibilities and products occasionally. So there were different periods of times we had different things. All the field salesmen and the customer contact was on this side, and this was all the product and the tech service over here. And this was solely marketing.

Q Okay. So on the -- As you look at it, on the left-hand side under the designation, "Assistant Director,

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Marketing, Field Sales," and these are Regional Managers under here?

A Yes.

Q And the sales people would report to the Regional Managers? Is that correct?

A Yes, that's correct, or the District Managers would.

Q Okay. And then under the general heading of the Assistant Director for Marketing for Products, where you have these two or three subdivisions, one of which you headed --

A Right.

Q -- the technical services functions were there? Correct?

A Yes. Along with the Product Managers.

Q Okay. Now, I believe that in your discussion of the job that you had when you were in technical services for the plasticizers group earlier you mentioned that even though you were in technical service you had customer contact; is that correct?

A Yes.

Q Now, did the people who were under you in this particular organization, which is depicted on Plaintiff's Exhibit Bergen Number 1 -- did the technical services people also have customer contact?

A That's correct.

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Q Okay. How did they relate with the sales people in terms of customer contacts?

A The customer -- Salesmen would usually say if the customer has a problem, or, "I need to show him how to use my product," and when he needed technical help to do either of those two things, he would then call on the technical service group to come out and help him. They very seldom would make a call by themselves. They usually went with the salesmen.

Q What kind of backgrounds were these people? Were they chemical engineers or chemists?

A Chemists or chemical engineers, generally. Some of them might be mechanical engineers.

Q Okay. Did they discuss things like compatibility of various products with existing products?

A I don't know what all they talked about. They talked about their products and how to use them.

Q Was it the same technical services people who developed the technical bulletins for the products in the group?

A At that time usually the technical bulletins were written by the technical service people, with research help, with advertising help, and also with inputs from the medical people, anything on toxicity or anything like that, and we usually would incorporate anything we knew about the

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product as far as handling, safe handling.

Q Did you have any role in the preparation of those technical service bulletins?

A When I was in tech service, yes.

Q That was prior to 1963; is that correct?

A Yes.

Q Do you remember the names of some of the technical services people who worked for you during the period 1963, I believe, to 1968, who would have been involved in the preparation of the technical bulletins or sales literature?

A Well, there were so many different ones.

Q Do you remember anyone who was involved in -- with regard to those products that contained PCBs?

A Not specifically.

Q You don't remember any names?

A The time frame is what's hazy, because people would move in, and they would move out, and I can't recall specifically who wrote what bulletin. There were people like --

MR. SCHINK: You don't have to guess if you don't know.

THE WITNESS: I don't really know.

BY MS. STEIN:

Q Can you give me the names of some of the people who were in the technical services area, even if you can't

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remember the names or the numbers of the bulletins that they wrote?

A Some of the tech service people were also industry managers, marketing managers, below a product manager. And so some of them would write the bulletins also, but they were technical people. So -- but there was a play on names between technical service and marketing managers, and --

Q Could you describe for me what you mean by an industry manager?

A Well, within a total market there might be subsections of that market, like in industry, and some of them might specialize in a certain part of it.

Q Could you give me a concrete example?

A Within the plasticizer area, for example, we had speciality plasticizers and we had commodity plasticizers, which broke out markets down two ways. And that was one example.

Q Okay. What would the difference have been?

A Well, one was just a big volume thing that you would sell like salt or sugar, and the other one was one that required more specialized knowledge and how to sell it and where it was applied and used because of its properties and its performance.

Q So these technical services people were familiar

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with the properties of the various products?

A Yes.

Q Okay. And who determined in the Organic Chemicals Division during the period 1963 to 1968 what the applications of a product were? I mean, I assume that new products were being developed, and they were going to be put into new uses or applications. Do you know who was involved in the -- or, what the process was for determining what those uses would be and what -- you know, for those particular products?

A It would primarily be the research group working with the marketing group or the development groups. There were usually three different functions: the R and D function, the development function, and then the marketing function.

Q Okay. What was the difference between the R and D function and the development function?

A Well, R and D actually does the physical test tube and the chemical reaction and the process development, and application research will try to apply it to various products or end uses. The development group would generally be the group that would take this new product which showed some favorable performance characteristics, and they would take it out to the customers to see if it was credible and marketable and acceptable. Then the marketing group would finally take over and sell it.

Q During the period 1963 to 1978 who was the manager

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for the research and development in the Organic Chemicals Division?

A I don't really recall. They had quite a change of some of those people there.

Q Do you remember -- I believe you mentioned that there was also an application research function.

A Yes.

Q Do you remember who was in charge of that?

A Well, again, there were different ones for these different functions.

Q They were product specific?

A Yes, they were more product specific. In other words, there was an application group of petroleum additives, there was a whole rubber chemical laboratory, so there were --

Q All right. After the middle of 1968 what was the next job that you had?

A Well, at that time there was an organizational change, and they eliminated the product director concept and made the business directors totally responsible for their business, and they brought a new title in called the Business Director. And they did away with the line functional organization. There was no longer one Director of Marketing. There was no longer one Director of Research. And they divided it into different businesses. And then there were Business Directors, and they each had directors of research,

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directors of manufacturing, et cetera, under them. And the Product Director job was eliminated. The Business Directors then reported in either to Assistant General Managers or directly to the General Manager.

Q Why did it differ in some cases? Why did some Business Directors report to a General Manager and some to an Assistant General Manager?

A It was just the time in the organization. People would move in and out.

Q Did you then become a Business Director?

A Yes.

Q Okay. For what division?

A Functional Fluids. No, I'm sorry. Constantine Anagnostopolous became a Business Director in July of '68, I believe, and I was Director of Marketing at that time; and then six months later he went to a different group, and I became the Business Director.

Q Okay. So --

A I may be off six months somewhere in there, but for a period of --

Q So for about six months--

A -- about six months that we had this new function, I was Director of Marketing, and he was the Business Director.

Q That would have been until about the first of January of '69?

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A Right. Approximately about then.

Q And then about January of '69 you assumed the responsibilities of the Business Director for Functional Fluids?

A Yes. Or it might have been June of '68. I might be six months off there somewhere.

Q Okay. Okay. Would you draw for me a chart showing who reported to you as Business Director of Functional Fluids and to whom you reported in that capacity?

A Let's see.

MR. SCHICK: If you can't remember it, all you can do is put the divisions down.

BY MS. STEIN:

Q If you can remember names, that would be helpful, but obviously I can't ask you to remember something you don't remember.

A This was '69. I'll put approximately January of '69. I believe it was John Mason at that time, but I'll put a question on that. And he was an Assistant General Manager, and he reported to Howard Minckler, who was the General Manager of the Organic Division. What else did you want to know?

Q Could you just show me who reported to you, and not just the first line, but if you can remember farther down?

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A I can't remember all of them.

Q Okay.

A I believe Don Olsen was the Director of Marketing, Dr. Bill Richard was the Director of R and D. Jim Savage was Director of Manufacturing.

(Discussion off the record.)

(Drawing was then marked as Plaintiff's Exhibit Bergen 2 for identification.)

MS. OLIVER: What is Mr. Kountz' title here?

THE WITNESS: He was the Engineering Manager, and I put a dotted line there because he didn't report directly to me. His direct responsibility was to the Director of Central Engineering. But he was the Engineering Manager assigned to our group. Each business group had an Engineering Manager assigned.

BY MS. STEIN:

Q What did the Engineering Manager do?

A He would design plants, plant expansions, or if there were process modifications he would do the engineering work to put in the process or whatever was involved.

Q Was he also responsible for quality control of the products?

A No.

Q It was actually just going and setting up the

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facility where a product was made?

A No, he was not responsible for that.

Q Okay.

A I put a dotted line here because Bill Papageorge was added to the group, I think in '70, I believe.

Q Okay. And he reported directly to you; is that correct?

A Yes.

Q Okay. Now, how long was this the structure for the Functional Fluids group?

A That structure stayed until about 1970, January of '70, and then what they did is they merged the paper group -- See, I had other Business Directors, and for example, example, the paper group, and in 1970 they merged the paper business group with Funtional Fluids, and we then called it Specialty Products.

Q So at that point--

A And then I was -- In 1970 then I was the Director of Specialty Products.

Q Okay. And what were your responsibilities as the Business Director for -- first -- Functional Fluids?

A I was responsible for the total business, total profit and loss --

Q Marketing strategy?

A The whole business, yes.

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Q And what were the responsibilities of the Assistant General Manager to whom you reported?

A He was responsible for the administration, the management, of the different Business Directors.

Q Okay. Who had the responsibility for making a decision as to whether or not a proposed product actually went onto the market, during the period, say --

A If it required a capital investment, depending upon the magnitude, it might have to go before the board of directors of the company. So everybody was involved. If it was a very small thing and it fit into a plant, it could be made just at the divisional level and would generally be approved by the General Manager.

Q Was there a dollar cutoff for determining which --

A No.

Q In terms of capital -- The differentiation was whether or not a capital investment was required? Is that correct? And that was the determining factor as to whether it went higher in the Monsanto chain of command?

A That was a key factor. It may not have been the only factor.

Q Okay. And who had responsibility for determining whether or not a product would be withdrawn from the market?

A Again, that could be anybody's function. If the product was very unprofitable, there would probably be

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a lot of pressure on from senior management to say, "Why do we stay in this business?" And if you couldn't turn the business around, you would drop the product. So profitability was a key criteria.

Q Was there a specific process that you went through - Strike that.

Did you periodically report to somebody on the profitability of each of the products in your group?

A Yes.

Q Okay. Was that to John Mason, who was the Assistant General Manager?

A Yes.

Q Now, you have given me an organizational structure, and -- what's been marked as Plaintiff's Bergen Deposition Exhibit Number 2. I believe you said that was starting approximately January of 1969, and that same chart indicates changes that were made in 1970. Did you stay with Monsanto after 1970?

A Yes.

Q Okay. For how long? What was your next job then after you were the Business Director of Specialty Products?

A My next job was in approximately January -- Decembe -- January -- January -- approximately January of '75. And then I was the Business Development Manager. There was another

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reorganization around that time.

Q In 1975?

A Yes.

Q Okay. Business Manager? Is that correct?

A Business Development Manager of a group -- what did they call it? I forget what it was called. They merged the Inorganic Division and the Organic Division, and there were some organizational changes made, and about that time I made up my mind I was leaving Monsanto, about that time.

Q Okay. So you left in about 1975?

A I left in June of '75.

Q But between, say, the end of 1970 and 1975 I'm sort of fuzzy on what your responsibilities were in the company. Was there any kind of interim reorganization in there?

A Yes. There was a period of fuzziness and uncertainty, really, because I had not accepted the job, and I told them I would not accept the job, and so I was performing a job, but I hadn't totally accepted it.

Q This was in 1975?

A Yes.

Q Okay. What did you do during the period from say, the end of 1970 until 1975?

A I was Business Director of Specialty Products.

Q Okay. Was that still the Organic Chemicals Division, or was that the Monsanto Industrial Chemical Company?

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A No, they called that the Industrial Chemical Company.

Q Do you remember when the Industrial Chemical Company was formed?

A Not exactly.

Q But the formation of that company didn't really affect the nature of your duties as the Business Director for --

A No.

Q Okay.

A We did get different managers in. There were changes in managers.

Q And you reported to somebody other than John Mason?

A Yes, that's correct.

Q Okay. Do you remember who it was you reported to?

A Wink Corey..

Q Who?

A Corey. C-o-r-e-y (spelling).

Q What was his first name, again?

A Wink. They called him "Wink." W. R. Corey.

Q When did you first become aware of Monsanto products containing polychlorinated biphenyls?

A Well, I was familiar with the Aroclors ever since

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I started working in plasticizers.

Q And that was back in the 1950s, then?

A That's correct.

Q And were you involved in the development of Aroclor-containing products at that time, say, in the 1950s?

A Along with many other products. They had already been developed.

Q Had they already been marketed?

A Yes.

Q Okay. Were you involved in developing any PCB or Aroclor-containing products that then went onto the market?

A No.

Q Okay. This was at the time that you were in plasticizers, right?

A Yes.

Q Can you tell me what the trade names of the PCB-bearing products were during the time that you were in the plasticizers group?

A Aroclors.

Q Aroclors?

A (Nods head affirmatively.)

Q Okay. When you went into -- When you became the Product Manager for Plasticizers, were there new Aroclor-bearin products that were introduced during that time?

A No.

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Q Okay. Okay. During the time that you were the Director of Product Sales in the Organic Chemicals Division can you tell me what the Aroclor-containing products were in the group that you were responsible for?

A The product line really didn't change much. It had been established for a long time, even prior to my coming to Monsanto.

Q Can you tell me what the products were that were in that product line?

A The trade names?

Q Yes.

MR. SCHINK: That contained Aroclors?

MS. STEIN: That contained Aroclors.

THE WITNESS: Would you rephrase the question?

MS. STEIN:

Q Okay. Can you tell me what the names of the -- the trade names of the products that contained Aroclors during the time that you were the Director of Product Sales for the Organic Chemical Division?

A Right. Our Therminol products, some of them contained Aroclors. Our Pydrauls, some of them contained Aroclors.

Q Did any of the paper chemicals?

A No.

Q Any of the petroleum additives?

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A No.

Q Any of the rubber chemicals?

A No.

Q Or the resin intermediates?

A No.

Q Do you remember which of the Therminols contained Aroclors?

A That's what we called our FR series.

Q How many Therminols were in the FR series?

A I do not recall.

Q Okay. Which of your Pydrauls contained Aroclors?

A The majority of them did.

Q Now, the Pydrauls were the hydraulic fluids; is that correct?

A Yes.

Q And the Therminols were heat transfer fluids?

A That's correct.

MS. STEIN: Excuse me. I've got to get a drink of water. My throat is just killing me.

(Short recess.)

BY MS. STEIN:

Q Okay. When did you first become aware of the presence of PCBs in the environment?

A The first was I read about it in the articles from Sweden.

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Q Okay. Do you remember when that was?

A I think that was approximately in '69 -- late '68 or '69.

Q Do you remember who were the authors of those articles?

A I would remember if I heard, but I can't say them offhand.

Q And how did those articles come to your attention?

A I don't recall.

Q After you read those articles did you do anything in response to these articles?

MR. SCHINK: You're asking about Mr. Bergen individually, as opposed to Monsanto?

MS. STEIN: I'm asking about Mr. Bergen at this point. That's correct.

THE WITNESS: I personally didn't do anything, no.

BY MS. STEIN:

Q Do you know of anybody who did?

A I think Bill Richard began to ask some questions. I think the Medical Group began to ask some questions.

Q What were the nature of their inquiries, if you know?

A Well, I think everybody was surprised and couldn't believe it.

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Q What do you think was the basis for everybody being surprised?

A Well, because most of our products were all contained or tied up in something, and we didn't see how they could escape to the environment.

Q Do you consider the traffic paint a contained use?

A It was contained with a resin, bound in with a resin.

Q And it never volatilized or escaped from the resin?

A We didn't think so.

Q Okay. And what about adhesives?

A Again, they were bound in with a resin.

Q And how about carbonless carbon paper?

A Again, they were capsulated and bound into a system.

Q But you didn't anticipate that anyone would throw them out? The carbonless carbon paper. Just to throw it in a wastebasket?

A I didn't know what other people would think. We did not think they were a problem.

Q And how about hydraulic fluids?

A Again, they were contained products.

Q And you were never aware of any leaks from hydraulic --

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A I personally was not aware of any specific leaks.

Q Who was aware of the leaks?

MR. SCHINK: What do you mean by "leaks"? Are you talking about just loss dropped from a machine, or are you talking about discharge to the environment?

MS. STEIN: Escape from the container, the fluid container.

MR. SCHINK: Which is not necessarily the same thing as discharged to the environment; is that correct?

MS. STEIN: I'm talking about generally escape to the environment.

MR. SCHINK: Well, now, that's not what you were talking about before.

MS. STEIN: Okay.

MR. SCHINK: What is your question?

BY MS. STEIN:

Q Okay. Are you aware of any instances of hydraulic fluids containing PCBs escaping to the environment?

A No, I was not.

Q Let's get the time frame straight. You never during the entire time that you were at Monsanto --

MR. SCHINK: No, the questions you asked him, Ms. Stein, were in late 1968 or early 1969, at the time he became aware of some report about the presence of PCBs in the environment what did he know, and what to

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the best of his knowledge did others at Monsanto know. That's been the time frame of your last series of questions, as I've understood it. Is that not correct, Ms. Stein?

MS. STEIN: That's fine.

BY MS. STEIN:

Q Okay. Did you subsequent to late 1968 and early 1969 become aware of any instances of PCB-bearing hydraulic fluids escaping into the environment?

A In late '69 or 1970 we did get some reports that some material had gotten out, and again we didn't know how, and that's when we first began to be aware that some was getting out in the environment, but we still didn't know how, and we still didn't really believe it.

Q Okay. Can you tell me the name of the Monsanto customer or other source of these discharges -- excuse me -- these PCB escapes into the environment that you became aware of after early 1969? You said there were instances of escapes that you became aware of after early '69. Can you tell me the specific examples that you have in mind?

A The earliest I recall was -- and I had my memory refreshed yesterday when we reviewed some documents -- was out in San Francisco where there was a claim that PCBs had been found, I believe, in the Bay, and then shortly after that there was a claim that PCBs had hurt some shrimp in

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Florida, from out plant at Pensacola. And I think that's the first time we became aware that they were there.

(Discussion off the record.)

MS. STEIN: Okay. Would you --

THE REPORTER: Read it back?

MS. STEIN: Yes.

(The reporter then played back the requested portion of the record.)

MS. STEIN: Would you continue with your answer, please?

MR. SCHINK: I'm not sure that he --

THE WITNESS: I completed it.

MS. STEIN: Okay.

BY MS. STEIN:

Q Could you tell me who the "we" is that you are referring to?

A The Medical Department, all the people involved at Monsanto.

Q Would that include the Research Department?

A Yes.

Q The Manufacturing Department?

A Yes. I think they were aware of it.

Q Okay. Did any people above the level of Business Director become aware of these reports of PCBs in the environment?

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A That specific time, I don't know.

Q Do you know what Monsanto's response was to these reports of PCBs in the environment?

MR. SCHINK: Your question is what did they do?

MS. STEIN: No, the --

MR. SCHINK: What do you want, their emotional state? You asked for their response.

MS. STEIN: Their response in terms of actions or activities.

THE WITNESS: Let me answer that over a time frame, let's say, of '69 and '70. As we became aware of the problems -- as I said, at first we didn't believe it -- so we started to check first of all analytical to see if this was really true, were the people that were reporting these things, were they really reporting PCBs. So we questioned, first of all, the analytical process, the techniques, were they properly identified. So we assigned people in research in the analytical chemistry side to investigate to see if this was really true. And I think as you realize, the state of the art at that time, we were just getting those kinds of instruments that could measure down to parts per billion and parts per trillion in the mid-Sixties. So here was a new instrument that could begin to find some of these things in these very low quantities. So

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the whole state of the analytical art was relatively new, and a lot of unknowns, so -- had a lot of questions about technique. So we had people in our research group that were investigating that. We also appointed teams to begin to clean up our plants, to be sure that there was no problem.

