

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

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

The deposition of NORMAN T. JOHNSON,
called by the Defendant Outboard Marine Corporation
for examination, pursuant to notice and agreement of
the parties and pursuant to the Rules of Civil Pro-
cedure for the United States District Courts per-
taining to the taking of depositions, taken before
Thea L. Urban, a Notary Public in and for the County
of Cook, State of Illinois, and a Certified Shorthand
Reporter of said State, at the offices of Kirkland &
Ellis, 200 East Randolph Drive, Room 5700, Chicago,
Illinois 60601, on the 16th day of February, A.D. 1982,
commencing at 10:00 o'clock a.m.

PRESENT:

MS. ELIZABETH STEIN,
(Pollution Control Section
Land & Natural Resources Division
Department of Justice
Washington, D.C. 20530),

appeared on behalf of the
United States of America;

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PRESENT: (Continued)

MR. MICHAEL A. POPE,
(Phelan, Pope & John, Ltd.
30 North LaSalle Street
Chicago, Illinois 60602),

and

MS. JOANNA C. NEW,
(Martin, Craig, Chester & Sonnenschein
115 South LaSalle Street
Chicago, Illinois 60603),

appeared on behalf of the Outboard
Marine Corporation;

MR. JAMES H. SCHINK,
(Kirkland & Ellis
200 East Randolph Drive
Chicago, Illinois 60601),

appeared on behalf of the Monsanto Company.

ALSO PRESENT:

MR. HUGH THOMAS.

- - -

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I N D E XWITNESS:DirectCrossRedirectRecross

NORMAN T. JOHNSON

By Mr. Pope

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E X H I B I T SJohnson-OMC Deposition
ExhibitMarked for ID

No. 1	109
No. 2	132
No. 3	134
No. 4	169
No. 5	179
No. 6	185
No. 7	188
No. 8	191
No. 9	200

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(Witness sworn.)

MR. POPE: I understand there are some disputes right now as to document production and various things on some of the documents that were produced.

It would make sense, I think, for all of us to go ahead with the deposition pending resolution of those questions for the Judge.

The one possibility, Mr. Johnson, is that the Judge requires either additional documents to be produced by Monsanto or some of the materials that have been produced to be produced in their original form. There may be some additional questions we need to ask you at that time. It seems to make most sense to me that we proceed even though there is a possibility we may have to have another session sometime in the future. Is that acceptable to you?

THE WITNESS: I don't have much choice.

MR. POPE: You are here voluntarily and we appreciate that and we do not want to inconvenience your schedule.

MS. STEIN: The Government joins in the comments of Mr. Pope in respect to the document dispute and with his request that if Mr. Johnson were to be recalled, we would appreciate it if he could come back at that time.

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MR. POPE: You are here voluntarily, are you not?

THE WITNESS: Yes.

NORMAN T. JOHNSON,

called as a witness herein, having been first duly sworn,
was examined and testified as follows:

DIRECT EXAMINATION

BY MR. POPE:

Q For purposes of the record, why don't you state
your name and address.

A Norman T. Johnson. I live at 601 Huntington
Commons Road, Mt. Prospect, Illinois 60056.

Q Are you currently employed, Mr. Johnson?

A Yes, I am.

Q By whom?

A Henkel Corporation and the office is located
at 2360 East Devon, Des Plaines, Illinois 60018.

Q In what capacity are you so employed?

A Account Manager.

Q What kind of company is Henkel? What is its
business?

A Henkel is in the chemical industry and the
group I am a part of was acquired by Henkel which was
General Mills Chemical Group.

Q Do I take it correctly that an account manager

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is a sales or marketing position?

A Yes.

Q As such are you responsible for a certain type of chemical or certain type of customer?

A Resin materials, let us just call them resins.

Q Where do you sell these chemicals or to what types of customers do you sell?

A Southern Illinois and Wisconsin, Minnesota, North and South Dakota, calling on coatings manufacturers and the ink industry and chemical companies.

Q How long have you been so employed by Henkel?

A About three years.

Q Prior to that by whom were you employed?

A I was employed by Reliance Electric for a period of time and I also worked for a company called Allied Tube & Conduit, and prior to that I was with Davies, Young and before that Monsanto.

Q Do you have an ownership interest in Henkel?

A No, it is a privately owned corporation.

Q Working backwards on the chronology you have given us, what position did you hold with Reliance Electric?

A I was District Manager in Chicago.

Q Sales?

A Yes.

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Q What kind of products were you responsible for?

A Microprocessors for energy management control.

Q How about with Allied Tube & Conduit?

A I was a Director of Product Development for vinyl coated tubing.

Q Was your office here in the Chicago area?

A Harvey; Harvey, Illinois.

Q Then the first company that you worked with after Monsanto was Davies?

A Davies, Young in Maryland Heights, Missouri.

Q What kind of company is that?

A Custom chemical manufacturing.

Q What was your position with them?

A Director of Marketing.

Q Do you have the approximate date that you went to work for them? Was it on the date that you left Monsanto?

A I left Monsanto in March of 1973.

Q Did you work for Davies, Young a relatively short period of time?

A Two, two and a half years. I then went to Allied.

Q How long were you with Allied?

A Two, two and a half years, somewhere in there.

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Q And Reliance?

A For about a year. I then went to Henkel.

Q Three years?

A Yes.

Q Can you tell us why you left Monsanto?

A I thought there was an economic opportunity at Davies, Young. Another employee had left the company and gone over there.

Q Who was that?

A A fellow named Gil Kosup.

Q Coming back to the present, Mr. Johnson, would you tell us what you have done by way of preparation for this deposition?

A I've spent time with Jim going over some of the documents that he has and discussing the timetable events. I am not sure they are all clear in my mind in terms of what happened, when, but to the best of my knowledge, I think we understand the sequence of events.

Q Approximately how much time did you spend with Mr. Schink?

A Total, probably over the last two years, two days.

Q Were you paid for that time?

A No.

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Q I take it from your tone you do not expect to be, either, is that right?

A No, I don't.

Q Were the documents that you reviewed in preparation for this deposition to the best of your recollection all Monsanto documents?

A Yes.

MR. POPE: Mr. Schink, would I be safe in assuming they had all been documents that have been produced in the litigation?

MR. SCHINK: Yes.

BY MR. POPE:

Q Have you talked to any other employees or ex-employees of Monsanto regarding this case in the last two years?

A No, I haven't.

Oh, I met Howard Bergen in October down in New Orleans, but we really didn't talk about the case. I knew he had been, I think a deposition had been taken.

Q Have you had any contact with Outboard Marine Corporation in the past two years or so?

A Yes, I guess I met with, three years ago -- it's tough.

Q Say since the time you were working at Henkel,

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as a point of reference.

A No.

Q Since you left the employ of Monsanto, have you called on any Outboard Marine employees in connection with the sale of any products of companies you were working for after Monsanto?

A No.

Q With the exception of discussions with lawyers regarding the past events, have you had any discussions with any of the plant's operating people at Outboard Marine Corporation since you no longer were working for Monsanto?

A No.

Q Would you give us a summary of your educational background and your work experience prior to going to work for Monsanto?

A Just college, is that it?

Q Yes.

A I went to Wright Junior College for two years and then went to University of Illinois and graduated with a degree in marketing-economics.

Q When was that?

A I graduated in 1954, spent two years in the Army, came back in 1956 and went to work for the Royal

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McBee Company, was with them for about two years. Then I worked for a company called Mead & Wheeler Company here in Chicago about two years, then joined Monsanto in 1959. Mead & Wheeler is no longer in existence.

Q What kind of work was that you were doing?

A Selling office equipment.

Q With Royal McBee?

A Accounting systems, selling.

Q Would it be fair to say you were in sales or marketing almost entirely throughout your profession?

A All my life.

Q When you initially were employed by Monsanto, what capacity was that?

A Sales.

Q As of 1959 when you went to work for them, were you selling a particular type of product or an area or how was it broken down?

A I started with them in '59 and went through a six-month training program selling for the Organic Division which was composed of about six or eight product groups. I was assigned to Indianapolis and I worked there for four years, selling for approximately six different product groups, calling on all the potential customers for Organic Division products.

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Q What was the area you would be calling on, the immediate Indianapolis area or beyond that?

A There were changes in the territory, but basically Southern Illinois, about three-fourths of Indiana, southern portion of Ohio and the central portion of Kentucky.

Q Can you give me a summary of the type of products you were selling at that time in the Organic Division?

A Sold fine chemicals.

Q F-i-n-e?

A F-i-n-e, like aspirin and saccharine and phenacetin, going to the pharmaceutical and food industry selling resin materials; going to the coatings manufacturers, plasticizers; going to people who produced polyvinyl chloride; intermediates which would go to general chemical companies; functional fluids which was a broad base of products, going to the electrical industry, chemical industry, people doing die casting or manufacturers processing hot metal. What else -- sold some rubber chemicals, going to the rubber compounders. I think that's it.

Q The functional fluids, I take it, include the Aroclors.

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A Aroclors were included in the plasticizer group and the functional fluids group.

Q Were you selling Pydraul for use in hydraulic equipment.

A Yes.

Q During that period of time?

A Yes.

Q Beginning sometime in 1959 or early 1960?

A Right.

Q Was the General Motors Plant one of your --

A Yes.

Q -- clients?

A Yes. A number of GM Plants.

Q Were you supplying them or selling to them the Pydraul fluids for hydraulic use?

A Which GM Plant?

Q Any of the GM Plants that you had within your area.

A Some we sold to, some we did not, and it was obviously my effort to try and sell them.

Q The ones you did not sell to, it wasn't because of a Monsanto decision that somebody else should sell to those clients, simply that they were not buying?

A Yes, right.

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Q How about New Bedford?

A Bedford, I called in that area.

Q You said you did that for approximately four years?

A Right.

Q Let us back up for a second.

Did you have an immediate supervisor at that stage that you reported to?

A Twice, two of them.

Q Who were they?

A I worked for a man named Dave Evans who was the District Manager out of St. Louis, and then my territory was changed and even though I did not move I was responsible to a man named Jim Feeks who was the District Manager in St. Louis.

Q How do you spell his name?

A F-e-e-k-s.

Q Was there a promotion then after about four years?

A Yes, I went to New York.

Q New York City?

A Yes.

Q Your title changed?

A Yes. I don't remember the title. I specialized

in selling plasticizers to the vinyl industry.

Q With the exception of that specialty, was your job pretty much the same as it had been in the sense you were still calling on customers yourself?

A Yes.

Q Did that include the sale of products that contained PCBs as far as you know?

A No, it did not.

Q How long were you in New York?

A Two years.

Q Your job was basically the same during that entire two-year period?

A Yes.

Q Who did you report to?

A John Lonsberg.

Q Was that still out of the Organic Chemicals Division?

A Yes.

Q What was the next position you held for Monsanto?

A Then I was transferred back to St. Louis.

Q About 1965 or so?

A No, the sequence: I was transferred from Indianapolis to New York in the end of '64 and I moved

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back to St. Louis in December of '66.

Q What position did you have with them?

A I think they called it Industry Manager for the Functional Fluids Group.

Q Does that relate to a particular industry or to the functional fluids?

A Functional fluids.

Q So you were back to the same type of products that you had before. You sold solely functional fluids as opposed to the Organic Division, is that right?

A Yes.

Q Was your job still basically marketing and sales?

A Yes.

Q Did you now have salesmen that worked reporting to you?

A Yes.

Q Did you have an area of the country that you were in charge of?

A The entire country.

Q To whom did you report at that time?

A George Buchanan.

Q As of December '66, you were back in the area of selling products that included Pydrauls and the PCB-

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bearing fluids area of various sorts?

A Yes.

Q Approximately how long were you in basically the same position in St. Louis?

A The position changed about 18 months after I was Industry Manager. Then I became Field Sales Manager for Functional Fluids.

Q How was that a change in position?

A I now had total responsibility for the field salesmen selling functional fluids. The difference before was that they reported to the District Manager in which they worked for rations and quarters. I was responsible for business direction to the salesmen as Industry Manager.

Now, as Field Sales Manager I was totally responsible for everything.

Q All the salesmen that were selling functional fluids would in fact report to you indirectly?

A Yes, right.

Q Can you give me an idea of how many salesmen we are talking about in '68, '69; salesmen as opposed to typists or clerks?

A I understand. I think there were 13.

Q Were their responsibilities broken down by

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territory?

A Yes.

Q Within those territories, each of those 13 salesmen would be selling all the functional fluids that Monsanto marketed at that time?

A There was some specialty in that one or two just sold to the electrical industry.

Q With the balance of that, my statement would be true?

A Yes.

Q The electrical industry's basic purchases would be the PCB-bearing fluids?

A Yes.

Q That fell within your responsibilities of Field Sales Manager of Functional Fluids, is that correct?

A Correct.

Q Approximately how long was your position generally the same as Field Sales Manager, '68, 1968?

A We changed again, I believe, around the beginning of 1970. I was made Marketing Manager for Industrial Fluids only, but now had responsibility for Field Sales, Product Group and Product Development.

Q Field Sales --

A Product Group and Product Development.

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Q During the period of time that you were an Industry Manager, Field Sales Manager and Marketing Manager for Industrial Fluids, was a part of your compensation based on sales figures for your --

A No.

MR. SCHINK: Let him finish the question.

BY MR. POPE:

Q Did Monsanto have at that time a bonus system that applied to those three positions you had or other incentive compensation system?

A I don't believe there was any incentive compensation program for me while I was in those positions, but one year I received an award of a thousand dollars. I don't remember what year.

Q Was that just for general excellence or was there some further explanation? Was there a reason for your award?

A I don't remember.

Q When you were Field Sales Manager to whom did you report?

A Initially Howard Bergen. In 1968 to 1970, I reported to Howard Bergen.

MS. STEIN: I didn't hear the question.

(Question read.)

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BY MR. POPE:

Q I take it that changed.

A Then I reported to Don Olson.

Q Was that following --

A And your numbers are incorrect. When I came there in '66 I reported to George Buchanan. Then in '68, I reported to Howard Bergen. Then sometime early in '69, Don Olson came in and Mr. Bergen was promoted to Business Director.

Q As you became Marketing Manager for Industrial Fluids, were you still reporting to Mr. Olson?

A Yes.

Q And that continued for the entire time you were Marketing Manager for Industrial Fluids?

A No, then Tom Gossage came in.

Q Sometime after 1970?

A Yes.

Q Can you tell me with a little more particularity the description of your responsibility as Marketing Manager. You said with regard to Field Sales, Product Group and Product Development. I realize these are terms of art to Monsanto, but can you tell me a little more about what those three categories of the company are?

A Basically the problem of the PCBs required

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someone's immediate attention, total attention to the issue, so they singled out that one group and the number of salesmen changed in that we were a larger group. We were down to six salesmen handling industrial fluids, two people in the Product Group and one person for Product Development.

Q Field Sales was the normal sales that would be handled by what you referred to earlier as 13 salesmen and was now handled by six, and PCB products were singled out under Product Group, is that correct?

A Pydrauls were singled out.

Q How many people would take care of that area?

A Two people in the Product Group and one person in Product Development. There were six salesmen in the field and one Regional Manager.

Q Regional Manager for what, Product Development?

A No, for Field Sales.

Q The two people that were in the Product Group, can you tell me who they were?

A Dave Hall and Dave Smith.

Q This is a change that took place around 1970, is that right?

A Right.

Q Do you know why the change was made?

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A They brought in a consultant who felt a greater degree of specialization within the fluids group would be a good thing to do because of aviation fluids and fire-resistance concentration and also on the Therminol fluids and heat transfer applications. And the electrical fluids didn't really require that much attention, so by splitting up the Field Sales Group, splitting up the Product Groups, one person would assume total responsibility for the marketing of those products.

Q As to the electrical industry, they were no longer within your area?

A Right.

Q Who took that over?

A Paul Benignus.

Q Did the consultant that was brought in take into account the potential environmental problems arising from the Pydrauls or PCB generally?

A I don't think that was a factor at that point in time.

Q More of a traditional management and consultation regarding how best to organize the marketing forces?

A Right.

Q The six people that were left in charge of Field Sales under the Industrial Fluids, were they again

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divided up across the country?

A Yes.

Q Based on area?

A Yes.

Q Was one of them Bob Damiani as of 1970?

A Yes.

Q What did his area consist of as you recall, generally?

A Northern Illinois, Wisconsin, Minnesota, North and South Dakota, Nebraska, probably Iowa.

Q As we discussed earlier, his job would be to sell all of the industrial fluids to any customers within that area, is that correct?