Now, we did not consider that we had a big problem because, again, we ran pretty clean, efficient plants, and so we began to say, well, you know, is there outlets, are there leaks? And so we began investigating. We began to talk to our customers at that time to see, you know, where could it possibly come from.

So we really began at that time to seek out was this possible. We also sent people over to Europe to talk to them over there, to talk to the scientists over there, and get reports back from them. We talked to some other environmental groups in the States that were beginning to find them, and basically we formed a very cooperative, investigative, responsible approach to investigating this whole matter and taking action to change. '69 was a very active year.

BY MS. STEIN:

Q Did you consider taking any of these PCB-bearing -- any of the Monsanto PCB-bearing products off the market in 1969?

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A I believe in 1970 we did.

Q And what were the reasons for -- Did you actually take them off the market in 1970?

A Several of them we did.

Q Okay. Which ones?

A I believe it was the 1254 and 1260.

Q And why were those chosen as the ones that were taken off the market?

A Those were the ones that were being found in the environment.

MS. OLIVER: Those were the trade names Aroclor, right?

THE WITNESS: Yes.

BY MS. STEIN:

Q And what was the next step after you took Aroclors 1254 and 1260 off the market? This was in 1970, is that correct, that you had them taken off?

A I believe that's right.

Q And then what was the next step that Monsanto took with respect to its PCB-containing products?

A The next step was in the area of the Pydrauls.

Q Did any of the Pydrauls contain Aroclors 1254 or 1260?

A I don't recall.

MR. SCHINK: But all products that contained

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Aroclor 1254 or 1260, regardless of their trade name, were taken off the market at that time, correct?

THE WITNESS: Yes, yes.

MR. SCHINK: In 1970?

THE WITNESS: Yes.

BY MS. STEIN:

Q Okay. You said the next step was with Pydrauls. Could you describe more specifically what those actions were?

A We took the chlorinated biphenyls out of the product

Q What did you replace them with?

A We went eventually to the phosphate ester products.

Q By "went eventually," does that mean there was an intermediate step?

A Yes, there was an intermediate step.

Q And what was that intermediate step?

A We went to the polychlorinated terphenyls.

Q And what is the difference between a polychlorinated biphenyl and a polychlorinated terphenyl?

A A biphenyl has two rings, and a terphenyl has three rings or more.

Q Did you do any toxicity testing on these terphenyls before you put them into the products that you put on the market?

A There had been some toxicity testing done on all the products a long time ago.

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Q Was it done on the specific formulations that were being marketed as a replacement for the PCBs?

A I don't recall.

Q Okay. And then after the polychlorinated terphenyls what was the next step that Monsanto took with respect to its Pydrauls?

A Various phosphate esters.

Q And was there toxicity testing done on the phosphate ester Pydrauls that were marketed as a replacement for the PCT-containing Pydrauls?

A Again, most of the phosphate esters had been long exposures, much data reported.

Q But was any toxicity testing done specifically in connection with the transition to phosphate esters as a replacement for PCTs?

A I believe there was some done, but I can't recall specifically what.

Q Who would know?

A The Medical Department.

Q Can you give me the name of somebody in the Medical Department who would know?

A Elmer Wheeler, Emmett Kelly.

Q Are you familiar with how PCBs were disposed of at Monsanto facilities where they were manufactured?

A At what time?

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Q Between 1963 and 1968.

MR. SCHINK: What do you mean, "disposed of"?

THE WITNESS: No, I was not.

MR. SCHINK: Okay.

BY MS. STEIN:

Q Did you ever call on customers, Monsanto customers directly?

A Yes. What time?

Q During the period 1963 to 1972 did you call on customers?

A Yes.

Q Okay. Did you ever call on Johnson Motors?

A Yes.

Q When did you call on Johnson Motors?

A I don't recall the exact date, but it was during this period, '68 to '75, sometime in that period.

Q You can't be any more specific than between '68 and '75?

A No.

Q Do you remember what prompted your visit to Johnson Motors?

A They were one of our largest customers on Pydrauls.

Q Was there --

A And I had a policy of trying to get out to all my largest customers.

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Q Do you remember what the annual volume of Pydraul purchases was, say, from 1968, 1969, 1970, by Johnson Motors?

A No, I don't.

Q Was it just a general courtesy call that you made?

A It was both a courtesy call and a business call from the standpoint of talking about all facets of our business

Q Did you make more than one visit to Johnson Motors?

A I believe it was only once up there, and I think they came down to St. Louis, and I saw them in St. Louis maybe once or twice.

Q Did you have any conversations with anyone from Johnson Motors regarding escapes of PCBs into the environment?

A When we toured the plant we did talk about that at that time.

Q But you don't remember when that plant visit was?

A I saw a call report or a reference to something yesterday that I guess pinned it down to possibly '72, I believ Is that correct? Possibly. That one you showed me?

MR. SCHINK: Yes.

THE WITNESS: Yes.

BY MS. STEIN:

Q Was there a specific procedure at Monsanto for dealing with customer problems or complaints about a specific product?

A Yes. We had a formal program for customer complair

WATER_PCB-SD0000002056

or quality complaints.

Q Could you describe that process for me, please?

A We tried to respond very promptly if there was a customer complaint, and normally it would come in from the field sales, somewhere in the field sales customer side, and it would generally go in to a gentleman, Bill Ault, who handled all of the quality control complaints, and then the complaint would then go immediately to the plant, the QC Lab, and we would check out a reserve sample, see if it was in spec or out of spec, and tried to take very prompt action with the customer, either take the product back or argue with him and convince him it was okay. And that was the normal thing. If it was a technical interpretation, then the marketing group and the tech service group might get involved.

Q Okay. Could you give me an example of what might be a technical problem?

A Well, say, on an alkyd cook if the customer said, "Well, your malaic anhydride isn't reacting fast enough," or, "It's got black specks in it. It's discoloring my polyester and my alkyd." That's a complaint. To the salesman would report that complaint back, and we would check the reserve samples of the material shipped to him to see if it's in spec or out of spec. And if it's in spec, then we go back and say, "Well, let's get a sample." We would always get a sample from the customer too. And we would try to

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verify is it a legitimate complaint. Sometimes there's a process complaint on his part that maybe he has too much heat on the reaction or something like that that he did wrong. And so that's when the tech service group might come in, if there was a misapplication or if he didn't use it properly.

(Discussion off the record.)

BY MS. STEIN:

Q I believe you mentioned that you kept reserve samples.

A Yes.

Q Is that on every shipment of a product to a customer?

A Yes. That's generally true.

Q Where were those samples kept?

A Usually in the quality control labs of the plants.

Q Was that at the plants that manufactured the product?

A Yes.

Q So it would have, say, a lot number or something?

A Yes, that's correct.

Q And that would designate --

A When it was made, and --

Q And the customer to whom it went? Or was there -- How did you relate the lot to the customer?

A It was on a bag. If it was a solid product, it

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was usually stamped on the bag. If it was a liquid product, it was probably a sample from, say, the tank truck or the tank car that was actually shipped to the customer.

Q Okay. Were you involved in the development of cautionary or warning labels for the products in the functional fluids group?

A It was not my direct responsibility. That was part of our safety, and again our Medical Group, and they would usually make the decisions about what should go on the labels.

Q Did you have any input into the decisions as to what went on the labels?

A Just from the standpoint of being sure that we did do that, that we did check with that department, and that we had the right labels on it.

Q The Medical Department, you mean?

A Yes, or the Safety Department, or whatever.

Q Was the Research Department involved in that too?

A Occasionally they would be, yes.

Q Was it Mr. Wheeler in the Medical Department who you generally worked with?

A He would be one of them.

Q Who were some of the others?

A I forget the names, but there were several others, and we had a Safety Department also, and they might -- people

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from the Safety Department might be involved.

Q Was the Safety Department part of the Organic Chemicals Division?

A I believe it was a staff function primarily.

Q I'm not sure I understand what a staff function is.

A Well, it's part of a corporate staff advisory function that served all the different companies.

Q So it wasn't appended to the Organic Chemicals Division? It was sort of a central --

A That's right. Like Central Engineering.

Q Do you remember who was in charge of the Safety Department --

A No, I don't.

Q -- between like 1960 and --

A No, I don't.

Q No. Let me go back to product development for a moment.

A What period of time?

Q Okay. Let's talk about the period from 1965 to 1975. Okay. If a new product was a -- contained previously tested components, do you know whether or not new tests were conducted on this new product?

MR. SCHINK: What kind of tests?

MS. STEIN: Toxicity tests.

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THE WITNESS: If it was a simple blending, probably not. If it was totally a new product, we always did some, the normal toxicity tests that the Medical Department would prescribe. And everything -- there was a prodedure that all products had to go through that before we would introduce them to the marketplace.

BY MS. STEIN:

Q Am I correct in stating that it was the Medical Department that made the final determination as to whether toxicity tests were required, and if so, what those tests were?

A Yes, primarily. Although later on it became a very enforced company policy to do that.

Q Does that mean that there were other components of the company that had input into the decision on toxicity testing?

A Going back over the history of Monsanto from the time it started, yes.

Q Okay. During --

A Some products it just evolves, you know. The world wasn't as sophisticated in 1901 as it is today.

Q Okay. Let's talk about the period, say, 1963 to 1975. During that period was there a fixed policy or an evolving policy with regard to the determination of whether toxicity tests were required?

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MR. SCHINK: Well, Ms. Stein, to the extent that you're talking about testing of products other than the group of products that this gentleman was responsible for at that time, I don't see that there is any foundatio

MS. STEIN: Okay. Let's limit it to the products that he was responsible for, then.

MR. SCHINK: And I think he has also indicated what his role was or wasn't in that regard, and I don't see that he has testified that he had any role with respect to toxicity testing. So I still don't even see what --

MS. STEIN: I'm trying to find out whether or not he had a role.

MR. SCHINK: Well, why don't you ask him that question? Why don't you just ask him that question directly, rather than asking him ten other questions?

MS. STEIN: If you don't mind, I'd like to conduct the deposition my own way.

Could you repeat the question I asked?

(The reporter then read back the requested portion of the record.)

BY MS. STEIN:

Q And I will limit that question to the products for which you were responsible in the Organic Chemicals Division.

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A I beg your pardon, but could you repeat the question?

Q Okay. During the period from 1963 to 1965 what was the policy --

MR. SCHINK: Excuse me. Do you mean 1975?

MS. STEIN: Yes, I do. Thank you.

BY MS. STEIN:

Q What was the policy at Monsanto for determining whether or not products for which you were responsible required toxicity testing?

A I don't recall all the various policies during that time period. My job was to be sure that my group followed the policies the company established. And that was my job. So whatever the policies were at any given point in time, I was enforcing those policies.

Q Do you know whether those policies were written down anywhere?

A There were a lot of written policies.

Q Do you know whether there were written policies during the period 1963 to 1975 regarding toxicity testing for products for which you were responsible in the Organic Chemicals Division?

A Yes, there were.

Q Okay. Did you ever read those policies?

A I read all policies.

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Q Do you know where I could get a copy of those policies?

A I would assume that Monsanto would have them somewhere.

Q Okay. You said that your role was that of enforcing these policies. Could you describe how you implemented that policy, or how you served as an enforcer of those policies?

A Well, that's the management function, is to organize, implement and control, and so you do that on all policies.

Q Okay. Could you be more specific, please? Let's assume that your group is thinking about coming out with a new product of some sort. Okay. Could you describe to me how you enforce the policy regarding toxicity testing?

A If there was a new product, we would see that the Medical Department got the product to do all the things that they were supposed to do with it. And then they would report back, and we would then have the information and make a decision.

Q Did they determine -- Did the Medical Department determine exactly what the tests were that were going to be performed?

A Yes.

Q Did they have input from any other entity within

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Monsanto in making that decision, as far as you know?

A I don't really know.

Q Okay. Now, I believe you said that in about 1970 Monsanto began withdrawing some of its PCB-containing products from the market. Do you remember which -- And I think you said the Therminols were.

A No.

Q I'm sorry.

A 1254 and 1260.

Q Oh. Okay.

A Because they were the ones being found in the environment.

Q Do you know whether Monsanto was doing any testing to ascertain whether or not any other Aroclors were present in the environment?

A Oh, we started a very comprehensive program on biodegradability of all of the Aroclors, and we did a lot of testing that was done in the application and research work.

Q Do you remember when those tests were started?

A I would assume it's in this time frame of starting in '69 through '75. I know they were done in that time frame.

Q Who was involved in the decision to replace PCBs with polychlorinated terphenyls?

A The Application Research Group, the Medical Group. Everybody was involved.

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Q Were you involved in that as well?

A I knew about it.

Q How long were the PCTs sold as a replacement for the PCB products?

A Approximately one to two years.

Q Did that period of time vary depending on whether it was a 1254 or 1260, 1242, 1248?

A I don't recall.

Q Do you remember when products containing Aroclor 1242 and 1248 were withdrawn from the market?

A Not exactly. It was towards the latter part of '74, the '74 and '75 period, I believe.

Q Were you involved in the preparation of a transition handbook for the sales personnel?

A Not personally. My sales department probably did that.

Q Okay. Do you know who would have been involved in the preparation of a transition handbook for the sales personnel?

A What product area are we talking about?

Q Functional fluids.

A The whole -- Pydrauls specifically, or --

Q No. Functional fluids. That would include the Therminols.

A I don't recall a document called that, specifically

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Q Are you familiar with a product called Pydraul F-9-A?

A Yes.

Q Okay. What was the chemical composition of that product?

A I don't recall.

Q Do you remember the period of time during which it was marketed?

A Not exactly.

Q Can you give me any frame of reference at all?

A '70 to '75.

Q Okay. Now, we talked earlier about the presence of PCBs in the environment. When did you become aware that -- well, that PCBs were getting into the waterways?

MR. SCHINK: He has answered that question. He gave you the -- He said 1969 --

MS. STEIN: Well, I was talking about the environment generally. Now I'm asking about waterways.

THE WITNESS: The Pensacola shrimp was the first that I had heard about.

BY MS. STEIN:

Q And that was a Monsanto facility that you're talking about there?

A That's correct.

Q Okay. When did you first become aware that

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customers, Monsanto customers --

Let me start over.

When did you first become aware that PCBs might be escaping from Monsanto's customers' facilities into waterways?

A I can't tell you the exact first date, but it was in this 1970 -- probably in 1970 when we began to really investigate the problem and talk to our customers. Maybe late '69, late '69 and '70.

Q Were you involved in the development of reclamation processes for Pydraul?

A I was aware of them. I didn't do any specific work in them myself.

Q Okay. What prompted Monsanto to begin developing a reclamation process for Pydrauls?

MR. SCHINK: Well, now, I object to the form of that question. It assumes that Monsanto began that kind of work, and I don't think there's any foundation that Monsanto began that kind of work.

BY MS. STEIN:

Q Do you know whether Monsanto began to develop a Pydraul reclamation process?

MR. SCHINK: A process for Pydraul reclamation.

THE WITNESS: We made a study as to whether that was a business that we should go into.

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BY MS. STEIN:

Q Okay. What prompted the study that you did?

A Because there were other customers that were doing reclamation, and there were other service companies that were doing it.

Q Do you know why people were reclaiming it?

A Yes. General Motors, for example, was reclaiming it to save money, and they had quite an elaborate facility, which I did visit, and I saw it. Findett was another company that was doing the business, and I visited them. They were doing it as a service for other people.

Q Did Findett do it as a service for Monsanto?

A We were aware they offered the service, and if a customer wanted his material reclaimed, we would refer them to Findett.

Q Do you know whether Monsanto encouraged customers to reclaim Pydraul?

A Once we knew that the material was getting out into the environment and the customers had a problem that was leaking into the environment, which we didn't know before, then we said they should tighten up their systems, they should control it, close the loop system, and reclaim it, or destroy it.

Q Did you regard hydraulic fluid uses of Pydrauls as a closed system?

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A Yes, we did.

Q And did you become aware at any time --

A I'm talking in 1967 and '68.

Q Okay. Did you regard hydraulic application as closed systems before 1967?

A Yes.

Q And could you describe to me what you mean by a closed system?

A Where the product is totally enclosed and circulates around, and is just kept in the system.

Q Now, did you ever become aware of instances in which PCBs escaped from a closed, in quotes, hydraulic system?

MR. SCHINK: Would you clarify? Do you mean escaped into the environment or simply leaked or were lost from this closed system? The word "escape" is an ambiguous term, and that's why I object to the form of the question, and if you can clarify it, I don't see any problem with the question.

MS. STEIN: Escaping from the closed system. Excuse me. Escaping from the container.

MR. SCHINK: You don't mean necessarily escaped to the environment? In other words, just being lost from dropping out of the closed system and going somewhere, wherever that may be?

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MS. STEIN: That's right.

MR. SCHINK: Now, the question is when he became aware of that?

MS. STEIN: Yes.

THE WITNESS: When did I become aware? I don't really recall. And I'm not trying to give you an ambiguous answer. It's just that you consider the crankcase of your car, and that's a closed system. Now, sometimes it will have a leak on the floor of your garage, and you wipe it up. Now, anybody could envisualize that any piece of machinery, be it a motor or anything, might leak a drop of oil, or something like that. So that is just part of machinery.

BY MS. STEIN:

Q Now, I believe Monsanto has a Dayton Research Lab, is that correct?

A Yes, they do.

Q Okay. During the period 1963 to 1975 did your group have any relationship with that Dayton Research Lab?

A Yes, but I can't recall anything specifically about it.

Q Did they provide any kind of services or do research for the people working in your functional fluids and specialty products group?

A The work that I recall that they did mostly on

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was some of our high-temperature aviation fluids.

Q Do you know whether they did any work on Pydrauls?

A I don't recall.

Q Now, did Monsanto manufacturing plants have laboratories?

A Usually quality control laboratories.

Q Do you know to whom the laboratory personnel in those plants reported?

A Not exactly. It might vary with the plant or the staffing of the plant.

Q Okay. Did you have any role in the development of an incineration facility for PCB fluids?

A I was aware of the development, and this was part of the investigation process as we got into the program of how to control them, and incineration was one technique for eliminating it from the environment. So I was, yes.

Q Okay. Can you tell me what your role was in that?

A Strictly again as the Business Director of -- seeing that it was looked at as a technique.

Q Okay. Now, did that incineration project ever get put into use?

A Yes, it was.

Q Okay. Were the PCBs that were incinerated there from Monsanto or from customers, or from both?

WATER_PCB-SD0000002072

A Both.

Q Do you know whether Monsanto had a policy of -- after they had this incineration facility -- of informing customers of its availability?

A Yes, we did.

Q Okay. Were you personally involved in that?

A I knew it was there and implemented, yes.

Q And how long was that incineration facility in operation?

A It was in operation when I left in '75.

Q Do you know when it first went into operation?

A Not exactly. It was probably around '72 or '73.

Q Do you know what was the impetus for starting the development of this incineration facility?

A To dispose of the PCBs.

MS. STEIN: Okay. I think that's all I have for right now.