A Right, which was basically Pydraul.

Q All of the Pydrauls?

A Right.

Q Various numbers.

Pydrauls we are talking about, was this all fluid that would be used for hydraulic uses, or were there other uses for it as well in the industrial customer?

A There were other uses.

Q Can you give me an example?

A Air compressors.

Q So whatever the use the customer would be making

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of a Pydraul fluid, it would still be sold as a Pydraul and within this Field Sales Group of six salesmen?

A Yes.

Q The two people in Product Group, Mr. Hall and Mr. Smith, what was their function to be?

A Providing tech service and liaison between Research and Field Sales.

Q Was the need for people such as these two gentlemen basically because of the environmental questions that were being raised by Pydraul?

A No.

Q Was there prior to this time a similar category of employee within the Marketing Department?

A Yes.

Q Had these two people previously operated in that position?

A Yes.

Q Were they both located in St. Louis?

A Yes.

Q Was their background in the chemistry area in terms of their degrees or their training as opposed to marketing?

A I don't know Dale Smith's background. However, he had been in the fluids area for many, many years.

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Dave Hall was a mechanical engineer and had served as a field salesman and was brought to St. Louis sometime in 1967 or '68.

Q What did these two fellows do? I realize you say technical service and liaison, but on a day-to-day, week-to-week basis, what were they actually doing?

A They generated the literature. They would respond to the salesmen's requests on information concerning O-rings, concerning O-ring manufacturers, hose manufacturers, valve manufacturers, pump manufacturers. They dealt with the pump manufacturers around the United States. They would go out and make calls with the salesmen where there were technical needs. They also worked in communicating to Research the needs we might have for new products.

Q When you refer to Research, you are referring to Dr. Richard's group?

A Yes.

Q At this point in time, was your Industrial Fluids Section introducing a number of new products, changing some of the composition of prior products?

A Yes.

Q Was that one of the reasons that these two people were assigned directly to Industrial Fluids?

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A No.

Q They did not work on new fluids or the testing of new fluids, did they?

A No, not until we got something out of Research.

Q When you say they generated literature, what do you mean by that? What kind of literature would they generate?

A All of the Pydraul literature as a marketing group, we were responsible for putting everything that went out to the field. We were responsible for going in the trade shows. We were responsible for accurate communications to the customers in terms of getting the best performance out of their products, their machines, whatever.

Q Did people in this group, Field Sales, Product Group and Product Development, did they devote any of their attention to questions such as reclamation of used Pydraul?

A Yes.

Q Would that be the Product Group people?

A Yes.

Q Mr. Smith?

A Yes.

Q Was that a corporate objective at some point

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in time of Monsanto to develop the technology and process to reclaim Pydraul fluids for customers?

A The literature which was generated prior to 1959 had a diagram in there and some suggested equipment for reclaiming fluid.

In 1970 we saw a business opportunity to possibly going in and reclaiming fluid and so Don Pogue assumed the responsibility to look at that marketing opportunity.

Q Did you work with him on that?

A Yes.

Q For how long a period of time was that a viable project within Monsanto?

A The thought of doing it had to start back in 1966 or before, but we started to take a serious look at it in '68, '69. Pogue was then put on the project to devote 100 percent of his time.

Q As far as you recall, how long did that situation continue where he was working full time and developing the project?

A I would say a year and a half.

Q Is that late '69? I know you are guessing here, it's been awhile.

A Late '69 into '71.

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Q At that point was the project dropped?

A My responsibility changed somewhere in '71 and I really don't know what happened to the total project. Pogue was working on it.

EnviroChem which was another division of Monsanto came in to look at this and eventually, I would say the program was dropped. The opportunity was just not there.

Q Do you know why it was determined the opportunity was not there?

A I don't feel it was economically feasible to build recovery plants around the country with approximate potential customers.

Q As far as you know, the demand was there but it could not be done with an economic feasibility?

A Right.

Q Who was the person that was the Product Development Department within your area?

A Pogue.

Q That was Pogue?

A Yes.

Q After he was assigned full time to the reclamation project, was he replaced?

A No.

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Q He remained Product Development?

A Right.

Q Prior to going full time on the reclamation project, what was his responsibility as person in charge of the reclamation project?

A Prior to that, he was in Market Research, reporting directly to Don Olson and worked on various projects that Don Olson assigned to him, and I don't remember what they were.

Q When he worked under you, was his sole function to work on the Pydraul reclamation?

A Yes. That was not the intent. That became actuality.

Q How long did your function remain relatively the same as 1970 on as Marketing Manager for Industrial Fluids?

A Until about the middle of 1971. And at that time the Paper Chemicals Group was merged into our group.

Q Paper Chemicals?

A Right, and I became responsible for the total field sales of both the Fluids Group and the Paper Chemicals Group and we integrated the entire marketing operations together.

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Q I take it you became responsible then for some more salesmen?

A The other salesmen in the group increased to about 30.

Q 30 salesmen?

A Right.

Q Was it set up along basically the same lines as Industrial Fluids was prior to that?

A No. We had salesmen who were specializing only in paper chemicals and some who specialized in functional fluids and some, depending upon the geography, they handled both products, product areas.

Q During this period of time you were Marketing Manager for Industrial Fluids and I guess to some extent when you were Field Sales Manager, was one of your functions to oversee the marketing of the change that Monsanto was making in the formulation of Pydrauls from PCB to non-PCB fluids?

A Yes.

Q To whom did you report on that particular aspect of your work?

A I reported to Don Olson who was Director of Marketing at that time, regardless of the job titles, and later to Tom Gossage.

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Q Did they give you directions with respect to the way marketing was to be handled for this transfer change?

A Yes.

Q During this period of time, up to say mid-1971, did you sit as a member of any committees within Monsanto devoted to questions related to PCBs and the potential environmental problem?

A Yes, to some degree.

Q Can you give me an example of what you did?

A The overall business group, I would not be involved in decisions or comments that were made at that level. I was not part of that group, but I was involved in monthly meetings with Research in the product development and evaluation of new fluids.

Q That met monthly?

A Yes.

Q Did it have a title, the group?

A No.

Q Slipped between the cracks?

A It didn't mean anything. We knew who had to be there.

Q Was there any other committee, either formal or informal, that you would sit in with from time to time

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with respect to this question?

A No.

Q Following the merger of Paper Chemicals Group to your Product Group, did your job remain basically the same during that period of time?

A No, it changed.

Q Tell me what the change was.

A I had a greater responsibility for the marketing of paper chemicals.

Q Had you done any work in the --

A Yes.

Q -- in the paper chemicals?

A I forgot to mention that I sold paper chemicals when I was in Indianapolis and that is another group.

Q How did your job change beyond the additional responsibility that you had for those additional salesmen who had been previously selling paper products?

A I had less daily involvement in the Pydraul area and in Pydraul fluids.

Q Were you likewise in charge of all marketing for the Paper Chemicals Group?

A No, total marketing responsibility was Tom Gossage's. My responsibility was for the Field Sales.

Q Is that both for Paper Chemicals as well as

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Industrial Fluids?

A Yes, all fluids, all fluids came back to me: Aviation fluids, Therminol and electrical.

Q Did you hold this position basically until you left Monsanto?

A No. Then I was promoted to Director of Development for the total group. I can't remember what we called ourselves. I guess we were just Functional Fluids and Paper Specialty or Paper Chemical Specialty Group.

Q Changes in organization during this period of time, is that right?

A Yes.

Q Approximately when did you receive that promotion?

A October or November of 1972.

Q Did you hold that position basically as long as you were with Monsanto?

A Yes.

Q Director of Development for Industrial Fluids?

A Director of Development for Paper Chemicals and Fluids.

Q Did that imply work in the bringing out of new fluids?

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A Yes.

Q Did you retain any responsibility for the sales at that stage?

A No.

Q What was the nature of your day-to-day job as of October, November of '72? What did you do?

A I handled the interface between Research and our own Product Development Group for taking out new products to the marketplace for trial purposes.

In other words, we had proven results to our satisfaction that we had a viable product and would go out now and try to get a plant to try it out in a paper mill or have them go to General Motors and have them evaluate a new fluid for transmissions or whatever they might be.

Q In that capacity did you still have contact with the salesmen that previously had worked for you in bringing a new product to possible customers?

A Sometimes. Sometimes we would go out through a salesman. Sometimes if the salesman had no contact at a specific customer, we would go in on our own.

Q Did you have at that stage any chemists that worked directly for you?

A No.

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Q This was still a marketing function?

A Basically still a marketing function.

Q Were you working closely at this stage with Dr. Richard's office?

A Yes.

Q Were you working at that stage with the Pydraul fluids that had replaced or been reformulated to eliminate PCBs?

A That was done.

Q That had already been accomplished?

A Yes.

Q Were you working with other fluids?

A Yes.

Q When you left the company it was mid-'73?

A March of '73.

Q Do you currently own any Monsanto stock?

A No.

Q Do you receive any form of income compensation benefits from them?

A Ultimately a pension benefit.

Q Upon retirement?

A Yes.

Q Why don't we go back a moment, Mr. Johnson.

Tell me the first time that you were told about

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polychlorinated biphenyls as a substance.

A I was told about polychlorinated biphenyls in the training program that started in 1959 in November when I joined the company.

Q This was in connection with its use as a Pydraul or just in general?

A Its use in Pydraul, its use in electrical, its use in plasticizers, its use as a heat transfer medium, dielectric.

Q I take it that was part of the training classes?

A Yes.

Q This was training that was given to all Monsanto salesmen who were going to be in the functional fluids aspect of the business, or were they, I guess industrial?

A At that point we were selling to six product groups or seven as I indicated.

Q Where did that training take place, in St. Louis?

A St. Louis.

Q Did this training include chemical makeup of PCBs and why it performed the functions it performed?

A Yes.

Q Did it go into some of the history of development of PCBs?

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A Yes.

Q During the training sessions and your early on-the-job training at Monsanto, was there any discussion of which aspects of PCB-bearing fluids were covered by trade secrets as to the composition of fluids, makeup formulation?

A Some of the Pydraul products were jointly developed by Monsanto and McDonald, Douglas. We knew or I knew that certain fluids were in that arrangement and some were not.

I did not know composition, per se, on percentage basis as to what was in one fluid versus another.

Q What was the significance of McDonald, Douglas' co-development? Was that considered more secret or more covered by an agreement with McDonald, Douglas as to the disclosure of its composition?

A No. The McDonald, Douglas, the old Douglas Company in the early '50s was looking for a fire-resistant compound for aviation use. And along with that development after Skydraul 7000 was developed, followed by Skydraul 500, both A and B, they worked on the possible development of an industrial fluid since there was a regular need for fire-resistant hydraulic fluids in

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industry.

The fire at General Motors' plant at Livonia, Michigan caused tremendous interest in fire-resistant fluids because it completely destroyed that plant and that plant was operating on petroleum oil.

Q What were they making at Livonia?

A They made automotive transmissions for Oldsmobile and the automotive industry and they lost the entire plant. And during that period of time, you bought Chevrolet -- well, you bought Oldsmobiles with DynaFlow transmissions and there were no automatic transmissions available for another three years.

Q Was that in the late '50s?

A '54, I think was when it happened.

Q With respect to Pydraul fluids, was there any instruction from Monsanto, either formal or informal, as to which aspect or any particular aspect of the formulation of its fluids were considered secret to the company and should not be disclosed outside?

A No.

Q During your training at the beginning of your work for Monsanto, was there any discussion or mention made as to recommendations that Monsanto made to its customers with regard to conservation of Pydraul fluids

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or protection to see that it did not get into the environment?

A We spent a lot of time looking for proper hoses, O-rings. We spent a lot of time talking to customers about collecting fluid, preventive maintenance programs.

We recommended in many cases that people put trays under various valves or hoses if they had leaks, collect the fluid and reclaim it because it was reusable.

Q That was the thrust of any discussion with respect to fluid escaping, was the efficient use of it in the machines and the reclamation of it?

A Collection of it and reclamation of it.

Q At any point in time during the time you were employed by Monsanto, did there come a point where the company decided either as a marketing matter, sales matter or any other concern to recommend to customers that Pydraul not be permitted to get into the environment for environmental considerations?

A Yes.

Q At what point of time did that take place, to the best of your recollection?

A Well, we were always concerned that fluid if

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it was to be disposed of would have been disposed of properly. Somewhere in 1963, 1964, I recognized the opportunity for potentially reclaiming fluid, large basis for customers -- Bedford, Indiana, General Motors started to reclaim fluid during the period I was in New York.

When I came back to St. Louis, they were reclaiming fluid and the opportunity certainly existed to do this for other people or find companies around the United States who would reclaim for other customers. And we were always promoting that it didn't take much equipment to do your own reclaiming.

Q As far as you know, where was the fluid that was being reclaimed by General Motors?

A It was going to Findett Services in St. Charles, Illinois.

Q St. Charles, Illinois?

A Missouri, I am sorry.

Q Prior to its being reclaimed, my question was where we are talking about Pydraul, where was the Pydraul?

A Ask the question again?

Q Sure. The reclamation project that GM had under way in New Bedford, Indiana in '63, '64, whatever this period of time was they brought up the conversation

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to reclaim this fluid, is that right?

A Yes.

Q Where physically was it reclaimed from?

A Interceptor ponds.

Q Were they the kinds that effluent water would be passed through and the water would --

A Pydraul would settle out.

Q The Pydraul would settle out and they would scoop it out?

A Pump out the Pydraul from the bottom.

Q And reclaim it, is that right?

A Yes.

Q Was this the state of the art as you knew in '63, '64 as far as you know now of reclaiming used Pydraul?

A Other people who had contaminated fluid or had overheated the fluid were taking it out of the machine and putting it in drums, sending it to Findett Services to be reclaimed and then Findett would return clean good fluid.

Q So both procedures were being employed, is that right?

A Yes.

Q And both procedures were considered to be the

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only acceptable way to reclaim the fluid, I take it, as of '63, '64?

A But other people were taking fluid out of the pits around the die cast machines or in the steel industry in some of their pits and pumping it out and reclaiming it sometimes on their own, sometimes to send it to Findett Services and sometimes other people got into the business to reclaim.

Q You mentioned some customers of fluid that was overheated.

A Yes.

Q What would be the effect of overheating Pydraul?

A Acidity.

Q How does that derive, where does the acidity come from?

A You get acid out of the phosphate ester content and you've got to neutralize that acid or it's going to attack the metal in the hydraulic system.

Q That would come just from heat?

A Yes.

Q What kind of temperatures are we talking about?

A 200, 250 degrees Fahrenheit.

Q As of this period of time, the mid-1960s, was Monsanto recommending the use of contractors such as the

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outfit in St. Louis, Missouri to do the reclaiming as opposed to Monsanto itself performing such functions?

A Yes.

Q Do I understand you to say at that point in time there was a marketing brochure or description to customers as to how to reclaim fluids themselves? Is that right?

A I believe in the F-9 brochure at the time, and I again single out that brochure because it stands out, there was a diagram in there showing pumps, valves and various containers for reclaiming fluid and explaining how to do it.

Q Would it be fair to say that as of this point in time, any of the instructions that went out in writing from Monsanto to its customers regarding this subject matter of reclamation of, say, Pydraul were geared toward reuse for economic reasons of the used Pydraul as opposed to warnings of any possible environmental damage that could occur?

A The intent was not to see fluid get into the environment, okay, so the recommendations for reclamation were both to keep it out of the environment and for economic reasons, to reuse the fluid.

Q Was it Monsanto's view as of the mid-1960s that

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if Pydraul got into the environment, it would cause environmental damage?

A You say early 1960s?

Q The mid-'60s. That is the period we are talking about, the '63, '64, '65 period.

A I don't think that anybody realized that PCBs were potentially damaging to the environment.

Q I take it from that that as of mid-1960 Monsanto did not advise its customers that PCBs were or could cause environmental harm?

A Didn't know it.

Q Therefore, it did not in the market brochures or instructions?

A No, right.

Q When you returned from New York to St. Louis to become Industry Manager, is that when you became familiar with the reclamation project that General Motors was pursuing in New Bedford, Indiana?

A I had met Dale Smith up in New York somewhere in '65, '66 and he told me they had started to do this. But I was talking with General Motors about doing it in '63, '64, so it had finally happened, yes.

Q The marketing or the sales pitch to a customer such as General Motors with regard to reclamation during

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this period of time, was it that there was a way to reuse the fluid that would be economical to the customer?

A Yes.