MR. SCHINK: Are you finished?

MS. STEIN: No, I'm not, but I just want to sit down and think about this for a little while before I continue.

MR. SCHINK: Are you ready to go, Roseann?

MS. OLIVER: Yes, we can start.

(Discussion off the record.)

(Short recess.)

WATER_PCB-SD0000002073

BY MS. OLIVER:

Q Mr. Bergen, what do you do now with Georgia-Pacific?

A I'm Vice President, Resin Division.

Q Resin Division?

A Yes.

Q Is that a marketing or sales function?

A It's a total profit business, manufacturing and research and marketing.

Q Is that the same type of position that you had when you left Monsanto?

A You might say it's a comparable thing. It's much greater responsibility.

Q When you left Monsanto in 1975 did you come right to Georgia-Pacific?

A No. I was recruited away and went to work for a Japanese company called Shinetsu, and I was president of the Shintech, which is a polyvinylchloride resin producer in Freeport, Texas.

Q You were president of the company?

A Yes.

Q You had the ultimate responsibility for all the different functions of the company?

A No. The Japanese had the ultimate responsibility.

Q Was that a manufacturing place?

A It was manufacturing and marketing.

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Q And where was that in Texas?

A Freeport, Texas. The headquarters office was in Houston. They are still there.

Q Okay. And how long did you stay with Shintech?

A A little over a year.

Q And then what company did you go with?

A Georgia-Pacific.

Q What type of resin products are you involved with?

A The resin products are both thermo-plastic and thermo-setting resins. The thermo-plastic resin, the main one we make, is polyvinyl chloride. And the thermo-setting resins are phenyl formaldehyde resins and urea formaldehyde resins. We also fractionate tall oil and make resin, paper size, and fatty acids.

Q What kind of products do these plastics and resins find their way into?

A Plywood, particle board, pipe, irrigation pipe, electrical conduit.

Q As the person in charge of the overall profit part of the business, what types of concerns, specific concerns, are your everyday responsibility?

A Well, it's the whole thing of running a business. Everything from your people and personnel administration, manufacturing plants, capital employment, research, marketing, health, safety, OSHA, NIOSH. You name it. EPA, all of them.

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All the aspects of the business.

Q Were those the same aspects that you were concerned with as a Business Director at Monsanto?

A Essentially, except at Monsanto the staff department were stronger than they are at Georgia-Pacific.

Q You mean research and development, marketing --

A Yes. Well, and the medical. Monsanto has a much stronger Medical Group than Georgia-Pacific, for example.

Q Did you have more day-to-day involvement with your staff at Monsanto than you have at Georgia-Pacific?

A Yes. The staff was very much a part of the groups at Monsanto. We were encouraged to use staff.

Q Was it your responsibility as the Business Director of the specialty products of Monsanto to make determinations of which of the products were profitable and which weren't for the company?

A Yes. I had to give a monthly P and L statement.

Q Okay. In terms of the profitability of the specialty products, could you tell me where Pydraul fit into the overall scheme?

A Pydraul was a relatively small part of the specialty products group, probably less than ten percent, and the profits were kind of commensurate with that.

Q Was there any consideration before, say, 1972 --

A Before when? I'm sorry.

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Q 1972. -- to removing the Pydraul products because they weren't profitable?

A No.

Q Was there any consideration while you were involved with the Pydraul products at all to remove them as a product line because they weren't profitable?

A Before I was involved?

Q No. While you were involved, at any time.

A No, not to my knowledge.

Q They were only about ten percent of the sales of the specialty group products?

A Approximately.

Q Do you recall what the average percent of the profit for the specialty groups was, involving the Pydrauls?

MR. SCHINK: Excuse me. Percent profit?

BY MS. OLIVER:

Q Well, if you have a profit of the specialty groups as a total, can you tell me what percent Pydraul --

A I said commensurate.

Q About ten percent?

A Approximately ten percent.

Q As the Director of Sales for products from 1963 to 1968 what exactly were your functions and responsibilities?

A I was responsible to manage the product managers that reported to me and to see that they were basically

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following the policies and procedures of the company and that they were doing a good marketing job.

Q Well, how was the Director of Sales for Products position -- How was your position different from the Director of Field Sales?

A The Director of Field Sales was responsible for the administration and policies and procedures for all the regional managers and the field salesmen.

Q You had the overall responsibility for the sale of the product, whereas the field salesmen were responsible for just going out and --

A Customers. They were responsible for customers. They had the customer responsibility. The product side had the product responsibility.

Q Was Mr. Dick Davis your product manager for functional fluids?

A Yes, he was one of the -- He is one of the Industry Marketing Managers that I referred to earlier, and he was involved in the Pydrauls and Therminols for a while.

Q Did you have any other product managers? Do you remember the names of any other product managers for Pydrauls or the other functional fluids?

A We had quite a few of them that went through there.

Q Over the period of 1963 to '68?

A I was thinking of the whole time span. '63 to '68

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I don't recall.

Q Okay. Did you have, as Director of Sales, regular meetings with your product managers?

A Fairly regularly. We usually had a staff meeting and occasionally business reviews of each product line at least -- well, semi-annually, or sometimes quarterly.

Q In your business reviews for each product line what types of topics were involved at those meetings?

A Essentially it was -- It covered the financial performance of the groups and then any problems or opportunities, long-range plans, where was the business going, what were any problems, and that sort of thing.

Q In the period from 1963 to '68 do you recall any specific problems that came up with the Pydraul business?

A No.

Q For a while you were a field salesman?

A That's correct.

Q As a field salesman selling functional fluids to some extent, did you visit plants which used the functional fluids?

A Yes.

Q Did you visit any plants using hydraulic fluids in the Los Angeles area?

A Yes.

Q Do you remember what those customers were, or

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who they were?

A I called on North American Aviation, and they were using some hydraulic fluids. We never sold them.

Q What was the use, or how were they using hydraulic fluids?

A He never took me in the plant. I didn't see.

Q Okay. Well, were you in any plants which used hydraulic fluids?

A No. I was in the hydraulic fluids part of McDonnell Douglas and Boeing on Skydrol, but the die-casting and that area I didn't call on that much.

Q Well, what was the area, the hydraulic fluids area that you visited?

A It was mainly the business meetings, and sometimes pump testing, something like that.

Q Did you become familiar while you were a salesman with the operation of a hydraulic die cast machine?

A Not really, no, because I didn't have that many customers.

Q Did you become familiar after that time when you were Product Manager or Director of Sales for the products of the operation of a hydraulic die cast machine?

A When I got into the Director of Marketing of functional fluids specifically, and then as Business Director I would visit the General Motors plants, the Johnson Motors,

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plants like that. And then I did become familiar with -- more familiar with it.

MR. SCHINK: You're not talking about after 1969?

THE WITNESS: I'm talking the time I became Director of Marketing, functional fluids, in that period of time.

MR. SCHINK: The middle of '68?

THE WITNESS: The middle of '68, '69, right.

BY MS. OLIVER:

Q Okay. So up to the middle of '68 or '69 you weren't familiar with the operation of a die cast facility which used --

A No, not the details, no.

Q Well, to what --

A I'm still not.

Q To what extent were you familiar?

MR. SCHINK: You're asking prior to '69?

MS. OLIVER: Yes.

THE WITNESS: Simply I knew what a die casting machine was, but I never really operated one or had seen one operate, and I certainly wasn't acquainted with all the hydraulic and the connection devices, whatever they may be.

BY MS. OLIVER:

Q Were you aware of how much hydraulic fluid was

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used in a die cast machine?

A Approximately.

Q Depending on the size of the die cast machine?

A Yes, approximately. But just from what the sales people and the product people would tell me. That's all. It was second-hand information.

Q Okay. You had information on how much of the Pydraul or the hydraulic fluid was being sold to your customers?

A Yes. I had the sales records.

Q Did you visit the GM plant before 1968?

A I don't recall the exact date.

Q Okay. Is the GM --

A I doubt it was before then, but I don't recall.

Q Is the GM plant that we're talking about the one in Bedford, Indiana?

A Yes.

Q Okay. Did your Product Managers or your salesmen discuss with you in the period before 1968 or 1969 any problems that the customers were having with the use of Pydraul

A The main thing that I would hear would be competitive problems with our competition.

Q Do you recall any problems with leakage of Pydraul?

A No.

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Q I think you said earlier that you were aware that Pydraul would leak from a hydraulic system.

A I believe I said that from my youth on up when I had a car I knew that crankcases would leak, and I assume that any type of machinery will drop some oil on the floor, yes.

Q Well, did you have specific knowledge that a hydraulic system such as a die cast machine would in fact leak Pydraul?

MR. SCHINK: You're talking now again pre-1969?

MS. OLIVER: Yes.

THE WITNESS: Yes, I would assume that it would leak, and I guess I kept that assumption.

BY MS. OLIVER:

Q Well, do you know how you got that assumption?

A Like I said, from owning a car.

MR. SCHINK: testified you had never seen one operate prior to 1969?

THE WITNESS: Yes.

BY MS. OLIVER:

Q Did you have any knowledge from any of your salesmen or from any other information you got as to how much Pydraul would leak from a die cast machine or a hydraulic system?

A No, I didn't. I didn't have any knowledge.

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Q Were you aware from any information that because of the pressures on a die cast machine, the hydraulic pressures that lines sometimes broke, spilling Pydraul?

A Yes.

Q Okay. Are you aware how much Pydraul could leak in that manner, or spill?

A No, I didn't know how much.

Q When that occurred did you have any knowledge of what happened to the Pydraul that spilled or leaked from the machines?

MR. SCHINK: You mean how it was cleaned up?

THE WITNESS: Not directly, no.

BY MS. OLIVER:

Q You didn't have any information --

A I heard that -- and again, I don't know what period of time this was, but the people would mop it up and use the cleaning compound to absorb it, just like a filling station will do.

Q Okay. Did you have any other information about any other way it was taken up after it spilled or leaked from the machine?

A Not until I became aware of the reclamation services.

Q Well, when you were aware that spills or leaks were mopped up or cleaned up did you know what happened to

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the Pydraul that was cleaned up?

A No.

Q Did any of your salesmen ever talk to you about what happened to it?

A No.

Q Did you consider that it could be thrown out?

A Yes.

Q And in that way it would become in the environment, or it would be in the environment?

A We didn't know.

Q Well, if it was thrown out --

MR. SCHINK: Well, what do you mean by "in the environment"? Do you mean in the water or --

MS. OLIVER: Outside of the plant.

THE WITNESS: We didn't know how they disposed of it. That wasn't our job.

BY MS. OLIVER:

Q In between 1963 and 1968 no one at Monsanto that you are aware of inquired of its customers what happened to Pydraul that was spilled or leaked?

A I don't know what they talked about.

Q Well, anybody under your responsibility that you were aware of?

A I'm only speculating that the salesman might have been aware of something, but he might have considered

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that just a normal practice.

Q It was never reported to you?

A No.

Q Okay.

A It was not -- It was probably not considered an abnormal experience or situation.

Q You mentioned that you became aware of reclamation procedures later on after 1968, '69. Were you aware of any reclamation procedures carried on by any customers or recommended by Monsanto to its functional fluid customers before 1968 or '69?

A Prior to that I wasn't aware of it, I don't believe. A salesman might have been, but I wasn't.

Q Were you kept advised of the activities of your salesmen with respect to the largest customers in the functional fluids group?

A Yes, occasionally.

Q Well, how often would you review your largest accounts?

A Like I said, semi-annually. Maybe quarterly. It depended on the group or the problems the group was having or whatever, financially, or business-wise.

Q Would there be any special treatment or special consideration given to the larger functional fluid accounts?

A What do you mean by that?

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Q More visits, more reporting.

A Well, the bigger accounts always received frequent attention. The smaller account, just by its priority, did not receive as much attention by the salesmen.

Q Well, what kind of attention would the salesman or anyone in your group give the larger accounts?

A Oh, I would say they normally would give very detailed coverage, call on them quite frequently, socialize with them, possibly have lab visits, whatever, help technical problems, that sort of thing.

Q Was there any regular visiting schedule set up for any of the big accounts?

A The Director of Sales, Field Sales, Norm Johnson, for example, would have a routine calls and policies, and he would make a lot of the routine calls during that period of time, and he had frequency call sheets, I think, that he had the salesmen send in, who they were calling on each week. So, yes, we made sure the salesmen were doing their job and out calling.

Q Did your Business Group or your Specialty Products Group have a schedule set up as when accounts would be visited?

A No rigid schedule, to my knowledge.

Q Who would determine that, Mr. Johnson?

A Normally Norm Johnson would. He was in that

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particular spot.

Q And what input, if any, would you have, and how often?

A None. That was his job.

Q But it would be important to you to know that your larger accounts were being taken care of?

A Of course. Right.

MR. SCHINK: Let her finish the question.

BY MS. OLIVER:

Q Was it your understanding that the larger accounts would be visited by salesmen just to see what was going on and how things were working out in the plant?

MR. SCHINK: What do you mean, "how things were working out in the plants"? Do you mean toured the plants? Is that what you're asking?

BY MS. OLIVER:

Q No special problem. Just a routine visit.

A Well, the purpose of the salesman's call was to sell and service the customer, and whatever that entailed.

Q Wasn't one of the purposes of the salesman to keep the business?

A Of course.

Q Okay. And isn't one of the means of doing that for the salesmen just to make a visit to see if there were any problems with the product and how things are going?

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MR. SCHINK: What do you mean? Problems with what products, the customer's products or Monsanto's, the product Monsanto was selling?

MS. OLIVER: The product that Monsanto was trying to get the business of.

THE WITNESS: The salesman has to be attuned to any problems that might be encountered with his product, sure.

BY MS. OLIVER:

Q Well, what I'm asking is that it wasn't only -- the only time a salesman didn't visit a larger account was not when the customer had problems with the product that Monsanto was selling?

A I'm sorry. I didn't understand your question.

Q Am I correct that Monsanto's salesmen did not limit their calls to their customers to only times when the customer may have had a problem with the Monsanto product it was using?

A That's correct.

Q Okay. They would make routine calls?

A That's correct.

Q And to your knowledge did the salesmen with the larger accounts familiarize themselves with the plant operation where the product was being used?

A The salesmen didn't have any control of that.

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The customer controlled that. And if the customer was willing to take him into the plant and show him, then the salesman normally was interested to learn, because he then could learn more about his product, but the customer controlled that. So some customers absolutely forbad any salesmen to go into the plants.

Q To your knowledge were the Monsanto salesmen for the functional fluids encouraged to tour the plant operations if the employer -- the plant -- permitted it?

A There was no spoken policy or written policy on that.

Q Do you have knowledge that the salesmen for many of the larger functional fluids accounts in fact were familiar with the operations --

MR. SCHINK: Okay. What do you mean by "operations" of a plant? Are you talking about the part of the plant that uses the product? Are you talking about the waste water system of the plant?

MS. OLIVER: I'm talking about the operations of the plant where the product was being used.

THE WITNESS: I can only answer that the salesman could only see what he was shown, and he could not comment about the process.

BY MS. OLIVER:

Q So you don't know whether the salesmen were

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familiar or not?

A No.

Q Okay.

(Discussion off the record.)

BY MS. OLIVER:

Q Were there any -- or, was there any training, specific training, given to salesmen for the functional fluids that you are aware of?

A We trained them in some aspects, and I'm not totally aware of what they were. Some of the other people you've talked to could better answer that question. But I know they did spend some time on pumps and things like that.

Q To your knowledge did they familiarize themselves with the hydraulic operations?

A I believe that they encouraged them to learn what they could about that.

Q Okay. Well, was it part of your responsibility to see that your salesmen --

A That was the Director of Marketing's responsbility, to see that they were trained. It was not mine. It was his.

Q But it was part of your overall responsibility for the profitability of the product?

A Yes.

Q Okay. Do you know what --

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A But in the same context, it's no different than a plant manager. I didn't train the plant workers.

Q But you were familiar with what kind of training the salesmen had?

A Yes.

Q Okay. Did the salesmen for functional fluids have any chemical training?

MR. SCHINK: What do you mean? Did they have chemical training before they became salesmen, or were they given training by Monsanto?

BY MS. OLIVER:

Q Let's ask if they were given training by Monsanto.

A I believe they were.

Q Do you know what type of training they were given?

MR. SCHINK: If you don't know, if you weren't there or weren't familiar with the training, you don't have to speculate and guess about it.

THE WITNESS: Well, I didn't supervise the training, and I only know some of the general subjects that they covered. That's all.

BY MS. OLIVER:

Q Well, what kind of subjects did they cover?

A They covered things like fire resistance tests. They covered things like pump tests. That was primarily the two efforts.

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Q Those were the types of things that the customer was interested in and concerned with?

A Yes. After all, the reason for using these fluids was safety. So fire was very important. How safe are they. The other thing is will they pump, and how they pump versus oil. So that's why the pumps are so important.

Q Okay. You mentioned earlier that you had an Engineering Manager in the business as Business Director.

A Uh-huh (affirmative).

Q Was the Engineering Manager while you were Business Director ever used as a consultant with customers?

A I don't recall.

Q Was his function primarily within Monsanto?

A Yes, he was primarily for capital and Monsanto projects.

Q Now, you mentioned earlier that you were familiar with Aroclors since working in plasticizers in the 1950s. Were you familiar at that time with the chemical configuration of Aroclors as PCBs?

A In 1950?

Q In the '50s.

A Yes.

Q Okay. What was your understanding of what PCBs were?

A What do you mean?

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Q Well, what did you know about PCBs?

A I knew their physical properties. I knew the information that we had on their toxicology. I knew some of the end uses.

Q Okay. Well, what were the physical properties of PCBs?

A They have a whole catalog on that. I can't remember them.

Q Did you know that they were non-biodegradable?

A No.

Q Did you know that they were insoluble in water?

A Yes.

Q Do you recall any other characteristics?

A They are fire resistant, excellent dielectrics, very heat stable.

Q Okay. What did you understand it to mean that they were insoluble in water?

A That they don't dissolve in water.

Q Were you aware of any information from the 1950s until 1969 or '68 that if Aroclors were in the environment they could be potentially harmful?

A No.

Q Were you aware of any information from the 1950s to 1968 or '69 that if PCBs were in the environment they could be harmful to humans?

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A No.

Q You mentioned that you were familiar with --

A And I still don't think they are.

Q Okay. You mentioned you were familiar with the toxicity tests on the Aroclors in the '50s. Do you recall what those tests found?

A No. They are in our literature, and they were generally typical of many industrial chemicals, nothing particularly outstanding one way or the other.

Q Okay. You also mentioned earlier that you were surprised in 1968 or '69 to find out that Aroclors were in the environment.

A Absolutely.

Q Was it your understanding that they were not to be found in the environment, or they were not to be in the environment?

MR. SCHINK: What do you mean, "not to be"? I don't understand the question.

BY MS. OLIVER:

Q Were -- To your understanding was there a reason that you are aware of in Monsanto --

MR. SCHINK: You're asking him why he wouldn't expect to find them in the environment?

MS. OLIVER: No, I don't think so. Well, let me start again.

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BY MS. OLIVER:

Q Your testimony, I think, is that Monsanto was not aware that PCBs were in the environment until 1968 or '69.

A That's correct.

MR. SCHINK: Well, his testimony was he and the people that he was familiar with. I don't think there's a foundation that he interviewed everybody at Monsanto and asked them that question.

THE WITNESS: Right.

BY MS. OLIVER:

Q We're only asking for your knowledge.

A Right.

Q Okay. Do you know why, or if there was a reason that Monsanto would not expect to find PCBs in the environment?

MR. SCHINK: As of when?

BY MS. OLIVER:

Q Prior to 1968.

A Because the majority of the uses and the major use was in the capacitors of transformers, and these were self-contained units, and everything to our knowledge was either bound up in a resin, or it was contained.

Q Well, was there a reason that Monsanto used PCBs in what it thought were closed or confined systems?

A No. The customer found the uses. Monsanto didn't

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place them there. The customer found that these had some outstanding characteristics for fire resistance, safety, dielectrics. They were the standard of the world for fifty years in capacitors and transformers. And today the replacement products still are not as good. And so they were the standard of the world, and the customers found that value. Monsanto didn't. Likewise, the heat transfer fluids and the other things, the performance of those products dictated that they be used in those types of applications. They were supercritical on fire resistance, heat transfer, whatever.

(Discussion off the record.)

BY MS. OLIVER:

Q Do you know if Monsanto had a policy prior to 1968 that products that sold with Aroclors were bound or confined in closed products or systems?

MR. SCHINK: I don't understand that question.

BY MS. OLIVER:

Q Does the witness? Do you, Mr. Bergen? Do you understand the question?

A Would you repeat it, please?

Q Sure. Do you know if Monsanto had a policy prior to 1968 or '69 that its products that it sold containing Aroclors were to be confined by resin or other types of materials to keep the PCBs in the product, or to be used in

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a closed operation?

A To my knowledge we had no policy of that type.

Q To your knowledge there was no reason why such a policy was necessary?

A That's correct.

(Discussion off the record.)

BY MS. OLIVER:

Q Did the fact that the products in fact were bound or considered to be used in closed systems or closed operations just evolve with the product?

A That's correct.

Q If Monsanto had knowledge -- if someone at Monsanto had knowledge in 1966 or before 1969 that one of its hydraulic fluid products or Pydraul was in the environment through a customer use, was it a policy or practice of Monsanto that you know of to contact that customer and discuss that with him?

MR. SCHINK: Well, there's no basis for that hypothetical. This witness has testified that neither he nor to the best of his knowledge anybody that he dealt with was aware of that situation.

MS. OLIVER: I'm asking if it was considered that --

MR. SCHINK: That Monsanto -- Did Monsanto have a policy? Did Monsanto have a policy addressed

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to that?

THE WITNESS: Not to my knowledge. We sold industrial chemicals, and we had no policy about restricting industrial chemicals to the environment.

BY MS. OLIVER:

Q To your knowledge before 1968 did customers' use of the fluid and the possibility that it could find its way into the environment was not a matter that Monsanto discussed with the customer?

A That's right.

(Discussion off the record.)

BY MS. OLIVER:

Q Did there come a time when Monsanto did develop a policy of discussing the fact that a Pydraul product, or a PCB-bearing product could find its way from a customer into the environment?

A Yes, in this '69 and '70 period. And we did advise the customers, and we did put warning labels on the drums, and we did visit with them and encourage them to tighten their systems and do these things.

Q Okay. Did that occur after this initial period of checking the analyses and doing research?

A Verifying the analytical data and the information, yes.

Q When the publicity about PCBs in the environment

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occurred in 1969, approximately, did someone at Monsanto become a person in charge of developing the actions that Monsanto would take with respect to its products?

A Yes. I was directed by the Corporate Management Committee to develop a business plan regarding this, and I think you have that memorandum.

Q What was the Corporate Management Committee?

A It was composed of the senior members of Monsanto, the inside board members, Monsanto board members, essentially. And then they would periodically review various business strategies, plans, long-range plans, and this was on a kind of a periodic review system. And if there was any key issues, capital, or whatever, they would have a review of that business.

Q Do you know how the Corporate Management Committee became aware of the PCB issue?

A Probably through the press.

Q Who contacted you --

A Because that's when we all became aware of it.

Q Who contacted you to become the director of the business plan?

A I'm sorry?

Q Who contacted you to prepare this business plan that you mentioned?

A My boss, John Mason.

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Q Mr. Mason was the General Manager of the Organic Division?

A He was the Assistant General Manager under Minckler.

Q And what did Mr. Mason tell you?

A Well, the CMC, or the Management Committee, told him and told me, and I was there; so, simultaneously we were told to develop that plan.

Q So a Corporate Management Committee meeting was held, and you attended that meeting?

A Yes.

Q Okay. And what matters were discussed at that meeting?

A As I recall -- and this is just a reference from yesterday -- is they were updated regarding the reports of what was being found in the environment, more or less a status report of what was going on, what was the status of various testing programs, et cetera. And it was at that meeting that they said, "Well, since the 1254 and 1260 are the products being found in the environment, we should get out of those products." And that's what we developed a plan to do.

Q Okay. Before this initial meeting with the Corporate Management Committee had Monsanto started its practice of discussing environmental concerns with its

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customers?

A Yes, as part of this whole investigation thing of finding out what was going on, to get the facts, yes, we did

Q Why did Monsanto start discussing environmental concerns with its customers?

A Because we couldn't understand how it was getting out in the environment.

Q Well, did you consider part of your responsibility as the supplier of products to discuss this with your customers?

A When?

Q Well, I suppose not before you started discussing it, but at any time.

A Right. Well, after we recognized that there was this problem, then we had to get the facts and get involved in the problem. Prior to that time we didn't know there was a problem, and we weren't our customers' keeper as to what he did with the product. So we didn't know.

Q Prior to the 1969 publicity about PCBs, Monsanto didn't discuss environmental concerns with its customers?

MR. SCHINK: Now are you talking about all products Ms. Oliver, or are you talking about the Pydrauls, as to which he testified prior to 1969 neither he nor to the best of his knowledge anybody at Monsanto was aware they were being discharged into the environment?

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MS. OLIVER: I think my question was a general question.

MR. SCHINK: I object. There's no foundation that he would even know for the company as a whole.

THE WITNESS: That's correct.

BY MS. OLIVER:

Q Okay. You don't know?

A (Shakes head negatively.)

Q Okay. Well, prior to 1969 when the problem with PCBs became publicized, did you have any knowledge that Monsanto was discussing environmental concerns with any of its customers of specialty products?

MR. SCHINK: That assumes that there were environmental concerns prior to 1969.

MS. OLIVER: Well, if there aren't any, Mr. Bergen can tell me.

THE WITNESS: Right. We were not, to my knowledge, other than just good industrial practice. In other words, we didn't advocate that people go around spilling any industrial chemical and just throwing it away. It's too expensive. It's foolish for them to do it. So just good business practice says you don't slop things all around. We didn't run out plants that way. We didn't advocate it.

BY MS. OLIVER:

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Q Did you have any knowledge that any of your customers of Pydraul or functional fluids were slopping it around, so to speak?

A I didn't personally. I don't know.

Q Well, did you have any information from anybody within Monsanto that customers were?

A I don't recall.

Q You don't recall whether you did or not, or you don't recall hearing any information?

A I don't recall specifically hearing that in that time frame.

Q Well, do you remember generally hearing anything along those lines prior to 1969?

A Not until all this became an issue.

Q What did you hear along those lines after 1969?

A Well, then you began to find out what customers were doing, and some customers were doing a lot of very good things, reclaiming and trenching, and doing all of these things, and others were not.

Q Okay.

Off the record.

(Discussion off the record.)

(Luncheon recess.)

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)
COUNTY OF FULTON)

I, Clifford C. Sheffield, III, Deposition Officer, being a Certified Court Reporter and Notary Public in and for the State of Georgia at Large, certify that the foregoing transcript, pages 1 through 93, is a true record of the testimony given by the witness, HOWARD S. BERGEN, who was first duly sworn by me; that I am neither a relative nor employee nor attorney or counsel of any of the parties, nor a relative nor employee of such attorney or counsel, nor financially interested in the action; that the said deponent and counsel did not waive the reading and signing of the deposition; and that the original transcript shall be delivered under seal to the Attorney for the Plaintiff.

WITNESS my hand and seals at Atlanta, Fulton County, Georgia, this the 12th day of March, 1981.

CLIFFORD C. SHEFFIELD, III

(SEALS)

Notary Public, Georgia State at Large
My Commission Expires May 10, 1983

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WATER_PCB-SD0000002105

AFTERNOON SESSION

CROSS-EXAMINATION (continued)

BY MS. OLIVER:

Q Mr. Bergen, I think you said earlier that I think about 1969 you became aware of some reports that there was some material that had gotten out into the environment containing PCBs; do you recall what types of materials you first heard about that were in the environment?

A The first report was that Swedish report; as I recall, that was the higher chlorinate of the 1254, 1260 type, so identified. And then, I think the next earliest ones I remember were the reports by Riceborough out there in California. And I think he was picking up the same sort of products.

Q Was Monsanto able to relate, or did you have any knowledge of, which products the 1254 and 1260 were in, that were found in the environment?

A The source? No, I think that's what we were trying to find out in '69 and '70, is where did it come from, how did it get there.

Q Well, did you find that out?

A I think we did as it went along-- '71, '72, '73, in that period of time.

Q Do you recall any information you heard about what the source was in the Swedish findings?

A I don't recall, no.

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Q Did you find out about the San Francisco problem?

A Yes.

Q What was the source of it?

A I don't recall.

Q How about the shrimp in Pensacola?

A The shrimp was from our Pensacola plant there.

Q Was that a manufacturing plant for aroclors?

A No.

Q What was the source of the Aroclors that were found there?

A I believe it was a piece of machinery in the plant somewhere.

Q What type plant was it?

A Primarily a textile plant.

Q Do you know what type machinery?

A No, I've never been in the plant.

Q Well, did you get any information?

A The information that I got later was that it was a compressor.

Q What was the product used in the compressor that was the source of the PCBs that were found?

A It was one of the Pydrauls.

Q Do you know which one?

A No, I don't recall.

Q Now, at the time you got the reports of the 1254 and

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1260 findings, did you have any information -- did Monsanto have any information-- that the other Aroclors were or may be in the environment?

A No, we didn't.

Q Did you get any information regarding the other Aroclors at anytime?

A I think, as the '72, '75 period evolved, other people and ourselves may have identified other Aroclors out there, also.

Q Do you recall specifically when other Aroclors were identified in the environment?

A No, I don't.

Q Well, do you recall whether--

A It was probably somewhere in the '70-'71 period, I would guess.

Q You don't recall what Aroclors were found in the environment by Monsanto?

A I don't recall specifically which ones, no.

Q At the Pensacola plant that had Pydraul-- that was using Pydraul, do you know how the PCBs from the Pydraul got out into the environment?

A No, I don't.

Q Do you know if Monsanto ever did an investigation of it?

A I think we did, yes.

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Q Were you involved in that at all?

A Not personally, no.

Q Did you ever receive any information on that?

A I might have, but I don't recall.

Q Do you know if the finding at that Pensacola plant was in this period of 1969 to '70?

A Was it what?

Q Was it in that period?

A Yes. Yes.

Q It was one of the earliest findings that Monsanto made?

A Yes.

Q Do you know if that Pydraul was a 1254 or 1260 Aroclor, that was found in Pensacola?

A I don't recall.

Q While you were the Director of Product Sales and the Business Director for the functional fluids, were the salesmen required to have written call reports-- make written call reports?

A Generally they were, yes.

Q Do you know what period of time-- Well, strike that.

From the period of time from 1963 to 1975, were salesmen required to make written call reports?

A Yes.

Q Was there a form that was used for these call reports?

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A Yes. They may have varied in format between business groups or between product areas, but there basically was a form.

Q So, before 1970, salesmen were required to submit call reports-- or prepare call reports.

A Yes.

Q What did the salesmen do with the call reports that they prepared?

A They would use them primarily for their own use, for follow-up and contact with the customer; they would use them to inform the product manager and maybe the research department what was going on in the marketplace, and so they would quite often copy them in on their call reports.

Q Were they kept in any one place, the copies of call reports?

A We did have a central file system there.

Q Where was the central file located?

A It was in one of the buildings on a certain floor, and it was close to the marketing area.

Q Was it in your special products group?

A Well, it served all the business groups for the organic division. I'm going back to that '69-'70 period.

Q Were the customer reports kept by customer, or by product; how were they kept?

A By customer.

Q By customer name?

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A Yes.

Q So there would be a file someplace with call reports from Johnson Motors in Waukegan.

A There were at that time.

Q Do you know how long copies of call reports were kept in the central file?

A We had a standard retention file time, and I believe it was two years. Then they were pitched out.

Q And was that standard retention time in effect from the period of 1963 to 1975?

A Yes, I'd say generally.

Q Were you involved in preparing or discussing the contents of sales bulletins for salesmen?

A Yes, occasionally.

Q Was it your responsibility to provide the sales bulletins to the various salesmen?

A No, not my responsibility. I'd say it was the director of marketing's responsibility.

Q What types of information would go into the sales bulletins?

A Could be anything from a price change to a technical bulletin about an application of a product, or a new application of a product; it could be something about a market expansion or even a customer activity or something like that. It was published-- something was published, common knowledge.

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Q Would the Director of Marketing come to you to get your approval on what would--

A He didn't have to, no.

Q But you kept advised of the bulletins.

A He would usually bring to my attention anything that he felt that he should.

Q Were the sales bulletins kept for any period of time?

A Standard policy, I'd say.

Q Two years?

A Probably.

Q Were you involved in the preparation of press releases on products?

A I was probably involved, but that was generally the public relations' function to do that.

Q Where would the public relations function get the information about the product?

A They'd get it from the product group.

Q So it would be your group?

A Depending on what the subject was, they might get it from staff groups or wherever.

Q Did you approve the press releases?

A Generally, we would.

Q Well, did you delegate that responsibility to somebody, or did you do it?

A I would delegate it sometimes. Depends on what the

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nature of the press release was.

Q In the case of a new product coming on the market.

A There's no set system.

Q Were you involved in the development and marketing of A-200, pydraul A-200?

A Not personally. That happened during this time.

Q That happened in about 1960 or '59.

A Uh-huh (affirmative).

Q You were involved with the functional fluids at that time?

A Uh-huh (affirmative).

Q Were you involved in selling or marketing the A-200?

A I forget when it was introduced, but I was in one of those jobs.

Q Did you work on any aspect of the product development of A-200?

A No.

Q Did you work on any aspect of the marketing division?

A No. Other than the managerial role; just managing the people that did the development, that's all.

Q Do you know what the purpose of A-200 was?

A I'm foggy on all the names, specifically, at that time.

Q Do you know whether A-200 was a replacement for Pydraul F-9?

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A I would speculate it might have been, but I'm not sure.

Q Did you have any knowledge of the different chemical compositions of the different Pydraul fluids?

A I did at the time.

Q At what time?

A During this period.

Q Which period are you speaking of?

A But I don't recall it now.

Q Well, which period are you speaking of? From 1968 to '75?

A Sixty-eight to '75.

Q Before that, did you have a knowledge of the different chemical compositions of the Pydraul fluids?

A No.

Q Do you have any recollection today of the differences in chemical composition?

A No.

Q I think you mentioned that the corporate management committee placed you in charge of a business plan.

A Uh-huh (affirmative).

Q What was the purpose of the business plan?

A It was to carry out the wishes of the corporate management committee, to phase out the 1254, the 1260 and all the other instructions over in that document.

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Q Was the decision to phase out 1254 and 1260 made before you were appointed to this job of head of the business plan?

A I believe it was afterwards.

Q Well, do you know how the problem of PCBs and sales products came to the attention of the product management committee?

A I mentioned earlier the press releases, San Francisco, and of course, we write monthly reports, and so, the monthly reports would go to my boss and then he might do what he wanted to do with them, to upper management.

Q You mentioned in 1969 and 1970, Monsanto took some actions like checking the analytical work that had been done on the PCB findings. Was that work begun before the corporate management committee developed this business plan?

A I believe it was. Again, I don't remember all the timing, but I believe as soon as we heard there was this reported finding in the environment, I think we started work immediately without waiting for any direction from them, to find out what are the facts, and so, we-- I would say we started almost immediately doing that.

Q Did you begin to verify the findings for PCBs before you began your work of looking for other Aroclors in the environment?

A I forget the exact sequence of time.

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Q How did you go about looking for Aroclors in the envirnment?

A Again, I'm not an analytical chemist, but they used their tools and their techniques to do that. And they got some samples, I believe, from various places.

Q Was it a sampling procedure that Monsanto actually did?

A It -- What period of time are you talking about? Sixty-eight, '69?

Q Yes.

A We may have done that. As we started to work with our customers, we may have started to do some things then with the customer, analyzing their fluids or whatever.

Q Was there any other way that Monsanto checked to see which Aroclors, if any, were in the environment itself, besides checking with customers?

MR. SCHINK: You mean, in addition to all these other things he talked about before? He's already testified about this before, Ms. Oliver, about sending people to Europe and--

MS. OLIVER: I'm talking about checking -- Monsanto checking, itself, to find Aroclors in the environment.

MR. SCHINK: But that's a way of checking.

BY MS. OLIVER:

Q Why don't you answer, Mr. Bergen?

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A Well, when we heard about the problem, then we also began to check our own plants.

Q Okay. So, you checked your own plants, and you said to talked to customers. Was there any other procedures that you followed to find out whether there were Aroclors in the environment?

A Yes. We worked with any scientist that claimed to have been finding them; we tried to contact them and work with them. We worked with any group that claimed to have some knowledge. We tried to keep everything above board and find out what was going on.

Q When you decided to take 1254, 1260 off the market did you consider any alternatives to that action?

A We were looking at replacement products where we could.

Q Other than replacing those products, did you consider any other alternatives?

A I don't know what you're driving at.

MR. SCHINK: If you didn't consider alternatives, you can just say you didn't.

THE DEPONENT: Not to my knowledge.

BY MS. OLIVER:

Q So, the decision was made to take 1254 and 1260 off the market, and there was no consideration that you're aware of, to any other action to those two Aroclors.

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A Not at all.

Q Did you find out how 1254 and 1260 was getting into the environment?

A We may have out later, but not in the 1969-70 period. Well, maybe towards the end of '70 we might have. But I don't recall that one day somebody said, "Hey, here's how it came." I don't recall suddenly some great discovery.

Q Well, what products involved the 1254 and 160 Aroclors?

A Well, they were sold directly as such for plasticizers. They may have been components of some of the Pydrauls; they may have even been some of the transformers and capacitors.

Q Well, why did Monsanto decide to take those two Aroclors off the market?

A Because those were the ones that were identified as being in the environment.

Q Well, was Monsanto concerned that there was a problem with those being in the environment?

A We didn't know-- and again, this was the medical department-- they didn't know what the implications of that were.

Q Well, did you have any knowledge that the 1254 and 1260 Aroclors were a problem in the environment before you took them off the market?