Q Can you give me some idea what we are talking about here. Could it be reused at a net cost that would make it half the cost of new fluid or something like half?

A Half the price. New fluid at that time for Pydraul 312 which was a product that they were using was costing them two bucks a gallon and you could reclaim it for about a dollar. That included freight both ways and costs of reclaiming.

Q During this period of time, was there a certain volume that a customer would have to be using to make reclamation economical?

A In the Bedford situation, yes. But in other situations, no. If a customer had contaminated fluid that was three drums, five drums, ten drums, you could ship it to Findett and he could reclaim that material and ship it back.

Q Why do you say with a New Bedford situation?

A In New Bedford, it was in the pond and the best way was to bring up a tank truck and pump out the bottom of that pond and take 4,000 gallons back to

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St. Louis or St. Charles, Missouri to reclaim it, ship it back.

Q This was fluid that was at the bottom --

A Of the pond.

Q The pond was the --

A They were interceptor ponds.

Q How big a pond are we talking about there?

Was it a football field?

A Can I relate it to this room?

Q Sure. Mr. Schink, I know, has the dimensions of this room well in mind.

A I would say the first pond is ten times the size of this room.

Q That sounds close to a football field to me.

A There were two more that followed that were equal the size.

Q What are you talking about, 150 square feet?

A Probably 150 by 175 feet. You have to remember things from way back.

Q Did you have any customers in that period when you returned to St. Louis from New York with reclaiming Pydraul from ponds or other places where they were mixed with water?

A I believe that Chevrolet at Messina was doing it.

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Q That is Michigan?

A No, Messina, New York.

Outboard Marine I knew was doing some reclamation of fluid. Buick had undertaken some reclamation up in Michigan.

Some people in the steel industry had started to do some reclamation.

Q Were there any marketing brochures or flyers or circulars prepared regarding advantage to customers of this type of reclamation project?

A No. I think most of it was just verbal and they recognized the value of the fluid.

Q Were there in-house communications in writing to salesmen recommending that they point out to their customers the advantage of possible reclamation projects?

A I would say yes, but I have not seen any letters to support that. But we pursued that opportunity wherever possible with customers, if they had interceptor pits and there was a possibility there was fluid in the interceptor pits and it could be recovered.

Q Were your salesmen advised to tell customers that the Pydraul was heavier than water and therefore would fall out in an interceptor pit?

A Absolutely. Our fluids were much more expensive

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than some of the other fluids that were offered in the marketplace and to offer an economic package, the possibility of the reclamation meant something to the customer because he could use a higher performance product and by reclaiming lower his overall cost.

Q This was the whole marketing approach to customers?

A Right.

Q Was there any complications in reclamation caused by mixing Pydraul or any PCB-bearing fluids with water that make reclamation more difficult?

A Not really.

Q During this period of time, to the best of your recollection, were your salesmen instructed to advise customers not to let PCB-bearing fluids come in contact with water?

A If a leak occurred in a reservoir on the cooling side, cooling water, and you contaminated the fluid with water and you continued to operate the equipment, you would eventually burn out your pumps.

Q Because water would get into the place where it should be simply fluid?

A You would form an emulsion and the emulsion was not a good lubricant.

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Q But the other way around, there was not anything wrong in letting Pydraul come in contact with anything outside the tank of Pydraul?

A If it was in conjunction with water that was flowing into the interceptor pit, the water didn't hurt it, no.

Q And the customers were so advised of that?

A Yes, we would tell them they could filter out nuts and bolts and cigarettes and anything else that might be carried by the Pydraul in the water system.

Q As part of that marketing approach, was there any technical advice or recommendation given to customers as to the size of a tank versus the water flow, how best the interceptor tank would work?

A I don't believe that anybody, any customer approached us in the early '60s asking about the building of interceptor pits.

These things existed in the plants, so the only thing that would happen is a customer may come in and say, "I have an interceptor pit of such and such size and I have a flow rate of water along with Pydraul that is of a certain volume and is there sufficient dwell time for the Pydraul to drop out of the system?" and we would work with them on that.

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Q Your department?

A Yes.

Q This would be the salesmen in the field?

A Back to the Tech Service people.

Q And I take it your example of the plant in New Bedford was one where that took place, was it not?

A Yes.

Q They expanded the additional plant?

A It existed.

Q The original pond?

A The original pond existed from when it was a foundry. It was originally three ponds.

Q Were there any written instructions to salesmen or brochures or any marketing documents prepared with respect to what to tell a customer that had a question about that particular subject, whether the retention time would be sufficient, given the size and the flow?

A I don't remember anything. I do remember that something went out explaining the economic advantages that were derived by the General Motors Plant in Bedford as they instituted their reclamation program.

Q This would be during this period of time in the mid-'60s?

A Yes.

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Q Inquiries were basically handled orally by people in your department, Tech Service Department, weren't they?

A Yes. Sometimes if the inquiry came to a salesman, the same man would ask the customer to call the people in St. Louis and discuss it with them.

Q Was there anyone else besides Findett that was doing this activity, appearing on the site to assist in the reclamation?

A The people at Messina, to the best of my knowledge, were using someone in Upper State New York and then there was an outfit, and I don't remember the name of it, that started up outside of Detroit that was reclaiming the fluid. I don't know of anybody else. Nothing comes to mind.

Q During this period of time, to the best of your recollection, would these services provide reclamation for fluid which had come out of the leaks in the machines and had been swept up in a kind of Dri-Rite or the artificial sawdust?

A They would reclaim anything.

Q It didn't matter what was mixed in in the fluid, generally speaking?

A Yes, right. It would be harder to take it out

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of the Floor-Dri or something of that type, but if you had it in a liquid phase and could get it into drums and transport it, you could take the fluid.

Q Your marketing directions of advising customers of economic advantages to reclaim Pydraul were both directed to the situations where you had the interceptor pit as well as the physical drums that would be picked up and otherwise recaptured?

A Right, or as I mentioned, if they overheated you could pump out the reservoir and send that fluid out to be reclaimed.

Q Did your department in this period of time, mid-1960s, did they deal as one of their areas with the question of labeling of Pydraul products?

MR. SCHINK: Mike, are you referring to this period when he came back to St. Louis as Industry Manager?

MR. POPE: That is basically right.

BY MR. POPE:

Q As a point of reference for you, Mr. Johnson, following your return from New York, that is what I am talking about.

A Yes.

MR. SCHINK: And I think he said December of '66.

Do you have the question in mind? It was

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whether you were involved with labeling.

BY THE WITNESS:

A I would say we might comment on labeling, but labeling was really handled by the people in the Medical Department.

I know there was a committee who you had to submit labels to, and of course, the labeling of a container, depending on whether it had to be red-labeled or what was predetermined by Government regulations and compliance, whatever was necessary.

BY MR. POPE:

Q The committee that you had to submit a label to, was that like members of the legal staff of Monsanto?

A I would say it was probably composed of not only legal people but medical people, industrial hygienists, anyone concerned with the toxicity of the product, the safe handling of the product and in compliance with all Government and State regulations.

Q During the period following your return from New York, the beginning of 1966, did you yourself have meetings with the medical people at Monsanto to determine for yourself what the safe handling characteristics of any of the fluids were?

A We used to occasionally get questions from

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customers about safe handling and so I had involvement with Elmer Wheeler and Dr. Kelly. But for the most part, the instructions given to the customer was given by the Medical Department and by the industrial hygienists, so they got accurate information.

Q You would pass that on directly to the Medical Department?

A Right.

Q Rather than act as an intermediary?

A Yes.

Q Was there a procedure during this period beginning in the end of 1966 whereby you would communicate directly with your salesmen on a regular basis?

A Yes.

Q Would that be through meetings or would it be orally, calling on them in person, by telephone, through circular, instructions, written instructions; all of the above?

A I traveled with them, sent memos to them, talked to them on the telephone; sales meetings.

Q Would each of these roughly 13 salesmen report directly to you as opposed to going through some regional manager?

A Not in 1966. When I started they were still

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responsible to a District Manager, but more for business direction with responsibility to me.

Q Then in '68 when you became Field Sales Manager?

A Then I assumed --

Q That direct responsibility?

A Yes.

Q And at that time, they reported directly to you as opposed to any other --

A There would be a Regional Manager. There was one on the East Coast, one on the West Coast.

Q Intermediary or regional?

A There were three Regional Managers, one in Wilmington, Delaware; one in Detroit, Michigan; and one in Los Angeles, California. So the salesmen reported to those managers and then to me.

Q Could you recall the name of the fellow in Detroit?

A Jack Fallon.

Q He had the Midwest, I take it?

A Yes.

Q During the period from late 1966, say up to 1970 when you became Marketing Manager, did you have occasion to communicate in writing directly to the customers?

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A Sometimes, but in most cases we really worked through the salesmen.

Q What would be the occasion of a direct communication in writing to customers of Monsanto?

A If a customer called in direct to us asking for some information, depending upon the issue, we might respond directly to the customer with a copy going to the salesman or advising the salesman what we were doing.

In some cases, the salesman would say, you handle it, but in Monsanto we worked through the salesmen. There is no desire to work on a direct basis.

Q At some point in time, Monsanto decided to write letters to most or all of its customers regarding the PCB situation, is that right?

A Correct.

Q And you participated in the drafting of those letters, I take it?

A Yes.

Q That was the first time in your experience since 1959 that that had ever taken place?

MR. SCHINK: What, direct communication with a customer?

MR. POPE: Direct communication to all customers or

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almost all customers.

BY THE WITNESS:

A No, I don't think that is true.

BY MR. POPE:

Q It had taken place before?

A I believe so, yes.

Q What kind of subject was involved previous to that?

A One that comes to mind, I believe Monsanto way back developed a rat poison and obviously it was withdrawn from the market because it was considered far too toxic and I would suspect that communications went out to all the people who purchased the product.

Monsanto manufactured parathion and was very, very strict on potential users of parathion.

There was another product that was based on the biphenyl that was withdrawn because it was a potential carcinogen and the product was dropped.

Q What product was that?

A The plant was demolished.

Q What product was that?

A I don't remember. It was a biphenyl.

Q What was the product's use?

A The use for which it was curtailed was going

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into polyvinyl acetate adhesives, was stopped. The plant was gone and that was decreed by the Medical Department.

Q The plant was demolished?

A The plant was buried.

Q Where was the plant?

A I believe it was at Sauget, Illinois. The President of the company said, "No more."

Q When did that take place?

A I don't know, somewhere in the '50s.

I think you should understand that I feel very strongly that Monsanto was extremely responsible --

MR. SCHINK: The question was do you recall any communications with all customers prior to 1970. I think that is the question. If you remember any more --

MR. POPE: Yes, it has been answered.

BY MR. POPE:

Q You feel very strongly that Monsanto was very responsible with regard to what?

A To anytime there was a problem relating to a product.

Q And specifically the letters that went out in the late '60s, early '70s, with regard to PCBs had precedence with regards to prior communications that had gone out on other matters, is that right?

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A I believe that to be true, although the procedures that we followed, we basically generated ourselves based on communications with the Legal Department.

Q You also understand, Mr. Johnson, by my questions I am not implying that your conduct or anyone at Monsanto's conduct was anything other than exemplary. It is my function to find out what your testimony is, what you recall and make it of record.

A I understand.

Q Why don't we go to the point in time at which you particularly, you personally learned for the first time that there was any question being raised regarding PCBs.

Can you tell me what your position was and the occasion which you first received such information?

A I would say that I must have been in the position responsible for Field Sales for the Functional Fluids Group.

Q Sometime between 1968 and 1970?

A Right, and I remember Bill Richard coming over and talking about the work done in Sweden, that PCBs had shown up in the environment and I was absolutely amazed that Bill Richard and Dr. Keller had already been there, so in a period of what I would say was no more than a

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month when they were aware of the Swedish work that had already been done, they had been to Sweden to talk to the people.

Q Was there a regularly scheduled meeting that they had dropped this information on you?

A No, it was set up for this particular purpose, to talk about it. Bill Richard was over talking to Paul Benignus and I went into his office and that is when it came up in the conversation and I was amazed that they had already been to Sweden and looked into the work done by the Swedish scientists and were trying to develop confirmation of the data developed by the Swedes.

Q As you recall, did they tell you about what the problem was that caused such a quick trip to Sweden?

A Well, apparently the Swedes had been identifying DDT in the environment and had now singled out PCBs, the best of my knowledge, were in the 54 and 60 percent chlorine.

Q 1254 and 1260?

A Right, and the desire on the part of Bill Richard and Dr. Keller was to learn whether the techniques being used by the Swedish scientists were such that they were truly identifying those materials in the environment.

Q As far as you recall, what was the surprise or

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concern about these findings?

A We didn't believe that PCBs were an environmental hazard.

Q Was your surprise that there would be findings of PCBs in the environment, generally?

A Yes.

Q Was it unknown or was it assumed that PCBs had not escaped from time to time in their industrial use?

A I think there is a possibility that something might escape, but that it was showing up in the environment and not degrading was a surprise.

Q That was a surprise to Dr. Richard as far as you recall?

A I don't know what would surprise Dr. Richard.

Q My question is intended -- neither you nor I am a chemist and I am a lot farther away from it than you are.

Was it the chemists', within Monsanto as far as you know, understanding that that was a surprise to finding PCBs of 1260 or 1254 would not degrade in the environment?

A Yes.

Q Was there a concern about where the PCBs were being located that were being found by the initial

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investigators?

A I don't remember where the Swedes found it. It doesn't come back in my mind, so I don't remember.

Q Was the initial concern that was expressed to you one that if the PCBs were being found in the environment, their presence may be harmful in a health sense?

A I don't know whether that was known.

Q So the basic thrust as far as you remember of the initial concern is it shouldn't be there, why is it there?

A How did it get there? Most of it is closed systems.

Q And why it did not degrade?

A Right.

Q When you say most of it is closed systems, you mean the use that was being placed at that time of the fluid?

A Yes.

Q Would that include the functional fluids as well as the electrical uses?

A Yes.

Q At this time when this discovery was made, was there roughly a 50-50 breakdown in terms of use of PCB fluid, electrical use versus non-electrical, or was it

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greater in one area than another?

A I don't remember percentages, but the dielectric business was far and away a larger business.

Q Than non-dielectric?

A Yes.

Q Did Dr. Richard report unofficially to you on what had taken place in their visit to Sweden?

A No.

Q As far as you know, did Dr. Scott Tucker go with Dr. Richard to that visit?

A I don't know. I remember, and I believe it was Dr. Keller who went with Bill Richard. Maybe Tucker went, I don't know.

Q At that point in time, did Monsanto in-house have the technical capability to examine substances to determine the presence of PCBs?

MR. SCHINK: At what levels, Mr. Pope?

MR. POPE: At any levels.

MR. SCHINK: I object to the form of the question.

You may answer.

BY MR. POPE:

Q Do you understand the question?

A Yes.

I remember that Scott Tucker had to do a

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lot of work in the development of proper columns to be able to separate and identify the specific PCBs involved. And part of the reason for the trip to Sweden was to look at the equipment and look at the techniques and to understand what they were doing so we could in turn duplicate that kind of effort here in the United States.

Q Was it your understanding that the Swedish scientists were employing new techniques that had not previously been employed by Monsanto?

A I believe that to be true.

Q At the time this first indication of the presence of PCBs in the environment was acquired by Monsanto, was there any practice as far as you knew at Monsanto for analyzing substances to determine whether there were PCBs present?

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

Q In the work that you had done for Monsanto, had there ever come a point up to this time, looking back, had there ever come a point in time when it was necessary or advisable for you to call on the Research Department to make a determination as to whether the PCB-bearing fluid was present in any substance?

A No substance.

Q At any point in time prior to this Swedish

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disclosure, had there been a time when you or your people had to go to the Research Department in order to determine whether PCB-bearing fluid met its specifications as to quality?

A Yes.

Q What kind of technique was employed to determine that question?

A I would say standard tests were run on the product. If it was going to be reclaimed, you'd run a test on acidity. If it had been reclaimed, it might be desired to run a fire test on it.

Q As far as you understood, the tests that we are talking about in terms of Swedish scientists are a totally different technique?

A Different nature, completely different.

Q Was there any significance to the fact that the Aroclors being discovered were 1254 and 1260, as far as you know?

A Ask that again.

Q Was there any significance to the fact that what was being discovered was 1254 and 1260 as opposed to some other Aroclor?

A Obviously the higher percentage of chlorine may have made the material less inclined to be degraded.

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Q That was the initial hypothesis, I take it?

A Yes.