A No.

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Q Well, what was the reason for taking them off the market?

A Because they were discovered in the environment, and then these scientists were reporting that it was killing birds and making them deformed and all these things. Which, again, we didn't necessarily believe, but they were accusations and we didn't know whether they were true or not.

Q So at the time Monsanto took the 1254 and 1260 off the market, you had no information that they were harmful?

A No.

MR. SCHINK: He's told you what information he had.

THE DEPONENT: I've told you the only information I had.

BY MS. OLIVER:

Q Did you consider taking all the Aroclors off the market at that time?

A I don't believe we did. I don't recall exactly.

Q Was there any discussion that you recall?

A No.

Q Were replacements found for the 1254 and 1260 Aroclors?

A I don't know if we found specifically for those two products. We did find replacements for many of the applications And products.

Q When you took those two Aroclors off the market, wha

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did you provide to your customers?

A We provided other products.

Q Well, what products in replacement or substitution of those two?

A I don't recall specifically the ones for 1254 and 1260. In some cases, we didn't find a replacement. And we just went out of the business.

Q Did you get any information later that 1254 and 1260 were harmful in the environment?

A Again, the claims were that they were to certain wildlife.

Q And did Monsanto ever verify or substantiate those claims?

A To my knowledge, we didn't do a lot of wildlife experiments.

Q Did you ever get any information to disprove that information, or those claims?

A Not to my knowledge.

Q Do you recall any conversations at the time 1254 and 1260 were taken off the market, about the possibility of finding the other Aroclors in the environment?

A Quite likely there was some discussion about that.

Q Well, do you recall any specifically?

A No.

Q Any general conversations?

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A I can't recall a specific time, conversation, or place.

Q Well, there came a time when the decision was made to remove the Pydraul-- the Aroclors from the Pyrdauls; is that right?

A Uh-huh (affirmative).

Q And what period of time was that?

A I don't recall. It would be in all the CMC notes there.

Q Was it done-- Was that decision made after findings of the other Aroclors were made in the environment?

A I don't recall.

Q Well, what was the reason for taking the other Aroclors off the market?

A Well, we were encountering a lot of media hysteria-- what's the word-- media propaganda, and there may have been one or two cases where we did find other products, other Aroclors, also in the environment.

Q Do you recall those cases?

A No, not specifically. See, there was a lot of biodegradation work going on.

Q And what was the purpose of that work?

A Well, that was part of the exploratory nature, to find out how come these are being found in the environment and others aren't. If they're out there, why aren't they being

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found? So, one of the theories was that they must biodegrade. So we then set up laboratory experiments to look at the biodegradation characteristics.

Q What were the findings?

A Some of the Aroclors did biodegrade.

Q Well, did you have that information, that some of the Aroclors biodegraded before you took the Aroclors out of the Pydraul fluids?

A I don't recall the exact time.

Q Well, is it your testimony that the Aroclors were taken out of Pydraul because of the publicity?

A And the fact that they were found in the environment.

Q That they were found--

A The 1254 and the 1260.

Q But the Aroclors in the Pydraul--

MR. SCHINK: Well, you're assuming that 1254 and 1260 weren't in some of the Pydrauls, Miss Oliver.

MS. OLIVER: Well, maybe he can clear it up.

THE DEPONENT: All of the actions that were done were voluntary actions, as far as--

MR. SCHINK: Wait a minute. There's no question.

BY MS. OLIVER:

Q Do you know what Aroclors were in the Pydraul fluids?

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A I did know; I don't recall specifically now the formulations, or which one was in which, no.

Q If the Pydraul fluids contained 1254 and 1260 they would have been taken off the market immediately, when the other 1254 and 1260 fluids were; right?

A Yeah.

Q So the fact that they weren't, they were taken off later--

MR. SCHINK: Well, now, wait. Now you assume that there was one single Pydraul fluid. There may well have been several different Pydraul fluids, some of them containing 1254 and 1260; some containing other Aroclors.

BY MS. OLIVER:

Q Well, what I'm asking is, that because some Pydrauls, at least, were taken off the market or phased out after the initial 1254 and Aroclors were taken out, indicates that those Pydrauls were not 1254 and 1260 Aroclors. Is that right?

A I have to confess confusion on all the formulations at this time.

Q But it is your understanding that all the Aroclors with 1254 and 1260 were taken off immediately, in 1969 and '70.

A We were trying to implement the functions assigned to us.

Q Is that a yes?

A It's a yes that we were trying to implement them as

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fast as we could, and meet the time schedule.

Q I don't want to beat this to death, Mr. Bergen, but I just want an answer. Were all the 1254 and 1260 products taken off the market in the initial action by Monsanto in 1969 and '70? In 1969.

A I don't know.

Q Mr. Bergen, did you, as the head person or the person in charge of this business plan, have other people working with you and for you on the PBC problem?

A Oh, yes.

Q Who were the other people that worked for you?

A Everybody on that organization chart, plus those that worked for them.

MS. STEIN: Which chart is this, Number 2, that was starting approximately January of '69?

THE DEPONENT: Yeah, that's the one-- the time period we're really talking about, primarily.

BY MS. OLIVER:

Q Did you work or report to the corporate management committee?

A Yes.

Q Were the decisions that were made after 1969 concerning the phasing out of the Aroclor fluids or the replacement fluids made by the corporate management committee?

A We made recommendations, we discussed it at the

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meetings, and came to a conclusion.

Q Well, was the decision made by the corporate management committee?

A Yes. Yes.

Q Was the board of directors involved in these decisions relating to PCBs?

A The board was informed at certain periods of time. I'm not familiar with when.

Q Were they informed on a regular basis?

A I don't know.

Q During what period of time did you report to the corporate management committee on the PCB problem?

A Please understand, I didn't report directly to them. I reported through my chain of command. And when they asked me to, I attended the meeting and I made the presentation.

Q Well, do you know during what period of time Mr. Mason, your superior and supervisor, reported to the corporate management committee on the PCB problem?

A Do I know when he did?

Q During over what period of time?

A Yes. They reported during the period of time we're talking about.

Q Nineteen sixty-nine and '70?

A Yes.

Q Did they report after that period, after 1970?

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A They were certainly kept informed throughout that whole period.

Q Throughout what period?

A Through '75, as long as I was there.

Q How many meetings did you attend?

A I believe it was only two.

Q Did you submit reports at all?

A We made recommendations and plans and reports.

Q Were you asked to prepare a plan for the meetings?

A Yes. I prepared plans, recommendations.

Q And at the first meeting that you attended, did you prepare a plan?

A I think we had a suggested plan at that time.

Q And when had you developed this suggested plan?

A It was developed before the meeting, whenever that was.

Q Did anyone ask you to develop a plan for the meeting specifically?

A I think that we had started working on it again; our plan started as soon as we heard about the problems. We were alerted to, "Here is a new problem." And so--

Q What do you mean when you say "a problem?"

A Well, that was found in the environment.

Q And did you understand it to be a problem for Monsanto?

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A Well, like I explained earlier, this was a surprise to us. We couldn't imagine how it got there. So, we said, "Well, how did it get there? Where did it come from?" So, then we got involved, did all the things I've repeated earlier.

Q What I'm asking, though, is, how was it a problem? How was it perceived by you to be a problem?

MR. SCHINK: He answered that, as well.

THE DEPONENT: It was an unknown problem; it was a new situation.

BY MS. OLIVER:

Q Once you became aware of this problem, did you consider it Monsanto's responsibility to inform its customers of this problem?

A Yes.

Q And why was that?

A Because it was something new that occurred to our products that we weren't aware of.

Q Well, why did you consider it your responsibility to discuss it with your customers?

A Just good business practice.

Q And what did you consider your responsibility to your customers concerning the PCB problem?

MR. SCHINK: He didn't say it was his responsibility. He said it was good business practice to discuss these findings of the presence in the environment with customers

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That's what he said, about ten times.

BY MS. OLIVER:

Q Did you consider it your responsibility, Mr. Bergen, to discuss the PCB problem with your customers?

A I think we're hung up on the definition of "responsibility," between that and good business practice. We felt they should be informed.

Q And what did you feel they should be informed about?

MR. SCHINK: When?

MS. OLIVER: After 1968.

THE DEPONENT: When they were discovered in the environment--

MR. SCHINK: We go '69, '70, '68-- Sixty-eight, there was nothing, as I understand the testimony. In 1969 there were reports of presence in the environment of certain PCBs.

BY MS. OLIVER:

Q Mr. Bergen, when you became aware of the PCB problem, and you felt you should communicate that problem to your customers, when was that?

A I don't recall the exact date, but it was probably in '69 or '70.

Q Okay. And what did you believe it was your responsibility to communicate to your customers about that problem?

A That they were being found in the environment, and

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that obviously there must be some way they were getting into the environment, and if they were involved-- the customers-- were involved in doing that, that they should take whatever steps necessary to try to prevent that.

Q Did you recommend any steps?

A Well, I think we were aware of the reclaimation service about that time. And I think we suggested reclaimation to them; I think that's when we started our work on the incinerators, saying, well, maybe the should be incinerated. All those things were going on, the biodegradation-- we were running the biodegradation tests; we even found some bugs that would kill them, in a biodegradation pond. And again, I don't know that time frame this was; this might have been '71 or '72 by that time, but--

Q How was the communication made to the customer about the PCB problem?

A Probably through the salesmen. And possibly by some direct letters.

Q Did you-- Were you responsible for, were you involved in any decision on communication to the customer?

A I was aware of the involvement and the decision to do it.

Q Well, who made the decision?

A The business team made the decision. I was ultimately responsible, as the business director. But it was done with a

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lot of input from staff, medical, everybody else.

Q Was there any consideration given to removing all the Pydrauls containing Aroclors from the market in 1969?

A Not to my knowledge.

Q Was there any consideration of that in 1970?

A I don't recall.

Q Did you have any contact with any federal agencies in the 1969-70 period?

A I believe I made maybe one visit, but that was primarily the responsibility of Bill Papageorge and the medical department. I believe I made one call to them, once.

Q And what was that call concerning?

A I think it was to the EPA.

Q For what purpose?

A I don't recall.

Q Did they ask for information?

A I don't know.

Q Before 1970, did Monsanto have an environmental coordinator for functional fluids?

A No. I was whenever Bill Papageorge came in that we had the environmental coordinator.

Q Who decided to hire an environmental coordinator?

A I believe that was one of the recommendations out of the CMC meeting.

Q And what was the purpose of that position as environ-

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mental coordinator?

A To be the coordinator and-- For that function.

Q Well, what was he supposed to coordinate?

A Develop the plans and-- He had a job description.

Q Well, was he concerned with the customer as well as the product line?

A He was concerned with all the aspects of it, yes.

Q And he reported directly to you?

A Yes.

Q Now, the Pydraul A-200 was taken off the market and-- Are you familiar with the replacement for that fluid?

A I couldn't name what it is, no.

Q Do you know whether one replaced A-200?

A I don't know.

Q Well, you testified earlier about the a PCT fluid replacing--

A Uh-huh (affirmative).

Q Do you know what fluid the PCT replaced?

A No.

Q Do you know why PCTs were replaced for PCBs?

A Because of the fire resistance qualities.

Q Well, did Monsanto have information that PCTs would not be a problem in the environment.

A They had not been found in the environment.

Q Do you know how they're different than PCBs?

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A As I testified earlier, they're Terphenyls.

Q Are you aware that PCT fluid was taken off the market by Monsanto?

A Yes.

Q And why was that done?

A A lot of that was action on our own part, because of the adverse publicity of the whole PCB situation. And the apparent lack of the government and the media to try to understand the difference between the chemical isomers of PCBs and PCTs. It was just too complicated a subject for them to get their mind around or to understand. And so, you end up with-- you look to other things to get out of that.

Q So, the PCTs were withdrawn from the market for public relations reasons?

A Business reasons.

Q Well, had Monsanto any information that PCT fluid would cause any problem in the environment?

A No.

Q Were you aware at any period of time you were director of sales products and business manager for the special products, of the quantities of fluid, of Pydraul that Mons-- strike that-- that Johnson Motors was purchasing on a monthly basis?

A Uh-huh (affirmative).

Q Do you recall what an average number would be?

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A No. Sure don't.

Q Do you recall whether it was in the thousands of dollars?

A Yes.

Q It was?

A Uh-huh (affirmative).

Q Did you have any knowledge prior to 1969 of what use that quantity of fuel was put to by Johnson Motors on a monthly basis?

A No.

Q You didn't know how it was being used?

A In die casting.

Q Did you know why that amount of fluid every month was purchased by Johnson Motors?

A Well, they were expanding, putting in new machines.

Q Do you have any other knowledge about what use that thousands of gallons of fluids every month was being put to?

A No.

Q Were sales contracts used on a regular basis with Pydraul specialty products?

A Sales contracts were offered. And they didn't have to have them, but-- Some customers had them; some didn't.

Q Why was that?

A Just the nature of the business. It's a very competitive business; some customers didn't want contracts and

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some did .

Q Do you know if Johnson Motors had a contract for the purchase of Pydraul with Monsanto?

A I don't remember.

Q In the period of time after 1969 when you became aware of the PCB problem--

MR. SCHINK: When you use the term "PCB problem, do you mean the reports of the presence of PCB in the environment?

MS. OLIVER: I'm using it as Mr. Bergen used it.

MR. SCHINK: Well, I'm asking how you're using it in the questions.

MS. OLIVER: I'm using it in the same manner he used it.

MR. SCHINK: How are you using it, Miss Oliver? I object to the form of the continued reference, unless we're clear-- I've understood it to mean the reports of the presence of PCB in the environment.

MS. OLIVER: I understand it to mean as Mr. Bergen testified to.

MR. SCHINK: Perhaps you want to clarify what you mean by that term.

MS. OLIVER: He's clarified it for me, and I think that's clear. So, let's just keep moving.

MR. SCHINK: It's not clear in my mind, and I will

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object to the form of those questions until you clarify, or you have the witness clarify it, at this time, Miss Oliver.

MS. OLIVER: Let's keep moving.

BY MS. OLIVER:

Q Mr. Bergen, the time you became aware of the PCB problem--

MR. SCHINK: Miss Oliver, at this point-- We talked about PCB's presence; we then engaged into interrogation about knowledge about health effects and so on. I think that those two areas of interrogation are confusing--

MS. OLIVER: The witness said he wasn't aware of any health problems.

MR. SCHINK: I appreciate that.

MS. OLIVER: Okay.

MR. SCHINK: All right.

MS. OLIVER: So I-- You know, the record is clear.

MR. SCHINK: The record is clear-- When you use the term "PCB problem," you're talking about reports of the presence of PCBs in the environment; is that right?

BY MS. OLIVER:

Q Is that what you're talking about, Mr. Bergen?

A When you asked me the question, the "PCB problem," I believe you're referring to the escape to the environment. And that's what I'm talking to.

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Q Okay. Your testimony was, that as far as Monsanto had information, there were no potential health-- or harmful problems related to PCBs in the environment.

A We were not aware of any in 1969.

Q And other than the claims that you testified you had read about in other reports, you weren't aware of any after that?

A No, I'd have to ask you to define what you meant by "health problems."

Q Any problems to humans or to living creatures.

A Well, they're entirely different subjects.

Q Well, are you aware of any problems caused by PCBs or related to PCBs in the health of humans?

A No.

Q Are you aware of any problems related to PCBs in the-- in any wildlife?

A Yes.

Q And those are the reports from other sources that you referred to earlier?

A Yes.

Q Okay. And your testimony was that Monsanto hadn't confirmed or disproven any of those other claims.

A That's correct.

Q Are you aware of any other problems--

A We did have some studies done, but I can't recall the specific results of that. The medical department ran some

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fish studies.

Q And when were those done?

A I don't recall. It was probably in '70, '71.

Q And what was the purpose of those studies?

A They were measuring the metabolites and the bioassay in the fish, as to what was picked up or not picked up in the metabolism of the fish.

Q And were those studies a consideration on Monsanto's decision to withdraw any of the Aroclor products?

A I'd say they were a consideration, yes, later on.

Q And what consideration was given to those studies?

A Well, we found different things about the different isomers.

Q Can you tell me what you mean by "the different isomers?"

A Well, an isomer is a chemical configuration, and the Aroclors are composed of over 200 different isomers. And so, the question is, which isomers degrade, which ones do not degrade, which ones pass right through the fish, which ones are retained in the tissues. It's a very complicated subject.

Q And how-- What were the results of those studies that Monsanto did on the fish?

A I don't recall all the details, but broadly, it said that some did and some didn't.

Q What time period were those studies done?

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A I'd say in the '70 to '73,'74 period.

Q And how were those results or studies in Monsanto's decisions relating to the withdrawal or replacement of Aroclor fluids?

A We were using that as one source of information to either verify or deny, get the facts, as to what other scientists were reporting. We weren't working in a vacuum; we were working in collaboration with the government and many scientists throughout the world. By that time it had escalated to a world problem; it was not just a U.S. problem, it was a world problem.

Q Did those studies verify or discredit the information that you had received earlier?

A They tended to say that certain information was correct and certain information was incorrect.

Q What was the information that was correct?

A Basically that some of the Aroclors do degrade, some don't. Some of them are found in the environment, others are not.

Q And how was that information that some do degrade and some don't used by Monsanto in determining which products to replace?

A Well, the general feeling was that those that tended to degrade were like any other industrial chemicals that degrade that they lose any adverse affect, whatever that might be, as

WATER_PCB-SD0000002138

that particular chemical. They get broken down into the basic elements, which are non-toxic and found everywhere in nature--carbon, hydrogen and oxygen.

Q Well, but my question was, how was that information used in Monsanto's decision to replace or not to replace the Aroclor fluids?

A Well, like I said, this was just a factor in part of the whole decision-making process.

Q Well, as a result of those tests, were any fluids taken off the market?

A The tests by themselves were not the sole criteria.

Q Well, what were the other criteria?

A You have all the other: the government actions, the safety aspects, the benefits versus the risks.

Q Well, do you recall the fluids that these fish studies were considered in connection with?

A Do I recall what?

Q Which fluids were influenced by these fish studies.

A Well, I believe we used many of them.

Q Pydraul fluids?

A Uh-huh (affirmative). Therminols-- we looked at quite a few of them.

Q Did Monsanto do a risk benefit analysis to determine whether the Pydraul fluid should be replaced?

A I don't know if we used that terminology, but we, in

WATER_PCB-SD0000002139

a sense, did that.

Q And how did you do that?

A I can't decribe the decision-making process, because it was an interplay of many people and many pieces of information.

Q Well, what were the factors that you considered?

A I believe I mentioned that earlier.

Q Well, I'm not sure which factors you're talking about.

A Well, the factors we considered were, first of all, what are the benefits of the products to the customers and to the marketplace, and they have many benefits. And so, then you would look at some of the other new inputs of information about the biodegradation, and all the other aspects were learning, and you have to come to a decision about what action do you take. We were consulting with the government; we were fully informing them on every piece of information we were doing, medical-wise, biodegradation-wise. There was a President's Task Force Committee; we were represented on that committee. We were doing everything to provide leadership for the whole problem. And we gained recognition from the government, with a very favorable letter of commendation, and they agreed that we're doing everything possible.