Q At that time was there a significance to the finding of 1254 and 1260 with respect to the uses that 1254 and 1260 were being made in products being sold by Monsanto?

A Oh, boy.

Q Let me ask you first if you understand my question.

A I am not sure I do.

Q If in fact all of 1260 was being sold or only being sold in dielectric fluid, the finding of 1260 would have significance as to how it got there.

My question was was at this point in time when the initial analyses were being made, the fact that 1254 and 1260 was being found have any significance as to the type of products that it came from?

A It obviously could, but we didn't sell much 1260 and 1254.

Q I see. And I take it that that heightened the concern of how it got there if not much had been sold?

A Right.

Q Was your initial discussion with Dr. Richard, I take it, a casual sort of informal discussion?

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A Yes.

Q Were you consulted shortly thereafter concerning the marketing effects, sales effect that these findings may have in the short term/long term future?

A I would say the next step we went through is who did we sell 1254 and 1260 and where do 1260 and 1254 get into the environment.

Q How were those questions answered?

A We looked at the sales analysis in terms of products we sold and, per se, they were very, very limited.

Q Can you describe the areas that they were limited to?

A I don't even remember.

Q Your recollection is it was not the dielectric business?

A No. 1254, I believe we used in one of the heat transfer fluids, and again, that was of small volume.

The remaining sales of 1254 and 1260, per se, were small, very small.

Q Was there any discussion at this early point in time after the disclosure of the Swedish investigators as to the possibility that what they were measuring had in fact been a substance that contained lower chlorinated

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Aroclors which had themselves degraded, leaving the 1254 and 1260?

A Obviously that is the next step.

Q And was that pursued as a possibility?

A Certainly recognition that when you produce a 1254 you are producing a bell curve of various degrees of chlorination.

Q Including 1254 and 1260?

A Right, relatively small amounts because that is not the intent to make those.

Q I take it that was understood from Day 1.

A Right. You knew you had small quantities of them, but the products also existed and were sold, per se, but in very, very limited quantities.

Q And then the investigation turned to this hypothesis that I just suggested?

A Yes.

Q In fact, the products were products that consisted mostly of other Aroclors which had changed and degraded in some fashion over the passage of time?

A No. I don't accept your statement. Ask it again.

Q What way?

A My statement is that if you make 1242 and you

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produce the bell curve, you will get some 1260 at this end and a little bit of 1254, but your intent is to make the bulk of the product 1242.

You also get some 1221 and 1232 and, therefore, those small amounts could conceivably have been what was getting out in the environment and not degrading, so 1254 and 1260 were not getting there as, per se, products but were getting there as a residual of the manufacture of something else.

Q That in and of itself had not gotten into the environment?

A That could have gotten into the environment and had degraded, leaving --

Q I am sorry, that is what I meant to say in my hypothesis.

What I am trying to determine is at some early point in this analysis of what is going on in Sweden, the question was raised, is that a possibility, particularly after you looked there and saw you didn't sell very much 1254 and 1260?

A Right. You must also recognize we were not the only producers, so when you look at some of the markets around the world, the fact that Sweden found some material and we could not identify its source, we

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also probably could not identify the individual who sold it.

Q Particularly in Europe, there were some other sellers, is that right?

A Right.

Q As to this hypothesis, what was being measured was the 1254 and 1260 and the balance of product had degraded. Was there any way to move forward to determine that that was the source of what they were finding? How did the investigation come out or the study?

A I would suspect looking back on it it was a sequence of events that actually caused the withdrawal of the total PCBs from the marketplace; that you saw one possibility and the next step was to analyze further and you saw, well, 1248 was still a problem; 1242 became a problem and making 1242 you ended up with a higher molecular weight material and ultimately all the PCBs were withdrawn by Monsanto.

Q As to the initial trip to Sweden by Dr. Richard and Keller, was it your understanding that they came away from that meeting with the impression that the studies being done there were accurate?

A I believe that to be true, yes.

Q Following your initial meeting with Dr. Richard,

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what was the next thing you participated in in terms of a project, meeting or discussion on this possible problem?

A I would say there were extensive meetings that went on. I don't know that I was present.

My job responsibility, I did an awful lot of traveling, so many times I would not be present in St. Louis for six, seven weeks at a time and meetings would go on. And it would be a matter of trying to catch up on what was being worked on down in the lab and what the concern was of the Management Group relative to the future of polychlorinated biphenyls.

Q The Management Group was immediately brought into the problem or apprised of the problem?

A Yes.

Q Why don't you tell me what the Management Group is so we have a common definition.

A The point at that time, I am referring to Howard Bergen's group, included Dr. Richard, Don Olson, someone from Manufacturing, someone from Accounting, someone from Product Development. And if they wanted to, would call on staff of people with Monsanto which might include the Medical Department, analytical people and so they obviously started to meet on the subject to

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decide what was really taking place out there.

Q And you were not an initial member of that group?

A No, no.

Q Did you receive communication from that group during that period from time to time?

A Verbally.

Q Was there any initial decision made as to what the committee would tell customers who inquired about the Swedish findings or the other findings as they began to be published?

A To the best of my knowledge, we didn't have any.

Q Any policy?

A Any inquiries. There weren't any inquiries.

To the best of my knowledge, the Swedish work was not publicized in this country. I look back on it, I don't even know how Bill Richard became aware of it. I was astounded that when I heard about it, they had already made their trip to Sweden and were already at work on it.

Q Did Dr. Richard have any recommendation that he espoused as to what the company should do about the situation?

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MR. SCHINK: When?

BY MR. POPE:

Q Following your meeting with him in the early point in time.

A He put Scott Tucker to work so the analytical people were pursuing what the Swedes had done and trying to find and establish our own procedure so we could identify these materials.

Q He had basically put Tucker to work for purposes of development and duplicating the procedure --

A Accurate, yes, right.

Q Did he make any recommendation on the PCB products as to what should be done with them?

A Can I ask when?

Q Since I don't know exactly what took place, it's hard for me to select a particular hour, day or place.

At some point in time I take it he expressed an opinion with regard to the continued sale of PCB-bearing fluids?

A I would say Bill Richard's attitude was we had to go to work and either discontinue or find a replacement product.

Q What was his reason as expressed?

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A I think he recognized the political concern for DDT and he saw the potential problem of that happening with PCBs and that the need was there to do whatever it would take to clean up the environment if PCBs were a problem.

Q So his thought was that the analogy to DDT was going to be some problem, there would be pressure?

A Yes.

Q To take action?

A Yes.

Q And his recommendation was that Monsanto should reformulate the product or discontinue PCB-bearing fluids, is that right?

A Yes.

Q And he expressed that in your presence, I take it?

A He sure as hell did.

Q More than one time.

Now, I ask you the same question you asked me: When did that take place, the first time?

A I'm not sure it didn't happen at that meeting in '68.

Q Shortly after his return from Sweden?

A Sweden, yes.

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Q What was your response as marketing man to that suggestion?

A The thing I always told Bill Richard and he used to write it on his bulletin board, "There is nothing that man can create that nature cannot destroy except Aroclor."

So we were hell bent to get out of the PCB business.

Q Do I interpret that as indicating you were in agreement with Dr. Richard that the company would be swept up in the DDT analogy?

A I love to fish and I love the world in which I live and I am not interested in seeing it destroyed in any way, shape or form. So I feel that if PCBs were a problem, then we had to find the solution for the problem.

Q What was the problem as conceived by people at Monsanto at that point in time, the early investigation?

A When the Swedish data came back, I don't think there was a total recognition or information to know the true nature of the problem. Certainly the fact that it was showing up in the environment was a point to be considered, but now where do you go from there and what happens once it is in the environment?

In early '68, it was just the initial phase

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of finding out what was involved.

Q Was there a perception at that point in time of a potential health hazard?

A Didn't know.

Q Was it discussed as a possibility?

A The fact that anything is in the environment and not degrading probably offered a potential health hazard.

Q Was there any investigation insofar as you know in this early point in time as to what Monsanto had by way of knowledge of potential health effects of PCBs?

A To my knowledge, we had nothing. The PCBs were not a cup of coffee, but they were not a highly toxic material. So whether they were found in the environment and present a potential health hazard, I don't know, I don't believe that it was known.

Q Was that one of the things that was brought back from Sweden, was a determination to find out whether there was a health hazard or not?

A Obviously it was a concern of Bill Richard.

Q Well, Dr. Tucker was assigned the task of checking tests that were being done in Sweden and duplicating those procedures. Was somebody else assigned the task of determining whether there was a potential health

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problem?

A I don't know, but I assume a lot of discussions went on with the Medical Department and I don't know of anyone specifically assigned. I don't know.

Q It was true that any finding of potential health hazards would be communicated as soon as practical to the Marketing Department, would it not?

A Sure would.

Q Is it also true that in your position it was important within the company, it was important for you to be up to date on the latest findings of research and the medical area of PCBs, was it not?

A But we had been selling the product since the late '30s and they really had never presented any medical hazards using it in industrial applications or plasticizer applications or the electrical industry, so the fact that now they show up in the environment, to conclude there was a health hazard, I think was jumping quite a ways into the future and I think we were not prepared to make that decision at that time.

Q What was the company's view as to where all of the Pydraul that had been sold, for example, was going? It wasn't all going to reclamation, obviously.

A Our assumption was that it was going into

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sanitary landfills and in many cases, that is the majority of cases, it was our belief that the customers were handling the product properly and were not putting it into streams or on roads or disposing of it in incorrect ways.

Q What was the assumption based upon? What fact was the assumption based that the disposal of PCB would be in sanitary landfills?

A Because that was a recommendation. If you had to dispose of the material that could not be reclaimed, they were to go to a sanitary landfill and the fact that you tell a customer to do this doesn't necessarily mean he is going to do it.

But you feel you are dealing with responsible people and they will follow your recommendations.

Q Were those recommendations contained in writing?

A I don't remember if there was anything in the literature that stated disposal of material in the early part. Later on, yes.

Q Do you recall that Monsanto salesmen were advised to make such recommendations to customers?

A Sure.

Q And in your definition or your discussion of sanitary landfills, does that differ from a toxic waste

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sort of a landfill or a chemical waste landfill?

A I didn't know there was a distinction.

Q I don't know that either.

The recommendations that were made to customers, were they in the term sanitary landfill?

A I would say more in the way of a chemical disposal area and whether that is a sanitary landfill, obviously not. How would I differentiate, not in the place they are throwing garbage.

Q I am trying to determine what you as Marketing Director would tell your salesmen to tell customers. Can you fill me in on the types of things they told customers as to how to dispose of Pydraul that could not be reclaimed?

A They had material in drums, collected in rags and Oil-Dri and whatever that had gone into containers that would go to a sanitary landfill.

Q At the time we are talking about in the '60s or earlier --

MR. SCHINK: Now, wait. Your question before was with respect to when he was Field Sales Manager.

Are you now going back to when he was a salesman?

MR. POPE: The question and answer stand very

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clearly all by itself, Mr. Schink. I don't understand why you are trying to interrogate me.

MR. SCHINK: I am just trying to follow your timing. Are you now going to another period?

BY MR. POPE:

Q Prior to your meeting with Dr. Richard, use that as a point in time, Monsanto customers were not advised that Pydraul was a toxic substance to require special handling in that sense, were they?

MR. SCHINK: Are you now including the red labeling and so forth?

MR. POPE: I don't understand the red label.

MR. SCHINK: The witness has referred to that before.

Could you repeat the question?

(Question read.)

BY THE WITNESS:

A Pydrauls were not a skull and crossbones product. They were not a red label product.

Red label refers to something that would explode or a fire hazard under 100 degrees Fahrenheit, so solvents fall in that category.

BY MR. POPE:

Q As to disposal, they weren't used as a practical

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instance in terms of advice that was given to their customers?

A I would agree.

(Discussion off the record.)

(At 12:10 o'clock p.m., a lunch recess was taken to 1:20 o'clock p.m. this same day.)

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

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

February 16, 1982,

1:30 o'clock p.m.

The deposition of NORMAN T. JOHNSON
resumed pursuant to noon recess at 200 East Randolph
Drive, Room 5700, Chicago, Illinois 60601, before
Thea L. Urban.

PRESENT:

MS. ELIZABETH STEIN,
MR. MICHAEL A. POPE,
MS. JOANNA C. NEW,
MS. CAROL DORGE,
MR. JAMES H. SCHINK.

ALSO PRESENT:

MR. HUGH THOMAS.

- - -

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NORMAN T. JOHNSON,
called as a witness herein, having been previously duly
sworn, was examined and testified further as follows:

DIRECT EXAMINATION (Resumed)

BY MR. POPE:

Q Mr. Johnson, you realize you are still under
oath?

A Yes.

Q Can you tell us the first time you yourself
called on Johnson Motors or Outboard Marine Corporation?

A Probably sometime in '67.

Q Do you recall what the occasion was?

A Just to go and meet the people, see the
operation, and the primary contact at that time was
John Nevill.

Q What did you know about Outboard Marine prior
to going up there in terms of its past business history,
Mr. Johnson?

A Just a very large customer of the Fluids Group
buying A-200. To the best of my knowledge, very satis-
fied with the fluid, was constantly looking at other
fluids, but Pydraul was doing the job for them.

Q Your purpose was basically to meet who was
involved and just to establish a personal contact?

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A Yes.

Q Do you know who you went with from Monsanto?

A I would think Bob Damiani.

Q How long had he been salesman for Monsanto by that date, do you know?

A I brought Damiani into the Fluids Group. I would think he came with us in '67, early '68; somewhere in there.

Q When he came into the Fluids Group, from where --

A From the training program.

Q You say you brought him in. Had you known him previously?

A No, he was in the training program and, of course, the trainees would be around there for that six-month period and I would represent our group to go down to the training program to go talk about our products. And that was a corporate training program at that time.

So Bob Damiani came with our group along with a fellow named George Fague. I remember the two of them coming and Bob was assigned to Chicago and I'm trying to think who he replaced and I can't remember.

Q That would be the way it would work during that period of time. Someone would come up after someone else had left, as a replacement rather than just adding a

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person to the team?

A Right, yes.

Q He came directly to Chicago and this area was his first --

A Assignment.

Q -- assignment?

A Yes.

Q At this time in 1967 --

A Should be '68, should be '68.

Q What was the job of somebody like Damiani in terms of calling on customers? Was there a requirement or guidance from the home office or from your office as to how often they should visit, what they should do when they visited, how they should write up this paper work, that kind of thing?

A Normally before you sent the man out, you went over a sales analysis and talked about various customers he had in his territory and the products they bought. You would go over what we would consider unsold potential companies out there that were potential customers that we weren't selling. We would try to share with them history as far as we knew about activity in the geographical area that he was going to be responsible for and when they came out of the corporate program, we would

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determine to train them more specifically in the products they were going to handle and then what products applied in their geographical area.

Q Were you making at that point in time some type of file on your important customers so as to be able to train somebody new as to what their needs were and what their capacity was?

A No central files were maintained by the Organic Division. We didn't maintain files in the Product Group.

Q But would you say the knowledge of the people in the group relative to customers around the country was pretty in-depth as a result of the contacts from the salesmen on?

A Previous years.

Q Person-by-person basis?

A Yes, and the technical people who had been out making calls on those customers over the years. A fellow like Dale Smith had been around the Fluids Group, my God, he was there before I came in with the company. I would say he had been there at least ten years.

Q That would be like we talked about this morning in connection with questions that had been given to him by somebody, some problem, and he would go out and handle

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it as opposed to your salesmen's contacts that were at least in part just calling on them and making the contact?

A The salesmen would make the personal contact and if there were some questions or answers needed to be given, Dave Hall or Dave Smith would be making calls. They went out and made calls in geographical areas where there was unsold potential or technical problems or technical questions of what needed to be required to retrofit a system with Pydraul.

Q When you refer to potential, are you talking about potential, those who were not purchasing the fluid, had never purchased the fluid or were not currently?

A Had never purchased it or were now buying a similar fluid from a competitor.

Q How would Monsanto be aware of those potential customers?

A Well, you knew who the die casters were in the United States. You knew who made steel. You'd find out who processed the zinc so you are looking at applications requiring a process of hot metals.

Q With regard to die casters, how did Monsanto get its information as to what companies were die casters?

A The Die Casting Institute meets every year and

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we'd have conversations with people who manufactured die cast machines. We were at the show every year. Potential customers would come up and say, "We are installing another Lester machine, whatever. We are not sure what kind of fluid we are going to put in the system and want to discuss the possibility of putting Pydraul in there."