Q Did the government ask you about your customers using functional fluids?

A I believe they did.

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Q And did you provide them with a list of customers?

A I believe we did.

Q When was that?

A Approximately in 1969, '70.

Q Did you contact your customers concerning that communication from the federal government?

A Absolutely.

Q And how did you do that?

A I don't recall.

Q Well, do you know if it was by letter, or your salesmen or--

A It was one of those.

Q You don't recall?

A No.

Q Were records kept concerning your communications to your customers about the federal inquiry?

A Yes.

Q And what information did the federal government ask about your customers?

A I don't recall exactly. I think they were interested in who they were and how much they used.

Q And you provided the government with that information?

A Yes.

Q At the time you provided the government with that information, did you know whether your fluids were in the

WATER_PCB-SD0000002141

environment, through the actions of the customers, or from the customers' operations?

A I don't recall the exact time period, no. I think it was after it was reported in the environment. It was sometime after that.

Q Do you know what use the government made of your list?

A Well, they formed this Task Force committee, and we were members on that committee.

Q And who were the other members of the committee?

A I don't have all that information. I didn't attend any of those meetings.

Q What was the purpose of the committee?

A The purpose of the committee was to, again, identify the problem; what is the problem, is it a serious problem, isn't it a serious problem. Nobody knew.

Q Did the committee issue a report?

A Yes, they did.

Q And what was the result?

A The result of the report was that Monsanto was taking all the actions that could be expected to be taken, and that we were acting very responsibly.

Q In what connection was Monsanto taking all the action

A Of our program and our plan that we were implementing

Q Were there any findings made with regard to the

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problem and what that problem was?

A I don't recall. The report was about that thick (indicating). And I don't know to what extent they got into all the technical aspects.

Q Well, did they confirm that the PCBs were in the environment?

A I think by that time, the time that it was issued, it had been confirmed.

MS. OLIVER: I want to take a couple of minutes, okay?

(Brief pause.)

BY MS. OLIVER:

Q After the time, Mr. Bergen, that you learned that PCBs had been found in the environment, were you aware of any indemnification agreements that Monsanto made with any of its customers-- Aroclor fluids?

A Are you asking about Pydraul?

Q No, Aroclor fluids. Any PCB containing specialty products fluids.

A You're really testing my memory there. There was something, but I don't recall enough to speak knowledgeably about it now.

Q There were indemnification agreements with some customers?

A Yes, later on.

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Q In what period of time?

A I believe this was probably in '72, '73.

Q And who indemnification agreements?

A I believe Monsanto did.

Q For what reason?

A Good business practice, legal protection, financial protection.

Q What were the factors of good business practice that made it something that Monsanto wanted to do, to have these indemnification agreements?

A Well, it was a shared risk, as we saw it. We were providing a lot of benefits to the customer, and yet we could see that our exposure was very high. And so, we wanted to share that risk. If we were to keep providing the benefits.

Q And what exposure did you seek?

A Legal exposure. Money.

Q For the Aroclors reaching the environment?

A For whatever might come out of it.

Q Well, what did Monsanto think might come out of it?

A I don't know.

Q What did you think might come out of it?

A I could foresee a lot of legal problems, and I'm not a lawyer.

Q Well, what type of problems did you foresee?

MR. SCHINK: I don't see-- There's been no testimony

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that this was ever involved with any Pydraul customer; indeed, he's given a time, and it was after the last sale of any PCB-bearing fluid to your client.

MS. OLIVER: Let me go back and ask--

BY MS. OLIVER:

Q Do you know what products the indemnification agreements were given with?

A I believe these were primarily to the capacitors, transformer people.

Q And were PCB fluids still being sold to the capacitor people?

A Yes.

Q And what were the trade names of the fluids that were still being sold?

A Well, we had the Entertine-- I forget all the names, but some kind of trade name type of things. Pyronol-- No-- Pyronol, Entertine, those were typical.

Q Were any indemnification agreements entered into with anyone, any customers besides the capacitor and transformer customers?

A I don't recall.

MR. SCHINK: You don't recall any, or you don't recall whether they were--

THE DEPONENT: I don't recall whether they were or they weren't; I just don't recall.

WATER_PCB-SD0000002145

BY MS. OLIVER:

Q And these indemnification agreements indemnify Monsanto from any legal liability for the sale of the PCB fluids?

MR. SCHINK: Now you're asking him for some legal conclusion. He's not a lawyer; he said he's not a lawyer.

THE DEPONENT: I don't recall exactly what they said.

BY MS. OLIVER:

Q Well, the purpose was to share the risk of any legal problems.

A Right.

Q Do you know if indemnification agreements were ever considered with Johnson Motors?

A I don't recall.

Q You don't recall whether they were they weren't?

A Right. It's just too long ago to remember.

Q Now, when the replacement fluids were introduced for the Pydraul fluids, did you make any recommendation as to whether the fluids that may have been sold previous to that, and were in the hydraulic system, should be drained or cleaned in any way?

A I was shown a letter yesterday and we apparently sent a letter our saying that were admissible and compatible with the present systems.

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Q Well, what you're saying is that a letter was sent out saying, "You can mix the replacement with what--"

MR. SCHINK: But the question was whether--

MS. OLIVER: --whether you considered whether the PCB fluids that were in the system or the machine should be drained out and the system cleaned.

THE DEPONENT: I believe there was, and I think by that time we were either referring to the reclamation service or we had an incinerator going that we would take the flushed fluid back to incinerate. Maybe my time period might be wrong, but-

BY MS. OLIVER:

Q Well, at the time the replacement fluids were introduced and sold to the customer, were the customers advised to clean out their old system of the PCB fluid?

A I don't recall what all the instructions were.

Q Did you consider that to be a good practice for the customer?

A I believe we felt that it was a practical and a reasonable practice.

Q Did you review any documents where that practice was related or communicated to the customer?

A I may have; I don't recall any specific one.

Q Was one of the purposes of the replacement fluids for the Pydraul PCB fluids the fact that it could be just added

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to the die cast machine, or whatever hydraulic equipment there was?

A Yes.

Q And that was a selling point for the replacement fluid.

A Yes.

Q Now, in the area of reclamation that we talked about before, in the period of 1968 to 1975, did Monsanto advise its customers to relaim and reuse the Pydraul fluids?

A Yes.

Q Did Monsanto advise its customers that the PCB fluids should not be used?

A I don't recall the exact wording in that statement.

Q Well, do you recall whether those recommendations were made?

A I don't recall the time frame. It was a moving time frame, and we were advising them to close the sytem if they do reclamation, rather than putting it out in the environment. And in that time frame we were saying recycle, go back to the machines and reclaim. There may have been a period later on when we said, "Put the new materials in and then bring it back and we'll incinerate it for you." So, there was a different phase of action at different times.

Q Well, in the second phase, where you got the PCB fluid back and incinerated it, was there a reason why that phase

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developed?

A Because the knowledge was escalating and we were all becoming more knowledgeable with the problem. And it looked like that was the only way to destroy them. Get them out of the system.

Q Well, did the problem change at some point from just being in the environment to some detrimental or harmful effect in the environment?

A No. It was just escalating.

Q In replacing the Pydraul fluids, did Monsanto have to dispose of inventories?

A We probably did.

Q What did you do with the inventories of the PCB fluids?

A I believe we incinerated them.

Q Do you recall asking Johnson Motors to finish off any of the inventories?

A No.

Q Was the decision made that the inventories should not be sent out to customers?

A I don't recall.

Q Well, whose decision would that have been?

A We're talking about a whole series of Pydrauls with a whole series of different Arolcors in the formulation, and I don't know whether you're talking about the ones we were

WATER_PCB-SD0000002149

phasing out of or the ones that were continuing on for a while. So that's why I can't answer you yes or no, and I don't remember anyway.

Q Let me go back, then, and ask, how were the Pydrauls phased out? What kind of program was set up?

MR. SCHINK: Which Pydrauls?

MS. OLIVER: Whichever Pydrauls that--

THE DEPONENT: That's why I can't answer, because I don't recall all the formulas and all the phaseout periods. I--

BY MS. OLIVER:

Q Well, were there different phaseout periods for different products-- different Pydrauls?

A Yes.

Q And how was that schedule arrived at?

A It was basically arrived at trying to get the things out of the environment that were being found first, the 54 and the 60. And then phasing the others as rapidly as the customer and we could do it.

Q Well, was the decision to phase out all the Pydrauls made at one time?

A No.

Q So the decision was made to phase out one, and then at another period of time a decision was made to phase out another?

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A Yes.

Q And what were the considerations in the decisions to phase out the products?

MR. SCHINK: Now, wait a minute. He's already been over that about three times, on the decision to phase out the 1254 and 1260 products. He's talked about a whole host of factors.

MR. OLIVER: I'm talking about the Pydrauls that were phased out in different ways. I want to know if there was any different considerations that were given at different times in phasing out the Pydrauls.

MR. SCHINK: That wasn't the question.

THE DEPONENT: I don't think I can really answer the question.

BY MS. OLIVER:

Q Well, for example, when A-200 was phased out, do you recall why the decision was made to phase out A-200?

A I don't recall the composition of A-200, and I don't recall the timetable of the phasing out.

Q It was a mixture of 1248 and 1242 Aroclors. Does that refresh your recollection at all, as to why the decision to phase that out was made?

A Well, when was that decision made?

Q In 1970, maybe?

A I don't recall the specific things about that product,

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no.

MS. OLIVER: Mark that, please.

(Minutes marked Bergen Exhibit No. 3.)

(Memorandum marked Bergen Exhibit No. 4.)

BY MS. OLIVER:

Q Mr. Bergen, I'd like you to look at what we've marked as Exhibit Number 3. Take a minute to look through that.

(Brief pause.)

Could you identify Exhibit Number 3, Mr. Bergen?

A What do you mean, identify it?

Q Tell us what it is.

A It looks like the minutes of the meeting of the Corporate Management Committee of November 17, 1969.

Q And it shows that you were present at that meeting.

A That's correct.

Q Have you had a chance to read through this?

A Yes.

Q And do these minutes reflect the meeting that you testified about earlier, the meeting with the Corporate Management Committee, where you presented a plan of action?

A Yes.

Q And it was the first meeting you had with the Corporate Management Committee on the PCB findings?

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A It was the first meeting I attended, I believe, yes.

Q Okay. Do you know if there were other meetings before this?

A I don't recall.

Q Who was Mr. J. E. Springgate?

A He was the business director of the plasticizer group. In other words, he reported to Charlie Smith-- Where is this-- Here-- Charles Smith is the other assistant general manager. Jim Springgate reported to him.

Q So, you're looking at Exhibit Number 2, the chart where the business directors were set up.

Did Mr. Springgate help you prepare the plan of action that you presented to the--

A Yes, he was involved from the plasticizers standpoint.

Q On page 3 of the exhibit, there's a list of twelve steps; are those the proposals that you made to the Corporate Management Committee?

A These were the outcome of the proposals.

Q Were each of these twelve steps approved for implementation?

A Yes.

Q Step number 1 is "Appoint a project manager." Was that done?

A Yes.

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Q Who was appointed the project manager?

A Bill Papageorge.

Q Number 2 is "Notify all Aroclor customers of PBC problem." Was that done?

A Yes.

Q And how was that done?

A I believe in that case it was done by letter to the customers.

Q And who was responsible for drafting the letter?

A Probably the director of marketing.

Q Were you involved in the drafting of that letter?

A I may have been.

Q Do you recall?

A It was probably written by a committee--

Q Step number 3 refers to "Reduce and effectively control PCB effluents from Monsanto plants." Do you know if that was accomplished?

A Yes.

Q And how was that done?

A You'd have to talk to the plant manager and Jim Savage, but we first of all had to define what was happening and to what extent, and to take appropriate action.

Q Was there any time period established over which these points should be accomplished?

A I thought there was, somewhere here. Or it was at

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a subsequent meeting. But there were some timetables established, maybe subsequent meetings.

Q Well, did these points carry over and you reported periodically at subsequent meetings--

A Yes.

Q --on the progress--

A Uh-huh (affirmative).

Q Point number 4 is "Educate customers on need to reduce and effectively control PCB effluents at their plants." Was that point followed?

A Yes.

Q And how was that implemented?

A Well, again, it was through Bill Papageorge and through the marketing department, the two groups working together to contact the customers, talk to them, see what the problems were, what could we do to assist them. And we offered the analytical service of our laboratory to help identify any problems, any effluent, to measure any PCBs and that sort of thing.

Q So, by the time of this meeting in 1969, November of 1969, Monsanto was aware that its customers has PCB in their effluents or their plants.

A Yes.

Q Were these steps taken to implement number 4 or educating customers different than the step number 2, to notify

WATER_PCB-SD0000002155

customers of PCB problems?

MR. SCHINK: How it was affectuated, was that different?

MS. OLIVER: Uh-huh (affirmative).

THE DEPONENT: Well, I think it's the same step. First we notified them that we considered it a problem, and then you have to educate them. So, they sort of go hand-in-hand.

BY MS. OLIVER:

Q And how, again, did you educate your customers?

A I'm not familiar with all the details. The marketing group and Papageorge could answer that much better than I can.

Q Did Monsanto sample at customer plants?

A Yes, we did.

Q And what was the purpose of the sampling?

A To assist the customer in identifying what his problems were?

Q Did it also-- was that sampling also done so that Monsanto could identify whether PCB was in the environment?

A Yes. We were working together with them to see what the problem was.

MR. SCHINK: Again-- in time, you're talking about all these things, Ms. Oliver, subsequent to the date of this meeting; is that correct?

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MS. OLIVER: Right. That were implemented as a result of this meeting.

THE DEPONENT: Correct.

BY MS. OLIVER:

Q Number 5 is "Develop and implement new packaging systems for Aroclor 1254 and 1260." What new packaging systems were provided?

A I don't recall what that all refers to, but -- unless they meant labeling. We might have changed the weight of the drums. I believe that may be what they're referring to. Went to a heavier gauge drum, I believe.

Q Number 10, step number 10 here is, "Determine feasibility and cost of eliminating 5/6 Cl_2 in Aroclors 1242 and 1248." What does that mean?

A That's the isomers of this product that might be in 1242 and 1248.

Q Does that refresh your recollection as to whether any isomers were found to be the problem in 1242 and 1248?

A Well, these were the more-- the 5 and 6 chlorines were the ones that did not degrade as fast as the lower chlorinated ones. We found that out later on. We didn't know the significance at that time. Or we may have-- I believe we had some possible knowledge of that, but not total. Because we were still refining our analytical test program.

Q At the time that you developed your technical

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capabilities to determine whether PCBs were in the environment, were you aware of any customers that had the technical capability to do that?

A Not exactly. There were very few-- It was very sophisticated equipment.

Q Do you have any information that Johnson Motors had the capability to find PCBs in the environment, or in its effluent prior to 1970?

A I don't know.

MS. STEIN: I'm going to object to the form. Do you mean technical capability, as to measuring by instruments? Is that what you mean?

MS. OLIVER: Any capability.

MR. SCHINK: He said he doesn't know.

BY MS. OLIVER:

Q Number 11 is "Study incineration products." Do you know what that means?

A It's not totally clear to me what that means now.

Q You don't recall?

A No.

Q Number 12 is "Develop a business plan to offer Monsanto Fluid Reclamation and Recovery with Enviro Chem." Was that done?

A Yes. We looked at that plan, and decided it was not a feasible plan for Monsanto.

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Q Why was this considered, that Monsanto should go on fluid reclamation?

A Because that service was being offered by Findett, and other people were talking of doing that. And so, we thought, well, maybe that's the way to help the customer to control it, so--

Q Do you recall what the cost of this program was, this 12-step program?

A No, I do not.

Q Do you recall in the period of 1969 to 1975, that--- if the profitability of the Pydraul fluids increased?

A No, I don't recall the numbers.

Q Was one of the purposes of Monsanto in phasing out its fluids to keep the Pydraul business?

A Pardon me; what was the question?

Q Was one of the purposes of Monsanto to keep the Pydraul business as it was phasing out and introducing new fluids?

A Well, we wanted to try to maintain our customers if we could.

Q Did you do that?

A We lost some; we retained some. It's a very competitive market.

Q There were other fluids available?

A Yes.

Q Did you lose any customers that were so loyal or

WATER_PCB-SD0000002159

Johnson Motors?

A I don't recall.

Q Do you recall any large customers or big accounts that you lost in the Pydraul-- the functional fluids field during this period of 1969 to '73?

A No.

Q Did you report to Mr. Mason on the implementation of the plan?

A Yes.

Q Did Mr. Mason change any of your recommendations or alter any of your recommendations?

A We were in constant communication, and through that we usually came up with something that met his approval.

Q Did you ever recommend to Mr. Mason or anybody at Monsanto that the hydraulic systems that had been using Pydraul PCB fluid should be drained and steam-cleaned?

A I don't recall.

Q You don't recall whether you did or not?

A No.

Q Do you recall that subject coming up specifically?

A I recall there were many discussion about how you clean and drain and do this, but I don't recall any specific recommendation of that type.

Q Do you know what the term "closed loop" was intended to mean by Monsanto?

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A I think this was an expression that Bill Richard used a lot, and the group more or less adopted it. It was to literally try and make a totally enclosed system so that no material got out.

Q Tried to make the customers' usage a "closed loop?"

A Yes. And the total business and the -- supply the customer, to the use, back to the incineration, full cycle.

Q And was their step the recommendation given the customers to close the loop?

A Yes, I believe we did.

Q And was this done on an individual basis?

A I can't recall exactly how we did it.

Q Well, do you have any knowledge that Johnson Motors was told by Monsanto to "close the loop?"

A We worked closely with Johnson; we worked closely with G.M. Bedford, and when we were doing the reclamation project, I believe Don Pogue was up there, got a lot of samples and did a lot of talking to them. Papageorge might have been up there, too.

Q Do you know when that was?

A No, I don't.

Q Was Don Pogue the Monsanto person who had contact with Johnson Motors with respect to reclamation?

A He was not the salesman on the account. He was in the product group.

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Q Was he under your supervision?

A He was under the director of marketing's direct supervision.

Q And do you know how he came to become involved in Johnson Motors?

A I think he was assigned the project on the reclamation, to study the reclamation. I believe he and Dick Davis worked together on that.

Q Was he assigned accounts specially, customers?

A No, no. He was-- He had no account assignment.

Q You said earlier that you visited Johnson Motors on one occasion that you could recall, and you can't recall when that was?

A Not exactly. I said I thought it was in '72, I believe, or-- I was shown a reference yesterday where somebody had recommended that I ought to go up there, and I know I did go up there, so it must have been shortly after that call report.

Q And why did you go there?

A Because of the overall business situation, and the fact they were important, and we needed -- whatever the reasons were in that report. The salesman felt it was important that I be there to meet Mr. Stenberg and review the whole overall situation.

Q Who did you meet with? Mr. Stenberg, and anybody

WATER_PCB-SD0000002162

else from Johnson Motors?

A I assume we did. I can't recall the names now.