There were a lot of systems in the steel industry still using petroleum oil and they recognized it was a terrible fire hazard.

Q Was Lester Engineering considered to be the best of the die cast manufacturers or one of the best?

A One of the best.

Q Would Monsanto have direct contact with them regarding the products they are selling, the new markets they are developing and where they are being sold?

A We would talk to Lester. We talked to Lester at the shows. We knew people within Lester just as we did in HPM. We knew people there and if they had a question on the use of Pydraul in one of their machines, they would call down to St. Louis. We also had salesmen calling on them to be sure that any questions that were unanswered were answered for their benefit.

Q Those salesmen would be focusing on making the

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Lester equipment compatible with the Pydraul and vice versa, is that right?

A Yes, right.

Q As opposed to selling Pydraul directly to Lester?

A Lester would not buy Pydraul. Lester was not a die caster. They were a die cast manufacturer.

Q Who would maintain the contact with Lester? Would that be you or the salesmen?

A Salesmen. If Bob Damiani had a die caster in his territory, he would have called on him. There is an outfit, AA, out here in Elk Grove that made valves that get into hydraulic systems and many times the local salesman will stop in and talk to the people. We need information, too.

Q So the breakdown is geographical. The salesman who is selling the product to users would also be responsible for keeping up with things like die cast manufacturers in his area and then he would then transmit the information back to St. Louis as to what he found there?

A Yes. Sometimes you'd find out a new hose was being introduced to the market and we asked the salesman to go out in the company and get information and literature

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and get the new hoses they were making, whether they would applicable for Pydraul.

Q What kind of training in functional fluids did your people actually get? We talked about an actual training session, but during this period of time what kind of training would Bob Damiani have in the chemical makeup of fluids or how it is used?

A I would say that in '67, '68, we started to bring the fellows in from their corporate training group and they would spend a week in the Product Group and that week would be spent with the technical specialists going over accounts, going over equipment, where potentials would be.

We also had sent them down to the laboratory so they'd see some test applications operate for testing the lubricity of the pumps or operating characteristics of the pumps, to get into the chemistry. Sure, we talked about what the chemistry is, what the viscosity ranges are, what the methods were that were being used.

Q Was the technical background in addition to the general marketing training?

A Yes.

Q As of the time that someone such as Bob Damiani went to Outboard Marine for his first visit, what kind of

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information was there available from Monsanto than simply to provide him with sales figures for the past years?

A Basically I would say we spent a half hour talking about Outboard Marine in terms of what they were using, the kind of fluid out there, the kinds of experiences they had with Pydraul.

At that time we tried to sell them Pydraul 312 and they were not interested in dropping down to St. Louis. They had been to St. Louis and had seen fire testing and preferred to stay with Pydraul A-200.

Q Was that what you did with Damiani, give him the background on customers you visited?

A Either me or maybe a combination of Dale Smith and myself.

Q Where did you get the information regarding OMC?

A Reading call reports, development history over a period of time.

Q Salesmen at Monsanto, I take it, had for a long period of time prepared reports for visits to customers or potential customers?

A Yes, yes.

Q And those are called call reports, are they not?

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A Those are called call reports.

Q Were they maintained in a file by the customers that were being called on or in some other fashion?

A The salesmen maintained a file. If there was a regional office, they maintained the file, and then in St. Louis they were maintained in a central file, not in a Product Group.

Q Was that by customer?

A By customer and in there would also be the invoices of materials shipped, so it was a combination file that was maintained over in another area of the building in which we worked down in St. Louis. We called it the central file and if we needed information, that's where we went to.

Q Prior to Bob Damiani's first visit out to Outboard Marine, he had at least access to that --

A A file he could go over.

Q And that would take him back almost 20 years to Outboard Marine's purchases, is that right?

A No, two, two years. Those files are only maintained for two years.

Q What happened after that?

A Get pitched.

Q So beyond two years he would therein be required

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to rely on talking to people who knew the client or --

A Right.

Q -- or knew the customer, is that right?

A Right. Now, I am not saying -- people are chipmunks, squirrels. In some cases if somebody had a problem with a hose and where a Johnson Motor, there might be a hose file or there might be a pump file and someone may have that data in some file relative to Johnson Motors' experience on a given pump on a Lester machine. But there was no Johnson file in the Product Group.

Q Do you recall with regard to Bob Damiani whether someone accompanied him on this first visit to Outboard Marine?

A I don't know.

Q He had been calling on them for some period of time prior to your going out there, is that right?

A Yes.

Q Was your visit to Outboard Marine one of several you made to important clients, customers around the country?

A Yes.

Q Can you describe what took place on that visit, if you recall, who you met with, what was accomplished?

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A We went up and saw John Nevill, toured the die casting operation. I think at that time they were looking at the Wankel engine and they had some equipment there for making the Wankel engine and kind of an engineering curiosity that would come out of that. Obviously I saw the die cast machines, the die storage area, just a general tour of the facilities.

Q Is there anything else you recall taking place or any observations you made?

A At that time?

I know they were strongly interested in staying with Pydraul, with A-200, and that was stated at the time. They did not want to go to 312 and yet most of the industry had started to switch.

Q What was the reason?

A Fire-resistance.

Q And 312 was a little less fire-resistant than A-200?

A Actually A-200 had diminished in use. It didn't have that many customers still on A-200. Most customers had gone to the 312-type chemistry and yet you still had some people still buying Pydraul F-9 which was far more expensive and that was more their desire.

Q You said F-9. Do you mean A-200?

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A No, 312 cost \$2. A-200 cost around \$3, and at that time F-9 was around 3.60 a gallon, so you had three levels of pricing there for fire-resistant hydraulic fluids all with different levels of fire-resistance and physical properties.

Q I guess I don't understand. My question was was there a reason why Monsanto preferred that a customer such as Johnson cease using A-200 and begin using 312?

MR. SCHINK: If there was a reason. I object to the question to the extent it implies there was a preference on Monsanto's part that a customer use any particular fluid.

BY THE WITNESS:

A The only preference we might have that they might switch to 312 is that we could probably cease manufacturing the Pydraul A-200.

BY MR. POPE:

Q At that stage, they were the only major user of A-200 as you recall?

A Yes.

Q Anyway, by the time you went out there that was a dead issue, I take it? It had been rejected.

A It's never a dead issue.

Q It was a dead issue in the eyes of Outboard

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Marine, if not in yours, is that correct?

A Yes.

Q Did you make any observations with respect to the way the Johnson Plant was being operated?

A I don't think any different observation than I made going into any die casting operation. I think they were a very efficient manufacturer of castings and they knew how to handle hydraulic systems.

There really wasn't a lot we could do for Johnson. Johnson was a good information source for us.

Q In what sense?

A Well, they were willing to try different things. They had different experiences on seal manufacture. For instance, we would suggest making Viton seals. In some cases, they used rubber we would not recommend because they wanted the expansion because they ended up with a tighter seal. You can't argue with that. Neoprene is not compatible and yet neoprene, if you put in a O-ring is going to swell in Pydraul, but it gives a tight seal. But once you break the joint, it never goes back in place. It goes up like a donut which means you have to throw it away.

Q The point is they would assist Monsanto from time to time in trying new procedures out and reporting

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back to you on how things were working and didn't work?

A Right, and they did good things -- sometime you would say -- you can't argue with a customer.

If something is performing for them, it is not necessarily something you would recommend but if they are satisfied and get the performance, it is the customer's decision.

(Mr. Hugh Thomas entered the deposition room.)

BY MR. POPE:

Q How about the way they were handling, using the Pydraul? Was that as efficient as you had seen elsewhere in the industry?

A Oh, sure.

Q Nothing unusual about their means of using or conserving or reclaiming the Pydraul?

A I didn't see the reclaiming facility, but I knew they were doing it.

Q What did you know about how they were doing it?

A What, reclaiming?

To the best of my memory, they were reclaiming out of the pits, reclaiming out of the trenches. And also if they had some problems with the fluid in a given machine, they would reclaim that fluid and recycle

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it back into the machine.

Q You could see the trenches around the various machines that they were using?

A Yes.

Q And the trenches were then leading to a central collection place at some point?

MR. SCHINK: Are you asking if he knew that as of the first visit, Mr. Pope?

I object to the form of the question unless you make it more specific.

BY MR. POPE:

Q Mr. Johnson, do you understand my question?

A Yes. I would say I know the trenches were there. At that point, knowing where it was going from those trenches, no.

Q I am not asking for the particulars. You knew they were reclaiming and knew they were reclaiming through a series of trenches?

A And I saw the trenches.

Q And that was also collecting water and Pydraul at the same time?

A Right.

Q Trenches were visible, were they not?

A Sure.

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Q Did you meet with anybody else other than Mr. Nevill on this first visit, that you recall?

A No.

Q Afterwards did Mr. Damiani write up call reports?

A I don't know.

Q Would it have been his practice, at least on those occasions where he went out to a customer with you, to write up and prepare and show it to you?

A No. Really the intent of a call report is only for information purposes going back to the people in St. Louis, if you are requesting action.

Q That was going to be my next question.

What was done, at least in the Pydraul area, with call reports on functional fluids generally, I guess, call reports to be written by salesmen after a visit to a client? Where did they go, whose viewing were they intended for, what kind of information were they intended to convey?

A Two things: The call report was intended as an informational item for the salesman to jog his memory in terms of what took place the last time he was there and served, all it was was a request going in to various people for courses of action.

A lot of salesmen would save call reports

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from previous calls and before they would go in to make a call, they would look back over what had transpired over the last three or four calls. Maybe they had obligated themselves to do something, maybe they had not. Maybe they were trying to go in to gain some information or supply some information.

If they were looking for something, they could route that call report as they dictated it to someone in St. Louis requesting information on pumps or information on hoses, whatever.

It might reflect pricing. It might reflect competitive activity. If nothing significant happened in the call, we didn't expect them to write a call report because we really are not looking at the shuffling of papers, so calls could be made and there never be a call report.

Q But other than the salesman's jogging of his own memory, the basic purpose would have been to call for action within somebody else from the company, is that a fair statement?

A Right.

Q Would they, that is the call reports from your salesmen, go across your desk?

A Yes.

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Q So at some point after they were written --

A Yes.

Q -- would you review them for stylistic writing or for substance or --

A For content.

Q -- general information?

A Just content. You know, if a salesman was not dictating the kind of call reports you wanted to see, you might prompt him on it just as a part of the training or tell him if it is a nothing call report, tell him, "Jeez, next time you make a call and that is all you accomplish, goddamn it don't write a call report because I am not interested in the paper."

Q You had at this point 13 salesmen or so?

A In '68.

Q And each of them were writing these reports on calls that were of some significance?

A Writing to their Regional Manager and would come into St. Louis and after we saw it it would go into the central file.

Q I take it from what you said, this first visit to OMC in 1968 was before you had your meeting with Bill Richard and before the PCB problem arose in your mind, anyway?

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A Yes.

Q Let me show you a document that we have previously marked at Dr. Richard's deposition called Richard's Deposition Exhibit 17 for identification, a two-page document dated December 9, 1968. I want you to take a look at that.

A Okay.

Q That shows a copy going to you. Would you expect that you would have received a copy of that sometime around the date the document bears?

A I have to assume I received it.

Q You don't recall specifically?

A No.

Q Do you know whether that was a mailing list that was set up for any particular purpose as dealing with Aroclors?

A I don't know. I look at the people who are on there. I know some of them.

MR. SCHINK: The question is whether you know it was set up as a mailing list.

BY THE WITNESS:

A No.

BY MR. POPE:

Q Do you recall the meeting that is referred to

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in this --

A No.

Q -- memorandum from Mr. Wheeler to Dr. --

A Is it Doctor or Elmer?

Q Elmer.

A Good old Elmer.

Q Do you have any recollection during this period of time of discussing some tests to be done by Dr. Calandra?

A No.

Q Do you know who Dr. Calandra was?

A No.

Q No. 5 on this memorandum says that as to one of the matters that was discussed, the advisability of determining the character and possibility of isolating the "major fraction" in each of the Aroclors to be studied is to be explored.

Do you know what that refers to?

A Major fraction in each of the Aroclors?

Q Advisability.

MR. SCHINK: I object. There is no foundation as to what Mr. Wheeler meant some 12 years ago.

MR. POPE: I am just quoting the language.

MR. SCHINK: I appreciate that. There is no

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foundation that he knows what Mr. Wheeler had in mind when he wrote that. He says that he does not recall Dr. Calandra, doesn't recall, and indeed on the face of it, it would appear that Mr. Wheeler had the discussion, not that Mr. Johnson was involved in any way.

MS. STEIN: Just for the record, Mr. Schink, I would appreciate it if you would not suggest answers.

MR. SCHINK: Do you have the question in mind, Mr. Johnson?

BY THE WITNESS:

A I can't interpret -- I can, I can interpret what I think he might be asking for, but I don't really know what he was asking for because I was not really a part of this and I don't know why this study was being undertaken.

BY MR. POPE:

Q Can you tell me what your understanding is of what he is asking for then in No. 5?

A I can't explain character and the possibility of the isolating the major fraction. The only thing I can imply is that if you are looking at the 1242, you are trying to isolate the 100 percent, 42 percent chlorine on the biphenyl. Whether that is what he means, I don't know.

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Q That was to be my next question, whether the matter under question was the hypothesis we discussed this morning and to the Swedish findings.

You don't have any idea on that one way or the other, do you?

A No, just --

MR. SCHINK: No just. There is no question pending.

BY MR. POPE:

Q My question is whether you would receive during this period of time memoranda such as this from Mr. Wheeler, Dr. Richard and others that you would just sort of glance at and not really pay any attention to, or was there something like this that would come to you and you would know exactly what was going on and what was being reported on and because of passage of time, you don't know whether or not --

A I would anticipate Elmer --

MR. SCHINK: Do you have the question in mind? The question is at the time you received it, did you know what it was referring to?

BY THE WITNESS:

A No, no, no.

BY MR. POPE:

Q Do you know why Mr. Wheeler sent you a copy of

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this memorandum?

A I would only suspect that Elmer would send it over because of Aroclor.

MR. SCHINK: You don't have to guess.

BY MR. POPE:

Q Was there a point of time at which a corporate decision was made, either formally or informally, that memoranda dealing with the subject of Aroclors should be sent, copies of which should be sent to certain people including yourself?

A Well, the only thing you imply --

MR. SCHINK: The question was was there a corporate decision made. That was the question.

BY THE WITNESS:

A No, he's in the Medical Department. He's an industry hygienist.

MR. SCHINK: You have answered the question. The question was whether there was a corporate decision.

MR. POPE: Mr. Schink, let the witness answer the question. There are going to be 30 documents like this with his name on it. If he can tell us that he had nothing to do with it, we can save about six hours of testimony.

MR. SCHINK: He has answered your question, Mr. Pope. Now why don't you proceed.

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BY MR. POPE:

Q The question, Mr. Johnson, is whether during this period of time you received a number of memoranda involving Aroclors that you just did not pay attention to or is that not the case?

A As I stated earlier, I traveled an awful lot, cost me a marriage. These things, when I would come back after six or seven weeks, I'd have a pile of paper like this (indicating), including all the call reports and what have you.

For the most part, there was no time on Saturday and Sunday to go through it as you left on another Sunday, so that these things, I would rely mainly on the opportunity to get into a meeting where if this was pertinent to something that I should know, it would be brought up.

Q It would not have been your practice during that period of time to respond to Mr. Wheeler or others on this mailing list?

A No.

Q With regard to something you didn't understand or you don't know, were you sent a copy of --

A I know that anything that Elmer Wheeler would be doing would not come from my direction. He wrote it

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to the guy who probably would be intimately involved.

Q When I asked whether it was your understanding that he sent it, why did he send it to you? You said probably because it dealt with Aroclors?

A Right.

Q Why would he send something to you simply because it dealt with Aroclors?

A Because I was involved in the sale of Aroclors.

Q Were you the only one on this particular list who was involved in the marketing or sale of Aroclors?

A No, that is my point.

Q Who else was?

A Cuming Paton was for the Plasticizer Group and I was involved in it as far as the Fluids were concerned.

Hodges, I don't know. Kelly, of course, is charged in the Medical Department. Ken Wells is the Plasticizer Group and Dr. Pilarno along with Scott Tucker in Analytical, so there's three people on there involved in Aroclors.

Q No. 11, Mr. Wheeler says it was the consensus that the group should schedule monthly meetings to review progress.

As far as you know, is he referring to a

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group that you were a member of?

A No. If he was, I wasn't part of it.

Q Do you know what group he was referring to?

A No.

Q At this time, December of 1968, you were not dealing with the type of PCB product that was used in the paper bases, is that right?

A That was Cuming Paton's responsibility.

MR. POPE: I am certain this was marked before, but I don't have the number for it.

Miss Reporter, I have a multi-page document that I would ask you to mark as Johnson Deposition Exhibit No. 1 for identification, first page of which is a copy of a document from the desk of H. S. Bergen, consisting of two pages of correspondence and the balance is a study by Joseph C. Street, et al., entitled Comparative Effects of Polychlorinated Biphenyls and Organochlorine Pesticides in Induction of Hepatic Microsomal Enzymes.

(Johnson-OMC Deposition Exhibit

No. 1 marked for identification,

2/16/82, TLU.)

BY MR. POPE:

Q Mr. Johnson, I am going to show you that document and ask you to take a look at it and tell me if

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that is something you received sometime in 1969.

A I don't ever remember anything ever having been done by the Utah State University.

Q Do you recognize Mr. Bergen's writing there at the bottom of the first page?

A I recognize his initials.

Q Can you read what that says?

A Joe Street is a reasonable logical person and --

Q Meeting?

A Something meeting went well. I can't read the one word. I am not aware of this one at all.

Q Were you aware that from time to time Monsanto would receive articles from investigators or scientists regarding subjects of PCBs prior to their publication?

A No.

Q Would it be fair to say that you have no idea why your initials are on that front page of that report?

A It's incredible. He has people on this that have no involvement with chlorinated biphenyls at all.

MR. SCHINK: The question is do you know why your name appears on that buck slip.

BY THE WITNESS:

A My only interpretation again is that it relates to Aroclors and chlorinated biphenyls and Howard was

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anxious to pass information down and I would look at one of these things and say it was beyond my comprehension to understand what the hell they are talking about.

BY MR. POPE:

Q As far as you know, you have never seen that study before in any form, have you?

A No, I wouldn't even know how to interpret that stuff.

MR. SCHINK: That is not the question. The question is whether you have seen it before.

You have answered the question.

BY MR. POPE:

Q Was there an effort at Monsanto during 1969 to keep the Marketing Department up to date on studies that were going on around the country as they would relate to PCB products?

A It was an effort at Monsanto to keep everybody informed about everything.

Q I take it that would include studies anyone was doing on PCBs?

A Whether it related or not, things would come across your desk and which you knew nothing about, nor could you really interpret, and there were even things out of Research at times that would get circulated for

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just information purposes, to understand what the company was working on. They didn't necessarily pertain to you and if you had the time to read it and you wanted to read it, you read it.

Q What was your practice in a marketing area as it relates to products that you were selling that contained PCBs? Was it your attempt personally to try and keep up to date on what research was being done on those products?

A If I could interpret them and make use of the information, but something like that, I would rely on an Elmer Wheeler or go back to Bill Richard and say, "Bill, what do I do with this? What does it really mean to me? What does it mean to my customers and if there is something we have to do as a result of this, then tell us what we need to do."

They are the experts.

Q Did you have occasion to do that on a regular basis, namely, go to Dr. Richard or Mr. Wheeler and say, "What am I supposed to do with this information that has been provided to me regarding PCBs?"

A I would say as the environmental questions came up, there was a wealth of advice just as Bill Richard's at the time, as I told you, of the Swedish thing. He

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saw and envisioned that we had to be doing certain things, but that again is based on his interpretation, not necessarily mine, because I don't understand that kind of thing. My degree is in marketing, not in microbiology or chemistry.

Q During the year 1969, what were your salesmen instructed to say regarding PCBs?

A '69, we didn't have any inquiries. There were no responses from customers and on something like toxicity questions and what have you, I told you before if we had inquiries through the salesmen from a customer, we would route it to Elmer Wheeler and let him talk to their industrial hygienist and relate the handling characteristics of these products.

Q For the period up through 1969, would it be accurate to say that the position of Monsanto with regard to its salesmen was that they shouldn't say anything unless there was an inquiry from a customer regarding PCBs?

A PCBs relative to what?

Q Relative to either human health effects or presence in the environment.

A Health effects, there was information stated on the label. There was information stated in the brochures and the salesmen understood that they were not

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a cup of coffee. They were industrial chemicals.

Q That is the same information that had been available for five, ten years?

A Right.

Q Setting these aside, dealing with anything that arose out of or following the Swedish studies with regard to either presence in the environment or particular health effects as a result of the presence of PCBs in the environment, with regard to those subject matters, were your salesmen then advised not to really say anything unless there was a specific inquiry from a customer?

A Let's say the salesmen, based on the Swedish problem, were probably told that and the fact that the company was really looking at it. And if they got any inquiries, don't try to handle it yourself because it is probably well beyond your capability to answer and my capability to accurately interpret what they are asking about and give them information, so we passed it on to people in St. Louis.

Q Absent an inquiry, don't say anything in the affirmative less you screw it up?

A That's why Bill Papageorge was brought in to be the environmental person that we could funnel all these inquiries into.

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Q He was not in place in 1969?

A I don't know when Bill came in.

Q Were these salesmen told what you have just related by you orally? Was it in writing, what was this?

A Probably orally at that point, and understand that I don't know much at this point and they know less.

Q I understand. I am just trying to find out what was done in the company to either anticipate problems that may have never arisen or how to acquaint its salesmen with how they should handle the situation. That is one of the things you traditionally had done and your department had done, is it not, with regard to any kind of problem?

A When you said '69, there was a sales meeting in '69. There was a sales meeting in '68. What transpired at these meetings and whether we brought people over, like an Elmer Wheeler or Bill Richard, to speak at the meeting relative to the Swedish thing, I don't really remember.

If the data or we were along far enough that it was meaningful and that something should have been disseminated to the salesmen, I assure you it was.

Q That would have gone through you?

A It would have gone through me at the sales

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meeting with Bill Richard making the presentation.

Q If you yourself had access to the Monsanto records right now and you wanted to determine whether one of these people had been brought to the sales meeting, either in '68 or '69, how would you go about determining that question?

A I'd have to search my mind and try to figure out where the meeting was held and I know it would have been held in St. Louis, and then I'd hire a private detective to try to go back and rack somebody's brain to try to remember whether Bill Richard or Scott Tucker or whoever was present at that meeting.

Q There would have been no written minutes taken of any kind?

A There would have been no minutes, but there would have been an agenda.

Q Where would the agenda have been kept after the meeting?

A That would have been thrown away a long time ago unless somebody saved it.

Q In the Marketing Department, more in the central files, you would not have maintained such a copy of such --

A No.

Q Is that the sales meeting you are talking about

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for your 13 salesmen?

A Yes.

Q They were held once a year?

A Yes, but when we got to the PCB problem and Pydraul, we did it twice in one year.

Q At some point in time, I take it, these technical people, Dr. Richard, Elmer Wheeler, Dr. Kelly, Scott Tucker, some of them were invited, asked to address your salesmen?

A Yes.

Q On the subject of PCBs?

A Yes.

Q And you were in attendance?

A Yes.

Q I take it you don't recall which year it was?

A No.

Q What did they tell them at the first time that such a meeting was held?

A I'd have to just dream about it, probably say that in '69, depending upon when that Swedish data was developed, they would disclose to the salesmen and confirm that the Swedes had pinned down the 1254 and 1260 and then relate the status of what we were trying to do, and things moved very fast through that two-year period.

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I don't think any company has discontinued, started up and discontinued products as fast as we did and went through the testing that we went through and testing in customers' plants and, you know, a thousand-hour test in a pump is a thousand hours and you can't speed it up, so that effort and the speed in which we were going over that two-year period was incredible.

I give a lot of credit to Bill Richard on that. He never let up, never.

Q Was it similar to what you had talked about this morning, the similarity to DDT?

A Yes.

Q Was the thrust of the work you have been referring to at least as it appeared to your area, the replacement fluids, the development and formulation of replacement fluids?

A Yes.

Q How early was that decision made?

MR. SCHINK: What decision?

MR. POPE: The decision to reformulate replacement fluids.

MR. SCHINK: Are you referring now to all the Aroclors or just the higher chlorinated, Mr. Pope?

MR. POPE: I don't know exactly what the decision

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was.

BY THE WITNESS:

A I don't know the dates. I honestly don't. That is the foggiest because things moved so fast and I can only look back at some of the things that I have seen to see the effort to discontinue 1260, the possibilities of 1254 and 1260 in any products.

BY MR. POPE:

Q Can you tell me as you recall it how the decision was formulated and if in fact it started off with replacing one, just one type of Aroclor, how that started and then developed into a broader concept?

A I would feel that looking back over and trying to remember in my own mind, 1260, 1254 were defined as problem areas. Therefore, anything containing 1254 and 1260 had to be discontinued, reformulated, whatever, to get to lower chlorinated materials.

And then right after that, the lower chlorinated materials, and you are talking about a sequence here of about a month or two in which one problem, look, we have a solution and we are now finding more alligators.

Q Was that because there were more investigators finding the lower Aroclors in the environment?

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A No. I think it was more a recognition of the fact that 1260 was in 1254 and you had small amounts of 1254 and 1260 in the other chlorinated materials, and that any way you look at it, you are still going to have some of those, even in minute quantities. And if there are problems in the environment, how do you make 1242 without any 1260? I don't know if that is possible. I don't even know today.

Q That was to be my next question.

The decision was made originally to eliminate 1254 and 1260 and physically it was impossible to continue to sell virtually any PCB product without some of those substances, is that correct?

A I can't answer that. I don't know that you can -- a still is a still and if you can visually distill those materials and make an ultra-pure 1242, it would not have those other materials in that.

Q In your opinion, that was an initial way to start and in your opinion that was impossible?

A You'd have a column to the moon.

Q As you recall it, was a corporate decision made to proceed in two phases, the first being to eliminate as much as possible, the 1254 and 1260 products, and the second phase to go to reformulate the balance of PCB

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products in the functional fluids area?

A One, it was not a corporate decision.

Q Was it above the corporate level or below?

A No.

Q St. Louis?

A Right, down at the ropes. Bill Richard and Howard Bergen, in recognition along with whoever they were consulting with, that recognition of the problem to make these moves.

Q I meant a decision was made by Monsanto. It may have been made by a small group of people, but I assume made on behalf of the company.

A Yes.

t5 Q My question was was that done as a decision that we are going to have two phases, the first is deal with 1254 and 1260, and the second will be to deal with the balance of products?

A 1254, 1260 were a problem. The same question and at different points in time, 1242 was a problem. Now, two months later, 1242 was a problem and there was never, you know, to say it was a two-part situation, you were running so fast and the data is coming up and people are saying, wait a minute, 1254, 1242, 1248, you have 1260 in it. That is not a solution, so two weeks later

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what looked like a good possibility was dead in the water.

Q In your initial discussion on the subject with Dr. Richard, was he taking the position that sooner or later various forms of Aroclors would be discovered in the environment besides just 1254 and 1260?

A Yes, in the worst case, that is what he said.

Q And it proved --

A He said, "Get ready."

Q He proved to be right in that regard?

A You betcha, yes.

Q Did you participate in decisions on the marketing effect of these reformulations, what effect there would be on your customers?

A Yes.

Q Did you make any predictions or were you asked to make predictions as to the sales effect for a dropping altogether of PCB fluids or reformulation?

A Yes.

Q What predictions did you make and what form did they take?

A One, we couldn't drop the fluids immediately because there was no substitute replacement product to pick up the slack, so if they dropped PCBs on a given day,

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we would shut down the industry.

Q Is there anything else you did by way of a prediction?

A Obviously we had no replacement product as of the initial part of the PCB problem and our competition did not have the product to pick up the slack.

(Ms. Carol Dorge entered the deposition room and Ms. Joanna C. New left the deposition room.)

BY MR. POPE:

Q When you say there was no replacement fluid available --

A Right.

Q -- how were you aware of that?

A Because there was a shortage of coal tar acid in the United States and people making phosphate esters were importing coal tar acids from England and couldn't get enough and coal tar acids at that point were the only source to make a typical tricresyl phosphate. And without the coal tar acids, and not enough phosphate ester, you could not supply the demand of phosphate ester in the United States.

Q I take it implicit in what you said was that

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phosphate ester was the only real substitute.

A For high pressure equipment, it was the only answer. You could not go to water glycol in those systems.

Q Why was that?

A Because they were high pressure systems and you would evaporate the water glycol and therefore you could destroy the viscosity and destroy the pump. And when you destroy the pump, it explodes, so the hazards of playing around in high pressure systems are quite severe.

Q What reserach did you have available to you as to what the other possibilities in the marketplace were for replacement fluids?

A When?

Q '69.

A We knew the situation as far as our competition was concerned in their ability to supply esters and phosphate esters weren't as flame-retardant applications as polyvinyl chloride and they were in short supply. Part of the cause in this country was the coking industry supplying the steel industry had gone to higher and higher temperatures of coke in order to increase the rate of turnover on coke, which burned the coal tar acids,

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so the U.S. was no longer a big source of coal tar acids.

Q The by-product was no longer being available for your use?

A It was dramatically diminished so we wanted to make more phosphate ester, more tricresyl phosphate, what have you, and the raw materials were not available.

Now, that was not a good answer to what ultimately became the biphenyl problem, but we did develop new phosphate esters.

Q During 1969 did anyone suggest to you that the best thing for Monsanto to do would be to go to each one of its customers and tell them that the preference would be to eliminate all PCB fluids, but since no PCB fluid was available, they would have to discontinue until replacement?

A No.

Q Is there any reason why that suggestion was not made or raised?

MR. SCHINK: I object to the form of the question. It assumes that determination was made in '69 by Monsanto. I don't think there has been any testimony that that determination was made at that time.

BY THE WITNESS:

A In answer to your question, I feel that we felt

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that we are probably the best source of technology to come up with a replacement product that would satisfy the needs of the industry and we did that. And I feel we did that faster than anybody could have done this in the industry.

BY MR. POPE:

Q There was a lag time before a replacement?

A Nothing is continuous. As I told you, a thousand-hour test is a thousand hours and you can't do anything about it.

Q My question is why didn't the marketing people go to the customers during that lag time and tell them that there was a problem with the PCB-bearing fluids, but that Monsanto was currently working on a replacement fluid or a series of replacement fluids?

A I remember things I saw. Olson went out with that memo in early '70, isn't that right?

MR. SCHINK: You are testifying --

BY THE WITNESS:

A I don't know. The memo or the letter that went out to the customer relative to the 1254 and the 1260 and that was early February, I guess, of 1970. Somewhere in that period of time, obviously the work was starting on the terphenyl and utilization of terphenyl as

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a potential solution and initially I think people felt that even though we hadn't started to make the first fluid and started testing it, the terphenyl possibility was going to be a solution out of the biphenyl problem.

That later proved not to be true, but it was the desire and the feeling that we were handling the situation going into the terphenyl. So the customer didn't really have to be that concerned. We were going to get them out of the biphenyl problem by going into the terphenyl.

BY MR. POPE:

Q Some witnesses have testified that Monsanto's policy was in this area, dealing with this subject matter, to provide its customers with as much information as it was deemed they needed on this subject. Was that your philosophy?

MR. SCHINK: I object to that characterization of testimony of past witnesses. I don't think it is accurate.

BY THE WITNESS:

A If customers had questions, they were given answers, given truthful answers. There was no desire to hide anything.

BY MR. POPE:

Q Did there come a point in time when your salesmen

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were given this information to respond to questions about PCBs in the environment?

A It was a sales meeting in early 1970 and another one in the fall, and I don't remember. We had no money budgeted for the meeting and they said, "Do it," and so the people were brought in.

Q Small sandwiches?

A Yes. So somewhere in March or April of 1970, they were brought in and a whole discussion was presented. The whole problem was presented to them and they were told as much as we knew about the situation and told by, again, the people, whether it is a Bill Richard or Scott Tucker who came over and disclosed what they knew.

So the salesmen were equipped with as much information as was available and then they were brought in again in the fall.

Q Was that the first time this had taken place, early 1970, and then later you had another one?

A Yes, right.

MR. SCHINK: You are talking about '70? He already testified about '69.

BY THE WITNESS:

A There was also a meeting every year, but that year we had one early in '70 and one later in '70, two

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meetings that year.

BY MR. POPE:

Q I didn't understand your earlier testimony.

Is it your testimony that prior to that early 1970 meeting, there had been a '69 meeting?

A Right.

Q Where the same sort of things were discussed?