Q And what was discussed?

A I can only speculate that we talked about the whole subject. I don't really recall. I do remember we went into the plant; I saw some of the die casting machines; I saw some of the troughs, the sewer system, where the material would drain down into, and then I think they had some kind of an accumulator chip where they'd get the material and tend to separate it or segregate the products.

Q And who did you go down to Johnson-- or up to Johnson with from Monsanto?

A With a salesman. I'm not sure who it was; might have been Bob Wheland, at the time.

Q Do you know what product, Pydraul product, Johnson Motors was using?

A I forget now; I don't know exactly.

Q Was it 50-E?

A I don't know.

Q And what was your understanding of what you saw in the plants-- the trench and the interceptor?

A All I saw at the time was that they were making a conscious effort to try to reclaim the fluid. And-- Not to reclaim it, but to collect it. And I wasn't sure what they did with it; all I saw was that they were at least collecting

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it, and getting it in a pond or a collection base.

Q Do you know how long they had been doing that?

A No. I didn't.

Q Did Mr. Pogue or anyone with you, Mr. Wheland?

A I think they might have known.

Q You didn't discuss it?

A We probably did, but I don't recall what was said.

Q Did you have any discussions with Johnson people at that time about removing PCBs from their effluent?

A Again, because I don't recall the timing, I don't know what nature the discussions took.

Q You don't recall the discussions?

A No, I think the main-- the part that I do remember was that we were concerned about any possible effluent outside of the plant. And they were doing some engineering studies. They had an engineer working on this problem. And our people had been talking to him, and so,--

Q Did you meet with any other person at that time?

A I might have met him; I don't recall.

Q Do you know who he was?

A No.

Q And what were the discussions that you can remember?

A Essentially, that we would work with him and cooperate with him in doing these testing programs back and forth. And I think we emphasized that it was good industrial practices

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to keep it out of the stream.

Q Were you aware that Johnson was experiencing a problem with the phenyl content and its effluent?

A I was reminded of that yesterday, but I had forgotten it before.

Q Was that in the report that you reviewed? Was that a topic of conversation?

A It must have been, I guess; part of it. I don't know.

Q You don't recall specifically discussing the phenyl problem at Johnson Motors?

A I don't know.

Q You don't recall discussing the PCB problem, if there was one at the time?

A The only thing I can factually remember is that we discussed the cycling and the keeping it in a closed system. Whatever the fluid was, to keep it out of the environment and have a closed system.

Q Did you have any discussions with Johnson people or other Monsanto people about whether the system that you saw was working, or--

A At the particular meeting I was there, we didn't see the whole system. We were just inside the plant. We didn't go outside the plant and look around or anything. I think later on-- I guess it was later on, when Don Pogue went up, that he

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might have gone outside the plant and been more involved-- or maybe Papageorge did. That's speculation.

Q So you don't recall any discussion of how well the system was working?

A No, no.

Q Other than remembering being in the plant, and these general discussions that you've testified to, do you remember anything else about your visit to Johnson Motors?

A I was greatly impressed with the robots. They used the robots in the machine, the die casting machines there. It was the first time I'd seen robots in action; I enjoyed that.

Q Do you recall anything else?

A No.

Q How long were you in the plant?

A A couple of hours.

MR. SCHINK: In the die cast area, or at Johnson Motors altogether?

MS. OLIVER: In the die cast plant.

THE DEPONENT: Probably no more than 45 minutes.

BY MS. OLIVER:

Q And you were at the Johnson facility for a couple of hours?

A Yes. Maybe three hours and lunch, or something like that.

Q Did you see the rest of the facilities besides the

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die cast plant?

A No, I didn't have a complete tour. I just saw certain parts of it. And I can't recall exactly all the parts.

Q Do you recall any conversations regarding any problems that Johnson was experiencing with Pydraul fluid that Monsanto was selling?

A Nothing specific.

Q Anything generally?

A No.

Q On the couple of occasions when people from Johnson came down to St. Louis, that was after this visit in 1972 that you made to Johnson?

A They may have been down before that; I don't recall.

Q What was the purpose of their visit?

A It was both social and business. Norm Johnson had developed a very close relationship with the people, as had the salesmen, and I believe they liked to do some hunting or fishing, and so they'd get together and do a little socializing, doing that. When they were down there, we'd talk about business, and wherever we were with them at that particular time, or whatever program we were on. But again, I don't know what program, what time, you know.

Q Would you meet with them?

A Occasionally I might join them for lunch, something like that.

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Q But you didn't make a meeting out of it, where you made an appointment or they saw you as -- for a reason.

A Not specifically, as I recall.

Q When you went to Johnson Motors in 1972, did you have any information that they were thinking of switching to another product?

A I don't recall. As I said, it's a very competitive game, and customers were always threatening to switch or this and that, so-- That's a constant threat.

Q No one told you that you should go down there, because Johnson might want to switch?

A Whatever that report says, that was what triggered it. I don't remember.

Q Was the report that you saw-- There was a call report prepared by the salesman, I take it?

A Yes.

Q Were you aware that any promotional sales movies were made in customers' plants in the years 1960 to '75?

A I don't recall that now.

Q Do you recall any movies made at Johnson Motors during those years regarding the Pydraul fluids?

A No.

Q Do you have any knowledge of sampling done by Monsanto at Johnson Motors for PCBs?

MR. SCHINK: Other than so far as he's already

WATER_PCB-SD0000002168

testified?

MS. OLIVER: At Johnson Motors.

MR. SCHINK: I think he testified about that.

MS. OLIVER: I'm sorry; I don't recall.

THE DEPONENT: I believe as we got into all this study of customer effluents, I believe we got some from Johnson Motors.

BY MS. OLIVER:

Q Do you know what those analyses showed?

A I don't recall, no.

Q Do you know whether they were communicated to Johnson Motors?

A I assume they were.

Q Do you know whether they were or they weren't?

A I have no factual evidence now.

Q Well, what was the practice at Monsanto, with respect to that type--

A The practice was to communicate it back to the customer, because we were working cooperatively together, and it was their information; that was all part of the arrangement--they'd give us samples; we'd do the testing and we'd report back to them.

Q And in what manner was the report back to them made?

A What, normally there were written reports back; it could have been verbal. Again, I can't say how it went back.

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Q Okay. And at the time the reports were made back to the customer, did Monsanto recommend action to the customer?

A It depends on the nature of what the test was. It might have just been a fact-finding test, or it might have been a complaint. I don't-- It depends on what the situation was.

Q Well, I may be wrong; I thought we were talking about PCB analyses that customers--

A In that specific case, we would be giving them a report on what was found.

Q And would that report be written?

A It, normally, should have been written.

Q Are you aware of any reports made to any customers on the PCB analyses made by Monsanto?

A Well, I know we worked with lots of customers, and there were many reports made on these customers, through our research group. And there should have been communication to the customers, either written or verbal.

Q Well, with respect to the customers in the sampling done by Monsanto for PCBs, what other customers do you recall were sampled?

MR. SCHINK: Just a second. I understood yesterday that the Court did not grant the Government's motion insofar as it asks for identification of names of customers.

MS. OLIVER: I don't think that's right. I think th

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judge said that we could experiment today with Mr. Bergen and find out what his knowledge was, and if he could recall, we were entitled to ask him those questions.

MS. STEIN: I understood that it included any complaints of customers about PCBs.

MR. SCHINK: Oh, well, that's not this question. See if you can answer it.

THE DEPONENT: Would you rephrase your question, or ask it again?

BY MS. OLIVER:

Q I'll ask it again. Do you recall the names of other customers that Monsanto did PCB samplings for, or at?

MR. SCHINK: In addition to Johnson Motors?

MS. OLIVER: In addition to Johnson Motors.

THE DEPONENT: We worked with several customers, quite a few customers. In general, we tried to work with all the major, big customers. I would have to speculate, because I don't have any written evidence right here, but I know we were--

MR. SCHINK: The question would be, do you actually remember a customer from whom you took samples, analyzed the samples, and reported the results, as you did in the case of Johnson?

MS. OLIVER: I don't think that's an accurate characterization of what his testimony was, but that's--

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MR. SCHINK: Well, I think that's what he said about Johnson Motors.

MS. OLIVER: I think he said reported the results.

MR. SCHINK: Either written or verbal was the practice; that's what he said.

BY MS. OLIVER:

Q Do you remember other customers?

A Yes.

Q Who were they?

A General Electric, Westinghouse, General Motors, Bedford. Those are the main ones that come to mind. There were others.

Q Do you know which of the functional fluids General Electric was using?

A Yes, the capacitor fluid and the transformer fluids.

Q And Westinghouse?

A Same thing.

Q How about General Motors?

A They were using Pydraul.

Q Do you recall in the cases of -- in the case of any of the three other customers that you mentioned, whether Monsanto recommended any action be taken on the basis of Monsanto's analysis?

A I think our recommendation was the same to all customers, to "close the loop," and to use reclamation where

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possible; tighten up their plants.

Q And that was done as a result of the testing and analysis?

A Right.

Q And who would make these recommendations to these customers?

A It was usually done through the marketing department, but the recommendation might be with medical input or research input. But it was usually the feelings of what total Monsanto was trying to convey to the customer.

Q Well, would it be the salesmen, the field salesman--

A It was through the salesman. He was always the messenger to the company. Either he or the tech service person, or the marketing manager. It was always through marketing.

Q At the time that Monsanto was doing the analytical testing to verify the findings with PCBs and the other steps that you testified about earlier, in the period of '69-'70, what steps were taken with respect to educating salesman about the PCB problem?

A I think we educated them to the extent of telling them what was being reported, being found in the environment. And we kept them up to date on what we were doing in the laboratories. We were working with the customers with them. I think we were counseling with them about how to close up their systems, whenever they requested it. Many of these customers

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had very large engineering groups that could take care of these problems themselves, and they didn't want any assistance. Actually, some of them refused it. Others accepted it and--

Q Were the salespeople instructed on how to deal with customer questions about the fluids?

A To some extent. To some extent.

Q To what extent?

A To the extent you could educate the salespeople. At times we would send a plant manufacturing man up to assist, or possibly one of our plant engineers.

Q Well, with respect to the Pydraul fluids, were the salesmen given any kind of handbook or information for themselves to use when dealing with customers?

A I don't recall.

Q Would the person in charge of field sales be the person who would have supervised that aspect of it?

A Yes.

Q In 1970, that was Mr. Johnson?

A Yes.

Q Do you know if salesmen--

A Or the director of marketing, either one could have done that.

Q Do you know if salesmen were told that they should not permit customers to return fluids back to Monsanto?

A I can't recall.

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Q Was there a decision made by Monsanto that you're aware of, that Monsanto didn't want Pydraul fluids, that it was phasing out to be sent back?

A I can't recall that.

Q Before Monsanto became aware of PCBs in the environment, did Monsanto have a regular sampling and analysis procedure with its customers for Pydraul and Therminol?

MR. SCHINK: Are you talking now about the quality of the product as delivered, or the customer's effluent?

MS. OLIVER: A sample of the product, and analysis of the product.

THE DEPONENT: I believe we were doing that on the Therminols, to check the heat stability for the customer.

BY MS. OLIVER:

Q How about on Pydrauls?

A I can't recall any specific program.

Q Did that routine analysis on Therminol continue after 1970?

A I believe it did, until we phased out of the Therminol.

Q Did Monsanto make any recommendations to its customers on how it could remove PCBs from their effluent.

MR. SCHINK: You mean other than the ones he's talked about so far, reclamation and so forth?

MS. OLIVER: To remove it from the effluent.

WATER_PCB-SD0000002175

THE DEPONENT: There possibly may have been other ways. I mentioned the bugs and the degradation. I believe there was another technique that was also talked about, and that was the use of activated carbon.

BY MS. OLIVER:

Q Were those means communicated to customers?

A I believe they were?

Q And how were they communicated?

A Again, through the salespeople.

Q So, the salespeople were kept up to date on all these methods?

A Yes.

Q Were you aware of a PBC management plan that was developed by Monsanto?

A Yes.

Q And was that plan developed under you supervision?

A Yes.

Q Was Mr. Papageorge the person responsible for preparing the plan?

A I believe so.

MS. OLIVER: Can we mark these?

(Management plan marked Bergen Exhibit Number 5.)

BY MS. OLIVER:

Q Mr. Bergen, if you'll look at what we've identified

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as Exhibits 4 and 5, and--

(Brief pause.)

Okay; if you could look at them and identify them for us first.

A They look authentic, if that's what you mean.

Q Could you tell us what they are?

A Well, Exhibit 4 is a memorandum from Bill Papageorge to quite a few people, dated March 30, and it's a rough draft of a plan for managing the PCB problem. And then he requests a meeting to have a thorough discussion and to develop a finished plan, which will eventually be presented to the CMC by mid-April.

Q Okay. And is that the plan that Mr. Papageorge worked out underneath your supervision?

A This is a rough draft of it.

Q Do you recall seeing Mr. Papageorge's rough draft of his plan?

A I'm sure I must have.

Q Look at page 3 of the plan. Part 3; it's entitled "Objectives." If you would look at that part of it for a minute.

(Brief pause).

Okay; the overall objective stated there is to manage PBC pollution problem; to prevent it from adversely affecting the established return and investment objectives of the function

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fluids and plasticizers groups while maintaining the corporate image of Monsanto as a responsible and respected member of industry world-wide. Now, what does "return on investment objectives" mean?

A That's your profit return on the capital employed.

Q It was a profit that Monsanto was making in the functional fluids?

A That's correct.

Q Was the return on investment adversely affected by the PCB pollution problem?

A It was eventually, yes.

Q To what extent was it affected?

A I don't recall the exact number.

Q Underneath that overall objective, there's a list of several objectives supporting the overall objective, and number 1 is deleted here; do you know what number 1 was?

A No, I don't.

Q You don't recall?

A No.

Q Page 4 of the rough draft, part 4, is an action plan, and the first objective under the action plan is also omitted. Do you recall what the first objective was?

A No, I don't.

Q Did you make recommendations to Mr. Papageorge on what should go into this management of the PCB problem?

WATER_PCB-SD0000002178

A I probably did.

Q Do you recall what the most important objective to you was at the time?

A No, I don't.

Q Do you recall what the most important objective for action was at the time?

A The most important objective was to manage the whole problem.

Q Was this management plan drafted for the corporate management committee?

A Yes, we did draft one and then present it.

Q And was it approved by the corporate management committee?

A Eventually. I don't know if this was the one that was approved or not.

Q Okay. You're looking now at--

A --Exhibit 5.

Q --Exhibit 5, which is dated April 7, 1970, and it's the management plan by Mr. Papageorge.

A Yes.

Q There's some writing on page 2 of the margin of Exhibit Number 5; do you know whose writing that is?

A I'm not certain.

Q Can you tell me if Exhibit 5, which was dated April 7, 1970, was presented to you for your approval by Mr. Papageorge

WATER_PCB-SD0000002179

A I don't recall.

Q Do you know if a final plan for presentation was developed, and was in fact presented to the corporate management committee?

A Yes.

Q And you don't recall whether Exhibit 5 is the plan that was submitted?

A No, because there was another meeting after that.

Q Do you recall if you were in agreement with Mr. Papageorge's plans that he proposed to you?

A I can't recall now, other than what he says there.

Q Well, were you in agreement with the objectives in the action plan that Mr. Papageorge proposed in his drafts?

MR. SCHINK: Do you recall now, whether 10 years ago you were in agreement with what he wrote?

THE DEPONENT: No, I can't recall.

BY MS. OLIVER:

Q Why don't you look at Exhibit Number 5; tell me whether there's anything in there that you don't agree with, or you didn't agree with.

MR. SCHINK: Now, wait; you've got two different questions. He says he doesn't recall 10 years ago whether he was or wasn't in agreement with what Mr. Papageorge said. Now, is your question whether he is today in agreement with what Papageorge said 10 years ago?

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MS. OLIVER: Now, I'm asking him whether there's anything in there that he can tell me today that he was not in agreement with.

MR. SCHINK: He's already testified he doesn't recall whether 10 years ago he was or wasn't in agreement with what Mr. Papageorge wrote. He's answered the question.

MS. OLIVER: I don't think he looked at Exhibit Number 5.

MR. SCHINK: He just sat there and looked at it.

MS. OLIVER: Let's not argue. I'd like him to look at it, and if he can tell me, fine, and if he can't tell me, that's fine.

THE DEPONENT: Even if I read it today, I still couldn't tell you what my comments or feelings were 10 years ago.

BY MS. OLIVER:

Q Well, were the objectives that were stated there objectives that you agreed with?

A I can't recall.

Q Do you recall any objectives that you considered important, that Mr. Papageorge did not consider or include in his draft?

A I think he covered most of them.

Q Did you recommend, or did you consider important,

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any action plans or any actions that Mr. Papageorge did not include in his draft?

A If I did, they'd be in the file draft.

Q So you're telling me that you don't know whether you agreed with the action plans here or not?

A That's correct.

Q Okay.

MS. OLIVER: Mark that Bergen Exhibit Number 6.

(Letter marked Bergen Exhibit Number 6.)

MR. SCHINK: Is this a document from the files of Johnson Motors? I don't think this has been-- There's a "Received" stamp on it; that's why I was wondering. At least, it's not been produced by Monsanto.

MS. OLIVER: I don't know.

MR. SCHINK: You don't know what?

MS. OLIVER: I don't know whether we produced--

MR. SCHINK: Well, if it had been produced, it would have had a number in the lower righthand corner, and--

MS. OLIVER: By Monsanto.

MR. SCHINK: By Monsanto, correct. Because all the Monsanto documents produced in this litigation had a seven-digit number in the lower righthand corner.

MS. OLIVER: Okay.

MS. SCHINK: Is there a question?

WATER_PCB-SD0000002182

MS. OLIVER: Oh. Have you had an opportunity to read Exhibit Number 6?

THE DEPONENT: Yes.

BY MS. OLIVER:

Q Okay. Can you identify that?

A Yes.

Q What is that?

A It's a letter dated January 3 to General Electric Company, where we're advising them that we have previously notified them on correspondence, since early '70, that the material described on the attached acknowledgement of your order contains polychlorinated biphenyls. Do you want me to read the letter?

A No.

Q Was that the type of letter you testified earlier that Monsanto sent to its customers that it sampled and analyzed for PCBs?

MR. SCHINK: I'm not sure he testified that they sent them letters. He said that there were oral communications, and that the test results were conveyed. He didn't testify anything about any particular letter being sent, Ms. Oliver.

MS. OLIVER: I think he said that-- his testimony was that it was the practice, or it should have been sent in writing to the customer.

WATER_PCB-SD0000002183

MR. SCHINK: Right. This letter has nothing to do with that.

MS. OLIVER: Let me ask whether that's the type of communication you had with your customers regarding the analysis of the PCBs.

THE DEPONENT: This letter has nothing to do with analyses of PCBs.

BY MS. OLIVER:

Q It's after the analysis that was done.

A Well, there's-- No, there's no reference to that here.

Q Was General Electric one of the customers of PCB fluids from Monsanto?

A Yes.

Q Okay. And this-- One of the customers that Johnson-- Monsanto-- analyzed for PCBs.

A I believe so, yes.

Q And there were communications with General Electric concerning PCBs.

MR. SCHINK: Wait a minute; are you talking about the results of the sampling, or general communications?

MS. OLIVER: I'm talking about communications with General Electic, concerning PCBs.

MR. SCHINK: Concerning what about PCBs? The question is vague. Are you talking about the results of

WATER_PCB-SD0000002184

sampling, are you talking about other warning letters such as those that you've marked as exhibits in other depositions?

MS. OLIVER: I'm talking about communications from Monsanto to other customers concerning PCBs.

MR. SCHINK: And what's the question?

MS. OLIVER: The question was, is this typical of the communications that Monsanto made to other customers concerning PCBs?

THE DEPONENT: Yes.

BY MS. OLIVER:

Q Is it typical of communications made by Monsanto to its larger accounts for PCBs?

MR. SCHINK: Are you talking about capacitor customers like General Electric and Westinghouse? Are you talking about all customers, Pydraul customers?

MS. OLIVER: Functional fluid customers.

THE DEPONENT: Yes.

BY MS. OLIVER:

Q And to your knowledge, was it the practice of Monsanto to send letters to its larger accounts concerning -- letters typical of Exhibit Number 6-- to its customers?

MR. SCHINK: What do you mean, was that letter sent, or was information regarding the presence of PCB and the handling of PCB? What are you talking about?

WATER_PCB-SD0000002185

MS. OLIVER: Letters similar to Exhibit Number 6.

MR. SCHINK: Well, that letter refers to several different things, Ms. Oliver.

MS. OLIVER: I understand that. I'm asking the witness if that's the type of letter that was sent to other customers. That's all I'm asking, Mr. Schink.

MR. SCHINK: Can you answer the question?

THE DEPONENT: Yes. It's typical.

MS. OLIVER: See, that wasn't so hard.

Let's take a break.

(Brief pause.)

(Memos marked Bergen Exhibits Nos. 7 and 8.)

BY MS. OLIVER:

Q Mr. Bergen, you want to look at Exhibit Number 7, and identify that document for us?

(Brief pause.)

Can you identify what that is?

A This is a memorandum to Tom Gossage, who was director of marketing at that time, and it's in regard to "Marketing Price for PCB Incinceration and Pydraul Incineration Rebate Allowances on New Pydraul Series Purchases."

Q And that was written by you.

A That's correct.

WATER_PCB-SD0000002186

Q And was this memorandum written when the incineration procedure was in the initial start-up procedures?

A Yes, that's correct.

Q And was the incineration charges or schedules that you talked about in here instituted?

A I imagine it was.

Q And the third paragraph of this memo, you talked about "In the case of Pydrauls, we had no intention of burning them." Do you recall why--

A I don't recall now.

Q There was no reason that you recall why you weren't going to burn Pydrauls?

A I don't recall.

Q Do you know if Pydrauls were in fact accepted for incineration by Monsanto?

A I believe they were, based on this.

Q You added an additional charge for the Pydraul.

A I don't recall. There were changes in the charges as we went along in the program.

Q Who is Mr. Bradford?

A Barry Bradford was the industry manager, I believe, at that time, on the Pydraul fluids.

Q So, he was the manager for the Pydraul fluids? The product manager?

A Yes, the product manager.

WATER_PCB-SD0000002187

Q Who is, or who was, Mr. Benignus?

A Benignus (pronouncing). He was the product manager on the dielectric fluids.

Q Can you identify Exhibit Number 8?

Exhibit Number 8 is a memorandum from Mr. Pogue to a number of people, including you, concerning a reclamation meeting; is that correct?

A That's correct.

Q Dated February 19, 1971.

A Correct.

Q And Mr. Pogue is proposing an agenda for making plans for recovery and reclamation for customers; is that right?

A Uh-huh (affirmative).

Q Is that right?

A Yes. It's talking about the whole issue, the subject.

Q And was this time period, in about February of 1971, the period of time that this reclamation project or plans by Monsanto were developed?

A That's, I think, when we were looking at that as prescribed by the corporate management committee to enter into that business and study it, and that was part of the study.

Q Okay. So this was about the time that you started the study the study for reclamation of customers' products?

A Oh, we may have started it sooner than that, but this

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was just another meeting on that subject.

Q Well, did you have any plans for reclamation or recovery of customers' products before 1971, that you know of?

A I don't recall the time period.

Q Do you know, Mr. Bergen, the profit made on the functional fluids in the period of 1968 and '69 and '70?

A I don't recall now, no.

Q Can you give me an estimate of what the profit was?

A No.

Q Do you know whether-- Strike that.

In the period of say, 1963 to 1968, do you know what information about the functional fluids or the Pydrauls were given to Monsanto's customers concerning the properties of the fluid?

A It's too broad a question; can you restate it, or be more specific?

Q Monsanto's customers were provided with brochures on the fluids that Monsanto put out; right?

A Yes.

Q And the information in those brochures covered physical properties and how they would be used; is that right?

A Yes.

Q Are you aware of any information on the chemical composition of those fluids that was given to customers?

MR. SCHINK: Could you explain what you mean by

WATER_PCB-SD0000002189

"chemical composition?"

MS. OLIVER: The molecular--

MR. SCHINK: Fluorinated hydrocarbons; is that your question?

MS. OLIVER: No. The formulas, or the molecular composition of the fluids.

MR. SCHINK: What do you mean, the "molecular composition?" I mean, I don't--

MS. OLIVER: The chemistry of the fluids.

MR. SCHINK: It they contained fluorinated hydrocarbons.

MS. OLIVER: No, that's not what I'm asking. I'm asking the witness if he knows that the chemistry of the fluids--

MR. SCHINK: Well, now you're asking if he knows; you've already asked him that question.

MS. OLIVER: If he knows whether customers were given the chemistry of the fluids; that's all I'm asking. You don't have to answer it for him--

MR. SCHINK: I'm not answering it for him, Ms. Oliver. I'm trying to get it clarified in my own mind.

THE DEPONENT: I don't recall what the bulletin said, and I also don't recall what the salesmen may have said.

BY MS. OLIVER:

WATER_PCB-SD0000002190

Q So, you don't know if there was a policy on what information on a fluid to give to a customer? That's what I'm asking, Mr. Bergen.

A I don't know of any specific policy to say or not to say.

Q Was there any proprietary interest that Monsanto had in the formulations that it didn't want to divulge to customers?

A There was proprietary information, and we certainly wouldn't give away the whole formulation.

Q What's the proprietary information that you wouldn't want the customers to know?

A Well, there are many, many ingredients that go in there in addition to what we call the base stock, and you have additives, you have viscosity index improvers, you have all sorts of other materials that are added. And those are part of the real trade secrets.

Q Is the base stock a trade secret?

A It may or may not have been; I don't recall.

MS. OLIVER: Okay; I don't think I have anything else.

One more thing--

BY MS. OLIVER:

Q Are you aware of any federal investigations of Monsanto relating to PCBs?

WATER_PCB-SD0000002191

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Q Is the base stock a trade secret?

A It may or may not have been; I don't recall.

MS. OLIVER: Okay; I don't think I have anything else.

One more thing--

BY MS. OLIVER:

Q Are you aware of any federal investigations of Monsanto relating to PCBs?

WATER_PCB-SD0000002192

A What do you mean by "federal investigations?"

Q Grand jury investigation.

A Not specifically grand jury.

Q Are you aware of any investigations?

A No.

Q No grand jury investigations; that was the question.

A No, I don't.

Q Was anyone at Monsanto, to your knowledge, called to testify before a grand jury relating to PCBs?

A I don't recall specifically about a grand jury.

Q Well, do you recall that Monsanto people were called to testify before some federal investigation?

A All I recall is that John Mason handled most of the contacts with the government-- And you'd have to ask that question to him.

Q Is Mr. Mason still with Monsanto, do you know?

A Last I heard, he was. In Europe.

Q Okay.

MS. OLIVER: I don't have anything else.

(Brief pause while another reporter resumed taking of proceedings.)

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C E R T I F I C A T E

STATE OF GEORGIA)
)
COUNTY OF FULTON)

I, Linda C. Morrison, Deposition Officer, being a Certified Court Reporter and Notary Public in and for the State of Georgia at Large, certify that the foregoing transcript is a true record of the testimony given by the witness, HOWARD S. BERGEN, JR., who had been previously sworn; that I am neither a relative nor employee nor attorney nor counsel of any of the parties, nor a relative nor employee of such attorney or counsel nor financially interested in the action; that the said deponent and counsel in the presence of each other did not waive the reading and signing of the deposition; and that the original transcript of said deposition under seal shall be filed with the Court in which the action is pending or sent by certified mail to the Clerk thereof for filing.

WITNESS my hand and seal at Atlanta, Fulton County, this the 124th day of March, 1981.

Linda C. Morrison

LINDA C. MORRISON
Notary Public, Georgia, State at Large
My Commission Expires Sept. 2, 1984

(SEALS)
#A-114

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BY MS. STEIN:

Q Mr. Bergen, I believe that you testified earlier that some Aroclors degraded and others didn't; is that correct?

A Yes.

Q Okay. Do you remember which Aroclors will degrade in the environment?

A In general the lower chlorinated ones seem to degrade rather rapidly.

Q About how long would it take for them to degrade?

A I don't recall specifically. A matter of weeks to months.

Q Now, I believe that in response to a question asked you by Ms. Oliver, there were certain studies which went on starting in about 1969 or 1970, including some under the auspices of Monsanto in Europe. I believe you indicated that some of these studies showed that the information relating to the presence of PCBs in the environment and the potential impact on various life forms were correct, or were verified, if you will, by these studies, and there was other information that was not shown to be correct by these studies; is that correct?

MR. SCHINK: I don't believe that was his testimony. His testimony was only with respect to presence in the environment, as I recall. Why don't you just put a new question to him?

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THE WITNESS: Yes, give me a new one.

MS. STEIN: Okay.

BY MS. STEIN:

Q You testified that you were familiar with reports that there were adverse impacts on wildlife; isn't that correct?

A (Nods head affirmatively.)

Q And that there were further studies that were done to either verify or discredit those studies; is that correct?

A Yes.

Q Okay. Can you tell me whether or not the subsequent work that was done invalidated claims that there were adverse impacts on wildlife?

MR. SCHINK: Are you asking him as a layman, or are you asking him as a health expert? I think he testified that the --

MS. STEIN: I'm asking what he knew about it.

MR. SCHINK: -- responsibility for that was with the medical area.

MS. STEIN: What he knew about.

THE WITNESS: Most of that work was done by our Medical Group, Environmental Group, and Research Group. As a layman -- We seemed to verify that the products were available in the environment. Many times

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we couldn't come to an exact conclusion that it was PCBs solely that were the problem. There were many conflicting other things. Witness the egg shells. And there were many other -- about the birds and the egg shells and the thickness. And there were many other authorities who were saying, "Well, it's other ingredients in the environment in addition to PCBs." So there was a lot of confusion, and I don't know that I or anyone else came to the total conclusion that PCBs were the sole cause of some of these claims. It was perhaps involved with them, but whether they were the sole cause I don't think has ever been proven, to my knowledge.

BY MS. STEIN:

Q Were dibenzofurans implicated in these adverse effects?

A That was one of the claims by one of the scientists And we did look at that, and we found that we were below the accuracy of the instruments in measuring that particular ingredient.

Q Dibenzofuran?

A That's correct.

Q In other words, what you're saying is that the lowest detectable limit on the instrumentation that you had --

A Right.

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MR. SCHINK: Ms. Stein, my understanding is this issue was raised directly with the Court yesterday, and the Court indicated that the impurities, et cetera, was not an area that in her view was germane.

MS. STEIN: From what I understand, it was not really clarified.

MR. SCHINK: Well, my understanding is that it was clarified. I mean, you have asked the questions, but, I mean, I don't know how much more you have in that area, but --

MS. STEIN: Not that much.

MR. SCHINK: My understanding is that the Court felt that that was not an appropriate area.

MS. STEIN: It would help if we would have been there.

MR. SCHINK: I agree, and we are doing trial and error today.

MS. STEIN: Okay.

MR. JOHN: Trial and error in memories, too.

BY MS. STEIN:

Q I believe you said you got a letter of commendation from the government with regard to -- that Monsanto got a letter of commendation with regard to its work on PCBs; is that correct?

A That's what I said.

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Q Do you know when that was?

A The exact time, no. It would be sometime in '72, '73, maybe early '74.

Q What --

MR. SCHINK: Excuse me.

THE WITNESS: It was after this -- I forget exactly what they were called, but it was the Presidential task force group, and it was after they had done all their studies that they wrote their report, and it was after that.

BY MS. STEIN:

Q Well, this letter of commendation, do you know whether it came from the task force, or who wrote this? I mean, if you can't remember what it was -- I'm having trouble figuring out exactly what this communication was, and why it --

A It was so long ago I don't remember what branch or who.

Q Did you write to your major Aroclor customers with background information on PCBs so that they would be prepared for any inquiries about PCBs? By "you" I mean your group.

A I can't recall specifically. We might have. I can't recall.

Q Who would have been responsible for generating

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that kind of information to customers?

MR. SCHINK: Well, he said that he didn't recall that they did.

THE WITNESS: I can't recall that we specifically did that, but if it was done, it would have been done by Papageorge in the Marketing Group, primarily.

BY MS. STEIN:

Q Okay. Let me go back to the reclamation. The reclamation that you had was for fluids; is that correct?

MR. SCHINK: Are you talking about reclamation that they had?

MS. STEIN: Reclamation -- Monsanto's reclamation program.

THE WITNESS: We --

MR. SCHINK: By Monsanto, or that Monsanto's customers were engaged in?

MS. STEIN: All right.

BY MS. STEIN:

Q I believe that you indicated that reclamation services were available to Monsanto's customers with respect to its PCB-bearing fluids.

A Correct. Yes.

Q Okay. Now, I also believe that Monsanto had a reclamation facility.

A No, we did not.

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Q Okay.

A We talked about it, but we never did do it.

Q Well, how did you handle it, then?

A We would recommend Findett and anybody else that was doing it.

Q Do you remember when you started to recommend Findett or other reclamation services to customers?

A I believe Findett was doing that in '68, '69, on Therminol type products.

Q But what about for dielectric customers, transforme and capacitor?

A I don't believe that anybody did that.

Q By "did that," do you mean practiced reclamation in that particular use?

A Yes.

Q Okay.

MS. STEIN: That's all I have.

MR. SCHINK: Do you have anything else?

MS. OLIVER: I have a couple.

BY MS. OLIVER:

Q Mr. Bergen, on the reclamation point raised with Findett, do you know if Findett did reclamation of Pydraul fluid before 1970 or '69?

A I don't recall.

Q You just recall that they reclaimed Therminol?

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A I know they did Therminol.

Q Okay.

A And they may have attempted to do Pydrauls, or they may have done Pydrauls.

Q But you don't know?

A But I don't really know.

MS. OLIVER: Okay. I don't have anything else.

REDIRECT EXAMINATION

BY MR. SCHINK:

Q Mr. Bergen, you mentioned that General Motors engaged in fluid reclamation. Do you know -- When did you first become aware of the reclamation of Pydraul that General Motors was engaged in in its Bedford plant?

A I can't recall exactly. It was probably in that '69-'70 period.

Q Do you know whether General Motors had been engaged in Pydraul reclamation prior to the time you first became aware of it?

A I believe they had been doing it before I became aware of it, by maybe two or three years. They were primarily interested in the economies of reclamation and recycling it, keeping a closed system.

Q Do you know whether any of your field salesmen in the period --

Strike that.

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Starting in 1964 you had, as Director of Sales, responsibilities which included functional fluids, did they not?

A Correct.

Q And there were functional fluids salesmen that were in the field at that time dealing with Pydraul customers; is that right?

A Right.

Q Do you know whether those salesmen in their dealings with Pydraul customers were discussing reclamation with those customers as a means of reducing the cost of fluid and reducing the usage of fluid in their facilities?

A I believe they were, because we had some advantages of being able to be reclaimed, versus our competitio

Q And was that a point that your field salesmen after 1964 were advised about to the best of your knowledge?

A Yes. I'm not sure of the timing, but I'm sure they were advised.

Q Okay. And to the best of your knowledge was the fluid reclamation a subject which your salesmen did discuss on occasion with the customers?

A Yes.

MR. SCHINK: I have nothing further.

MS. OLIVER: Do you have anything?

MS. STEIN: No.

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RECROSS-EXAMINATION

BY MS. OLIVER:

Q In this period before 1968 why was there a need to reclaim the fluid?

A Primarily in an economic need on the part of the die casters.

Q How did the fluid to your knowledge come to be in a position to be reclaimed?

A Well, I think a lot of the plants were practicing good manufacturing practices, and they were collecting -- I think Johnson Motors was doing some of that, as were others. And so they had accumulated this material, and then they would say, "Well, can we reclaim it?" So it became a logical question.

MS. OLIVER: I don't have anything else.

BY MS. STEIN:

Q By collecting it, do you mean that it was collected at some point on the grounds of the manufacturing facility? I mean, it must have gotten out of wherever it was, to have to be collected.

A As I learned later, they would have trenches or curbing, and they would collect it. Sometimes they would sop it up with what we call kitty litter, and they would sop it up, and that would be hauled away to a solid refuse spot, or they would collect this and try to reclaim

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it. And different people did different things.

MS. STEIN: Okay.

MR. SCHINK: Thank you, Mr. Bergen.

THE WITNESS: Are we all done?

MS. OLIVER: Do you understand, Mr. Bergen, you have the opportunity to read the transcript of your testimony?

THE WITNESS: Yes.

MS. OLIVER: And sign it before it is filed with the Court?

THE WITNESS: Yes, I understand that.

MS. OLIVER: Do you want to take that opportunity to read it?

THE WITNESS: Yes, I'd like to do that.

MS. OLIVER: Okay.

MS. STEIN: Thank you very much.

(Deposition concluded.)

WATER_PCB-SD0000002205

HOWARD S. BERGEN, JR.

Sworn to and subscribed before me this the _____ day of

_____, 1981, _____ County, _____.

_____
(Notary Public)

My commission expires _____

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C E R T I F I C A T E

STATE OF GEORGIA)
)
COUNTY OF FULTON)

I, Clifford C. Sheffield, III, Deposition Officer, being a Certified Court Reporter and Notary Public in and for the State of Georgia at Large, certify that the foregoing transcript pages 1a through 12a is a true record of the testimony given by the witness, HOWARD S. BERGEN, who was first duly sworn by me; that I am neither a relative nor employee nor attorney nor counsel of any of the parties, nor a relative nor employee of such attorney or counsel, nor financially interested in the action; that the said deponent and counsel did not waive the reading and signing of the deposition; and that the original transcript under seal shall be sent to the Attorney for the Plaintiff.

WITNESS my hand and seals at Atlanta, Fulton County Georgia, this the 12th day of March, 1981.

CLIFFORD C. SHEFFIELD, III

(SEALS)

Notary Public, Georgia, State at Large
My Commission Expires May 16, 1983

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