A I don't know. I would say if Bill Richard had information on 1254 and 1260 relative to the Swedish thing, it would have been brought up at that meeting in '69.

Q But you do not have any recollection either way?

A No, I don't even know the exact date when he went to Sweden and when that information was relayed.

Q The meeting with the salesmen in early '70, was that held in conjunction with the Olson letter you referred to customers?

A It would have followed up on the Olson letter because I think the Olson letter went out in February or whatever and that meeting would have been in either March or April.

Q And one of the purposes would be to assist the salesmen in responding to questions that came up?

A That came up, right.

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Q At some point in time did you become involved in discussions regarding incineration of Aroclors?

A Yes. I remember discussions that went on.

Q Can you tell me what was the context in which you got involved in that question?

A Well, there was a proposal to build an interceptor over at the Krummrich Plant. I guess it was built. I think it was built and the point was raised, not only of using it internally but of disposing of chlorinated biphenyls that customers had that they wanted to dispose of.

Q This was to be in lieu of the reclamation project that had previously been recommended?

A No, I think it was simultaneously with it that if products were so contaminated that they couldn't be used, the best way was to incinerate them.

Q Did that apply to some types of uses of products more than others, namely, the contamination?

A No, no. You can contaminate electrical, you could destroy and contaminate heat transfer systems and you could do the same -- nothing is idiot-proof.

Q Why were you brought into this discussion of the possibility of incineration?

A Because if the customer wanted to return it,

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how would we handle it, how would the customer bring it back to us, freight collect or freight prepaid, what would we charge them for the incineration; and a number that stuck in my mind was we were going to do it for three cents a pound or two cents a pound.

And I remember some of the people saying we can't do it for that and there was a question of whether some of the Pydraul materials were going to be contaminated with solvents and we might blow up the incinerator and how can we check each individual's drums and so the customer was not shipping materials back there that were not designed to go through that incinerator.

Q Was there ever a program in place whereby customers were encouraged to send back Pydraul?

A I think there were letters that went out that stated some details to customers if they wanted to send material back for incineration.

Q Was that offer accepted by customers?

A I don't know.

Q Were there people that called?

A I don't remember.

MR. POPE: Miss Reporter, I would ask you to mark a two-page memorandum as Johnson Exhibit No. 2 for

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identification. It is a copy of a memorandum from Mr. R. M. Kountz to three people, including Mr. Johnson, dated December 8, 1969.

(Johnson-OMC Deposition Exhibit
No. 2 marked for identification,
2/16/82, TLU.)

BY MR. POPE:

Q The initial question, Mr. Johnson, is whether that is a copy of a memorandum you received sometime following the date it bears, December 8, 1969?

A I would believe I saw this, yes.

Q Let me ask you this -- I have another copy of the same memorandum. Is that your writing?

A No.

Q Do you recognize that writing?

A It seems to be a note to Mr. Papageorge. I can't quite make it out. I would believe that to be Howard Bergen's.

Q Does that refer to the project you have just been testifying about?

A Yes.

Q Who is Mr. Kountz?

A He was our representative from the Engineering Department, Corporate Engineering, to our group so if

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we were to build an incinerator at Krummrich, it would have been the Central Engineering who would have been involved in the design and installation.

Q The second sentence of the memorandum states:

"A serious question and doubt do exist as to whether landfill is the proper disposal method."

Do you know what that reference is?

A Well, I would say that if you had 1254 and 1260 getting into the environment and you weren't sure how to get it and it was going into a proper landfill, from the landfill it was getting into the environment, the next choice you have is to incinerate it.

Q Did you participate in any discussions where the possibility was raised that the means by which PCBs may be getting into the environment were through places such as landfills where disposal had been made?

A Everybody was trying to figure out how it was getting into the environment, so whether it was going into a landfill and drums weren't of proper strength or whatever and it was getting into the landfill and it was being dumped; whether the people that were responsible for the landfill were really taking care of the industrial chemical in the proper way, somehow it was getting out and you have to stop it from getting out, so the proper

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alternative is either stop the whole thing or incinerate.

Q Sometime around that time, around December 8 of 1969, were your salesmen advised to tell customers not to dispose of PCBs in landfills?

A I really don't know relative to that timing.

Q Do you know whether it ever happened?

A No.

MR. POPE: I would like the reporter to mark a two-page document as Johnson Exhibit 3 for identification, being a memorandum from Jack T. Garrett to Mr. Howard F. Bergen, dated December 16, 1969.

(Johnson-OMC Deposition Exhibit
No. 3 marked for identification,
2/16/82, TLU.)

BY MR. POPE:

Q I would ask you to look at that memorandum, look it over, Mr. Johnson, and tell me if that is a memorandum you received sometime around December of 1969.

A I was there.

MR. SCHINK: The question is did you receive the memo.

BY THE WITNESS:

A I only have to assume that I received the memo because I was a part of the meeting.

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BY MR. POPE:

Q Can you tell me what were the circumstances under which that meeting was held?

A There was concern on the part of the Water Resources Commission, on the part of chlorinated biphenyls, and part of our reason for sitting down and talking with them was to explain what biphenyls are, not just one product, that they are a family of products based on the extent of chlorine.

The people up at the Water Resources Commission were really not familiar with this chemistry at all and the point was also about the industrial hygiene of these materials and that is why Jack Garrett made the visit.

I know they had this problem of fish kill or whatever they referred to.

Q Clams?

A Yes.

Q Was that a concern that the Michigan agency had as a result of large numbers of clams that died as opposed to generally what the subject matter was?

A Actually I think the reason for the meeting was caused by people from General Motors. I think the people from the Water Resources Commission obviously in

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Michigan have a close affiliation with General Motors and that there was concern about these materials being in Pydrauls, what was the source.

Q Why were you present, do you know?

A As he refers to it, the first Pydrauls, George Fague was the salesman out of Detroit. He accompanied us there. I think Scott Tucker went with and that again, this was their laboratory and doing their tests to provide them with accurate information in terms of kind of testing we were doing to determine these things and Scott, of course, based on what the Swedes had done had developed the techniques here in the U.S. and was willing to share that information with that laboratory.

Q Why was General Motors involved?

A General Motors used Pydrauls.

Q They were contacted by the State agency as a user of Pydrauls?

A I would say they had a close relationship with the State agency and obviously the automotive industry has had its own pollution problems in the State of Michigan.

I can't remember exactly, but know that we got involved.

Q General Motors asked you to get involved directly

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with the agency, is that right?

A Yes.

Q As you know, the memorandum refers to a letter from Mr. Frost who was with the agency and wrote to automobile manufacturers in Michigan?

A Yes.

Q Are they talking about the use of Pydrauls in the manufacture of automobiles, is that right?

A In the die casting operations?

Q Right.

A Yes.

Q Can you tell me anything more about what you heard at that meeting or before then about this clam kill at the Clemens River?

A I don't know the source of the PCBs even today. It didn't make any sense. In other words, it was not a user who could have caused that to go into the river, to the best of our knowledge.

Q Did you investigate or have some of your people investigate?

A We have our own sales records. We knew where the plants are that used the materials and it didn't fit that there is any plant close to the proximity of that river.

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Q Mr. Garrett finishes up by referring to this sentence:

"It must be realized, however, that if 1242 is ever proven to be a persistent environmental contaminant we could be out of business with Aroclor-containing fluids in the State of Michigan."

Was the thrust of this meeting to convince the people in Michigan that the only environmental problem was that arising from the use of 1254 and 1260?

A No, we didn't know.

Q What took place at the meeting as far as you know now that comprised that statement?

A They must have defined that the product was 1242, so maybe, from what you are saying that they had pinned down the isolation of 1242, Scott Tucker was along and if he confirmed that or they had some people and I don't remember the details of it. He might have taken samples back to St. Louis and analyzed whether it was 1242.

1242 could imply electrical, could have been a transformer that somebody --

Q As far as you now know, it was demonstrated to those people and they accepted the fact that it was not any of your users of hydraulic fluid?

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A I agree, but that does not lessen the concern.

Q I understand. The other sentence in the second page of the Garrett memorandum is that, "This meeting can be classified as successful in taking the immediate pressure off of Pydraul 312 sales."

Had there been pressure on your salesmen regarding the continued use of Pydraul 312 as of December of '69?

A Pydraul 312 was going into GM, going into the automotive industry and I would imply from that that maybe there was some concern about the polychlorinated biphenyl that was in Pydraul 312 and concern about the product.

Q What is Aroclor 1242?

A I don't know. I don't know the formulas.

Q Was it Monsanto's intent to use the letter from the Michigan Water Resources Commission as a marketing aid?

A That, that letter?

Q This memorandum of a meeting. There is reference in the memorandum to an expected letter from --

A Frost.

Q From the agency.

A No.

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Q Do you see the second page?

MR. SCHINK: You are referring to this letter, in the first page, here?

MR. POPE: Mr. Frost's letter indicating potential problems that arise from the discharge of any type of hydraulic fluid and that control of these fluids must be improved to avoid a potential threat to the immediate water environment.

I was referring to the second letter.

MR. SCHINK: Is that a different letter?

MR. POPE: If I was Mr. Garrett, I could answer, and I was not at the meeting. Mr. Johnson was. Maybe he could tell me what that was.

BY THE WITNESS:

A I don't remember the content of the letter that Frost sent to the automotive manufacturers and I would suspect that it was our effort to try and clarify the whole issue and I would also anticipate that --

MR. SCHINK: You don't have to speculate.

BY THE WITNESS:

A (Continuing.) I don't know. I would think that he was trying to write and clarify his own position to the Water Resources Commission.

BY MR. POPE:

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Q Did you have any discussions with Mr. Garrett or anybody else from Monsanto regarding distributing that letter from the Water Resources Commission in the State of Michigan to your salesmen?

A No.

Q Was any such distribution made of such a letter as far as you know?

A I don't know of it.

Q You have no recollection of such?

A No. I don't know that we ever got a copy of it.

MR. POPE: Why don't we take a five-minute break here.

MR. SCHINK: Fine.

(Brief recess had.)

BY MR. POPE:

Q Mr. Johnson, I am going to show you an eight-page document that has previously been marked as Papageorge Deposition Exhibit No. 47, first page of which bears the date February 2, 1970.

I would ask you to take a look at that and tell me if you have seen that before.

A Yes.

Q Did you assist in the development of the final draft of that document?

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A No.

Q Who had, as far as you know?

A Dale Smith and Don Roush.

Q When did you first see it?

A Probably right after that date.

Q That document refers to a change in procedure, does it not?

A Right.

Q It is with respect to receiving an analysis of used Pydraul. Is that a fair summary?

A Correct.

Q Did you participate in the decision to make that change?

A The question was one of cost.

Q In what sense?

A And timely response. Because what was involved is that people were sending samples into our laboratory which required analysis by our people and we had other things to spend time on. Findett Services was more than capable of running the analysis and so what we were trying to do was to switch.

Q Why were customers sending the samples to you for analysis, on what kind of questions?

A Acidity, degradation of the fluid, contamination

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of fluids.

Q Seeking answers to the questions of whether the fluid needed to be reclaimed?

A Reclaimed, yes.

Q And thereafter Monsanto was advising those customers beyond a certain date that Monsanto would not accept samples of that kind of used Pydraul anymore, but rather was suggesting that they go to independent contractors. Is that a fair statement?

A Yes, but if somebody really had a problem and we had to run an evaluation, we would do it.

Q Was there an increased volume of requests for these kind of samples as a result of increased publicity?

A No. These things came in, samples came in all the time from people who felt they had degraded the fluid. I think there was a bigger problem in the Therminol than Pydraul area because here they were subjecting it to very high temperature and they would degrade the fluid. It would go beyond the temperature.

Q Was it a case of your salesmen being too successful in that reclamation be examined?

A No, Therminol was the biggest problem because most people were using a heat transfer system and were operating at the upper limits and if sometimes they

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turned down or weren't circulating properly and overheated the fluid in the heat source, it degraded the fluid so it formed carbon on the fluid.

Now, your carbon would tend to just cause more problems in the heat transfer surfaces, so you had to do something about it.

Q In the normal operation of a die cast machine such as Outboard Marine Plant ran, all aluminum where temperatures reached in the fluids were on a regular basis sufficient to cause that type of degradation?

A No.

Q Was there any relationship between Findett Service Company and Monsanto?

A No.

Q Was there any reason why they were selected as the people to recommend people send their samples to?

A They were in St. Louis, so the proximity to St. Louis was very, very close. Findett had been reclaiming Pydraul for Bedford since 1965, so they knew the fluids.

Q Did Monsanto work with them in any way to provide them with technical background or assistance in connection with this process here in this memorandum?

A Sure.

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Q Did you work with that or was that a technical area?

A More technical. I would -- and analytical tests and things of that type, Bill Richard's group would have been supplying them with that information so they could accurately run the test.

Q Am I correct that assuming this is a sales information bulletin, Exhibit 47 went out to the salesmen of Functional Fluids?

A Saying that Exhibit 16 went out to the salesmen, right.

Q Was that a regular form of communication between the home office and salesmen?

A Regularly irregular. There was no precise timetable that those would go out.

Q Do you recall other sales information bulletins going out on the question of Pydraul and PCB?

A At this point, no. I am sure they did, but I don't remember.

Q I would like you to take a look at a multi-page document which we have marked previously as Papageorge Exhibit 28 for identification. The first two pages are a memorandum from you dated February 16, 1970.

A Yes.

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Q Are you familiar with that document?

A Yes.

Q I take it that is one of the documents that you and Mr. Schink went over in preparation for the deposition, is that right?

A Yes.

Q Can you tell me how that memorandum came to be put together in terms of the final language that was used and whose idea it was and what was the genesis of the document?

A I don't remember who told me to write it. I think it stands on its own in terms of what we were trying to do and it was a follow-up to the decision to eliminate the use of Aroclor 1254 and 1260 in our Pydraul products. And this is a close follow-up to Olson's letter.

Q In fact that letter may be right here.

When you refer to Olson's letter, you are referring to the letter of February 9, 1970, are you not?

A What is the date on this, 16 -- yes. Yes.

Q I take it from your answer that as of February 16, 1970, a decision had been made that 1254 and 1260 would no longer be sold, is that right?

A Correct.

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Q Who conveyed that decision to you?

A Probably Howard Bergen.

Q Was he your boss at this station?

A No, Don Olson through that period.

Q Can you tell me who assisted you in the language closing the February 16 letter?

A Probably my own.

Q Did you review with the technical field, either Dr. Richard or Tucker or any of those people, before you sent it out?

A I don't remember, I don't remember.

Q How about the questions and answers that are attached here. Did you prepare those yourself?

A No.

Q Who did that?

A I don't know. I felt that was the Public Relations Group and Bill Papageorge, but I don't know.

Q By this stage, you were consulting with Mr. Papageorge regarding the PCB matters, were you not?

A Yes, passing things on to him, yes.

Q Would it have been consistent with your regular practice before a report such as this went out that he would review it for accuracy or any other reason?

A Logical, yes.

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Q Can you tell me, this is a letter basically going to salesmen, is that right?

A Yes.

Q Not only the questions and answers but also the memorandum?

A I don't know that that was all packaged together as you have it. I assume that it was.

Q This was provided to us by the Monsanto lawyers, I think in this sequence.

In any event, the idea was to acquaint the salesmen with the company's latest thinking on the subject matter along with some background information such as the Chemical Week article to tell them that letters had already gone out to customers, is that right?

A Yes.

Q Why did you tell your salesmen that they could give only verbal answers? No answers should be given in writing.

A Because the authorities on the entire subject were back in St. Louis. If the customer wanted something in writing, then let it come from the people who are current on the information.

Q Was that consistent with the past Monsanto practices with regard to customers?

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A Yes.

Q Were there any subject matters that your salesmen were allowed to give customers in writing in response to a customer inquiry?

A If they got a request on hoses or O-rings, whatever, they had discussed the subject with someone in St. Louis and said, okay, here are the potential suppliers of those kinds of things, they could put together a letter.

Many of the salesmen did not have that much clerical staff available to them. They were sending their call reports on tapes to some other city to get them transcribed.

Q Your instruction with regard to PCBs to not give answers in writing had nothing to do with clerical.

A No, more in terms of being accurate with information and up-to-date information.

Q As far as you knew as of February 16, 1970, the material contained in this package was up to date?

A As best I knew.

Q Now, you say in the second paragraph:

"We want to avoid any situation where a customer wants to return fluid."

What does that mean?

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A Just what it said. We couldn't handle it.

Q Was that a change in position?

A The question of returning fluid and our being able to handle it, what would we do with it, put it into a landfill?

Q What was the customer supposed to do with it, Mr. Johnson?

A He could put it into a landfill just as we could and not incur the costs of bringing it back to St. Louis.

Q Are you referring here to new fluid or used fluid?

A The old fluid.

Q New fluid or the --

A In the system, right.

Q That's all?

A That's right.

Q You were not referring here to a customer who said that the fluid they bought last week, they decided they didn't want. Were you taking that fluid back?

A Sure, if he hadn't used it up, unopened drums, we are obligated for a year to take that back.

Q That was not intended by your statement to be covered here?

A No.

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Q Why did you tell your salesmen that you would prefer that the customer use up his current inventory before purchasing the new fluids to be available?

A We were in the throes of the change. If a customer wanted to return it, we'd have to accept it.

Q Did that happen?

A No, I don't remember anybody returning fluid.

Q As a matter of fact, as this program evolved you used up all of your PCB-bearing Aroclors in replacement of new ones?

A In some cases we didn't even have any inventory. It was already gone and with the introduction of new products, we actually were behind on orders.

Q For what, the old or the new?

A The old.

Q Were you continually manufacturing any of the old products at this stage?

A No. In fact production planning was instructed don't make anything unless we absolutely have to have it.

Q In the same paragraph, you say:

"We don't want to take the fluid back,"
and that seems to be in my copy anyway underlined. Was that a marketing instruction to your people?

A Yes, um-hmm.

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Q Why was the fluid being replaced?

A Why was?

Q Reformulated?

A To get 1254 and 1260 out.

Q Out of the environment?

A Out of the environment and out of the product.

Q Would not that have been more effective to reclaim whatever 1254 and 1260 was still in your customers' hands at that stage, would that have been a better way to do it?

A In drums?

Q Yes.

A Rather than in the system?

Q Yes.

A If they wanted to return it, we would have accepted it in drums.

Q But that is what you are talking about here when you --

A We don't want to.

Q Don't want to take the fluid back, sell them the replacement?

A Right. If he had an inventory of ten drums and he wanted to return that material, we would be obligated to take that back. If he had one drum left

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and he wanted to return it, we would be obligated to take it back. If he needed more material to continue his process or continue his operation, he'd have to buy more materials. He would be buying the new product, not the old, so what you are asking about is the man who had one drum and wanted to return it.

If he wanted to return it, we'd be obligated to return it.

Q But you were instructing your salesmen in trying to keep it and replace --

A Keep it running.

Q You say here, referring to the customer: "He will then top off with the new fluid and eventually all Aroclor 1254 and Aroclor 1260 will be out of his system."

Who advised you that customers should be instructed or recommended by salesmen to top off with the new fluid?

MR. SCHINK: I object to the characterization of recommendations. It is not what the letter says, Mr. Pope.

BY THE WITNESS:

A Do you realize shutting down is the other alternative and taking the old fluid out and then replacing with new which may put a piece of equipment,

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especially an air compressor in a pumping station, gas pipeline, down and for the most part they are not going to shut it down. They are going to stay just operating.

BY MR. POPE:

Q But my question is who advised you that topping off with new fluid would be the acceptable way?

A Why isn't it?

Q I am just asking you where you got the information.

A There is no question of compatibility which is the problem with some of the other fluid we got into, so topping off would present no problem. There is a compatibility problem and I would say one of the reasons is that there is some of the products we came out with were not necessarily totally compatible at certain levels.

Q With respect to those products' compatibility, it was one of the essentials that went to your designers, to your chemists, is that right?

A Right.

Q That they had to develop a new formulation that would be compatible with the old?

A Yes.

Q And it is for this reason that the customer

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could top off with the new fluid, right?

A Yes.

Q What do you mean when you say eventually all Aroclor 1254 and 1260 will be out of the system?

A Because the new products won't be containing the material.

Q Where would the old material be going?

A Probably in leaks, probably collected into Oil-Dri and rags and whatever and eventually out of the system. And those things would be going into a chemical landfill.

Q Chemical landfill?

A Whatever, a landfill.

Q Before you sent this letter out, did you consult with anybody in the research area with respect to how long Aroclor 1254 and 1260 would remain in a system after it was no longer being used?

A I think I would have to give you an answer, it depends on the utilization of equipment.

Q Did you ask anybody? Did you consult with anybody about that?

A Our people in Research are not mechanical engineers. They are chemical and you'd have to talk to someone who is responsible for operating a piece of

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mechanical equipment and try to determine what the usage rate is, how much fluid, replacement fluid they put into a system; what they lose in the course of a month or a year.

Q Does that mean you didn't consult with any of your technical people on that question?

A I don't think it's important. I don't think your question is important.

MR. SCHINK: The question is did you.

BY THE WITNESS:

A No. It is not relevant.

BY MR. POPE:

Q The middle couple of paragraphs or I guess the third full paragraph of your memorandum I think is fairly described as encouragement to your salesmen not to be defensive in this changeover question, is that fair?

A Yes.

Q Was there a need that you perceived to exhort them to take a positive position on this question?

A No. I always think positively and if the data was suggesting that we had a problem, I felt we had the people within Monsanto who could come up with a logical solution and we could eventually come up with a product that would present no problem to the environment.

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Q Was the question of how the changeover was to be handled, was that one that was causing marketing or sales problems for your department?

A The history of Pydrauls presented problems in changeover from one fluid to another in terms of compatibility. Even within our own products, you couldn't necessarily take F-9 and change the system to 625, a higher viscosity, without creating some problems. And you had to alert the customer of the problems.

Changing of fluids must be done in a very precise way because the chemistry is different.

In this particular instance, we were seeking compatible situations.

Q So you are trying to avoid any problem, even if there wasn't one there already?

A We don't want to create a problem where the pump fails, a piece of equipment goes down. Our competitors were after us, sure.

Q As to this memorandum, written with respect to the products listed here, Pydraul 625A, ACA, ACA Winter Grade and 540A, are those the ones that were 1254 and 1260?

A Containers that we changed at that point in time, I think some of the other Pydrauls contained 1254

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and 1260 percent.

Q As of February 16, 1970, was it your position or Monsanto's position that customers using other PCB products were not basically the 1254 and 1260 products: That those customers need take no special action that they hadn't taken before with regard to PCBs?

A Not true.

Q What was the position of Monsanto with regard to those customers?

A We were telling those customers we were going to be out with replacement products as soon as we could get them tested and into the system.

Q So as of that time, virtually all of your PCB customers were being told that PCBs were going to be phased out?

A Out, yes.

Q Regardless of Aroclor number?

A Right.

Q You say here:

"We have no replacement products for Aroclor 1254 and 1260. We will continue to make these products; however, customers will have to use their own judgment on continued use."

Was that an indication that you were not

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phasing out the use of those?

A It was one customer who had used Aroclor 1254 in motors and he had gone to the President of Monsanto because we were going to shut him down. And there was an effort under way to find some suitable replacement for him and that really was not relative to that.

Q A small user?

A Yes, like two drums a year. I don't think our group sold 1260.

Q Referring to the next two pages of this exhibit, which is a copy of Mr. Olson's letter dated February 9, 1970, am I correct that the intent was that that letter go to all customers regardless of whether they were using 1254 or 1260 or not?

A It went out to all Pydraul and all Therminol and all dielectric customers.

Q Did you review this letter before it went out?

A I don't remember.

Q Would it have been your practice to review something like this going out to your customers from Mr. Olson?

A I would believe that he probably showed it to me.

Q Were you of the opinion as of February 1970 that

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PCBs with the chlorine content of less than 54 percent "appear to present no potential problem to the environment"?

A As of that date, yes.

Q Was that opinion reached because no such percentages had been disclosed in the environment at that stage?

A Right.

Q Did you ever suggest to Mr. Olson or anyone else at Monsanto that the effect of this letter when received by customers using some of the products referred to in No. 1 here might indicate that there was no problem with those fluids?

A As of the state of the art as of that day, we didn't feel we had a problem with those products. We are in essence saying to the customers that these products contain 1254 and 1260 and as of that date, we felt we did not have a problem.

Q Environmental problem?

A Right. Now, February 10.

Q Well, at least by the following week, February 16, that was still the same case, wasn't it?

A Yes, it was terrible.

Q During this general period, did you have any

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meetings with Monsanto people with regard to toxicity of PCBs?

A No.

Q Was this memorandum dated February 16, 1970 issued shortly before your first sales meeting of 1970?

A Yes.

Q That we discussed earlier.

A Yes.

Q And the discussion of these matters referred to in this memorandum and the attachments, did they occupy the bulk of that meeting?

A I would say by the time of the meeting, we recognized other problems and what was in that memo plus other developments were discussed.

Q What other type of developments?

A Probably recognition of the other Aroclors as being potential problems. It went that fast.

Q As you recall, this memorandum would not be an accurate agenda or summary of what took place?

A But part of it. It was yesterday's newspaper.

Q And there were other things regarding the lower Aroclors?

A Yes.

Q As of the sales meeting, whenever it took place

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in early 1970, had a new formulation been prepared to replace A-200 which Outboard Marine had been using?

A Probably under way.

Q Did you participate in meetings with Mr. Damiani or anybody else regarding Outboard Marine and the handling of a reformulated fluid for them?

A Yes.

Q Did that require a second visit to Johnson Motors?

A Yes.

Q It wasn't any interval, there wasn't any other in between there?

A I had been on a fishing trip with a couple of the people from Johnson.

Q Who was that?

A Bill Bratzke and John Nevill.

Q Was that St. Louis?

A No, we went out to Wisconsin.

Q Who was there from Monsanto?

A Bob Damiani, Jack Fallon, myself, Bill Bratzke, John Nevill, somebody from Bethlehem Steel, I believe, or Republic. I can't remember. There were six of us.

Q Was this a relatively routine occurrence?

A We went up on a Friday up to some lake in

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Wisconsin and went fishing over the weekend and came back.

Q Did Monsanto pay the tab for that?

A Monsanto paid for the room and meals. They provided their own transportation.

Q Was there any discussion of anything that was at all relative to whatever we have been talking about?

A No, because I honestly believe it was prior to the real start of this problem. I think it was sometime in '68.

Q Was it as far as you were concerned, a one-time deal?

A That is the only time we ever did it.

Q Do you know if Bratzke, Nevill or anybody else from OMC attended other fishing or other social occasions with Monsanto?

A No, I don't. Bill Bratzke had retired and it was just a nice thing for him and he wasn't going to live very long.

Q We are talking about the second trip then, I guess, to OMC?

A Right.

Q What was the occasion for that?

A We were into the throes of reformulation, going

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to terphenyls, and I joined with Damiani and we made a call on Johnson Motors, meeting with John Nevill and also Mr. Stenberg.

Q Can you give us an approximate date?

A No, I can't, sometime in 1970. There wasn't snow on the ground. That is all I do know.

Q That doesn't eliminate much.

A I know, but I can't help you any more. I would say it was either in the latter part of spring or early part of fall, I just don't know. It could have been in the summer.

Q Do you know what substance was changed for the Johnson use, what the new substance was?

A Terphenyl, chlorinated terphenyl.

Q Was that A-200, do you know, A-200A?

A I cannot answer as to whether there was a Pydraul A-200A followed by A-200B. I just don't remember.

Q Has Mr. Schink shown you documents that refreshed your recollection on that one?

A The only document I can remember referred to Pydraul A-200B. If there was A-200A, I really don't remember.

Q Can you describe the visit and what preparation you went through ahead of time?

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A It was a normal routine call as far as John Nevill was concerned, but we wanted to sit down with Stenberg and go over the chemistry change and what we were trying to achieve and we went up to the lunchroom and had lunch. And I drew him, on a napkin, a diagram of a biphenyl versus terphenyl and the chlorine content of the materials, to the best of our knowledge; the fact that the higher chlorinated materials just didn't seem to degrade, going to the terphenyl, maybe the chemistry will be biodegradable and get them out of the problem and yet it will not hurt them on fire-resistance or lubricating properties and should perform as well in the plant.

Q I take it we are talking about a time after February?

A Has to be.

Q The 1970 letters went out?

A Yes.

Q At the time of your meeting, they had still been using A-200 which they had been using for several years, is that right?

A Yes.

Q Was Mr. Damiani present with you?

A Yes.

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Q The purpose was for you to explain the change and hopefully get them to agree it was a good idea?

A And we would formulate product for them and supply some drums so they could test it in one of their machines and that we had done our pump test in St. Louis.

Q That had not been done at that stage?

A I don't remember if it had to be done.

Q What response did you get from them, Stenberg, Nevill?

A He did not object to the change in chemistry. We talked about the discharges from the plant and talked to him about containing fluid and preventing fluid from getting out into the environment. And he related to me their discharges were going to the Metropolitan Sewer District and I said, "Well, I assume the Metropolitan Sewer District is able to handle this."

And we talked about the data of the findings of the Swedes having found it. By that time, I was aware of the Paragon falcon problem and the problem with the pelican and there were a number of such birds and marine life. I don't know if I was aware of the WARF study and contamination in Lake Michigan, but we talked about the general topic of stop using PCBs.

Q Did that surprise you that Stenberg said the

effluent was going into the metropolitan sewer?

A I had no reason to doubt that from their facility, they might be tied into the Metropolitan Sewer District. I did not believe as a company involved in leisure products concerned with sailing, outboard motors or fishermen, that they would permit anything to go into Lake Michigan.

I understood their concerns about the Wankel engine. They were looking into terms of going from the combustion engine to the Wankel engine.

Q You were aware in past circumstances they had expressed a company position that they did not want to contribute anything to pollution?

A I just assumed that.

Q Did you talk at all about the oil interceptor tanks?

A No.

Q Did you talk at all about the collection system, the trenches and what it was leading to?

A I don't remember.

Q Did you talk at all about reclamation of Pydraul?

A I'm sure it came up in the discussion, that they were doing it.

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Q They were still --

A Doing their own.

Q Doing their own?

A Yes.

Q They were consulting with Damiani on a regular basis on that subject, were they not?

A Well, there was also a question as to whether Outboard Marine wanted to enlist the services of Findett Services and do reclamation through them or continue their own little reclamation operation that they had going.

Q How was that work done, what were they doing by way of reclamation?

A To the best of my knowledge, they were collecting it out of trenches. Then they were filtering that material and reclaiming the material and recycling it back into the machines.

Q Was that technically any problem?

A No.

Q Did Damiani talk to you prior to that visit about what he had done in recent calls --

A I don't remember.

Q -- at Johnson?

A I don't remember.

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Q Do you remember whether he discussed with you, either at the meeting with Johnson or before that, the status of their efforts to reclaim Pydraul?

A I had always known that they were reclaiming with a small system on their own.

MR. POPE: I'm going to ask the reporter to mark a copy of a call report to Mr. Pogue dated March 23, 1970 as Exhibit No. 4.

(Johnson-OMC Deposition Exhibit
No. 4 marked for identification,
2/16/82, TLU.)

BY MR. POPE:

Q Mr. Johnson, I am going to show you a copy of this call report on Johnson Motors entitled IF-3 and ask if you have ever seen that before.

A I would believe I saw this, yes.

Q Do you know what Mr. Pogue was doing out there at Johnson Motors?

A Yes.

Q Can you tell me?

A We had instituted the program to take a look at doing Pydraul reclamation within Monsanto and it goes back to the program of possibly setting up six or eight sites around the country to reclaim fluid.

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I would say the program was started, probably the latter part of '69 and he went up to Johnson Motors to talk to them about taking samples, to determine whether Johnson Motors was a prospect for reclamation.

Q Where was he taking samples from?

A It was going to be determined by Johnson Motors where they felt there was any possibility of fluid getting out the plant, whether that was interceptor pits, whether that was fluid that could be reclaimed, how much, where.

I see in here where he is talking about how much is lost just on burning aluminum. It was also a question, was there anything getting out of the plant.

Q Was he assisting people at Johnson on that question, Mr. Pogue?

A He was prepared to take samples with Johnson Motors' approval on any effluent coming out of the plant to determine if there were any Pydrauls in that.

Q You say he was prepared to. I take it he did?

A He did.

Q Do you know what the results of his analysis was?

A That there was Pydraul coming out. I'm sure you have another document somewhere that shows that

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Scott Tucker ran some evaluations.

The other point you have to understand is that Pydrauls are getting out or Aroclors are getting out in the environment. Nobody really had a fix on how the hell it was getting there.

Q There is a reference to Biodize. Is that a company referred to earlier, a subsidiary of Monsanto?

A Division of Monsanto.

Q Division of Monsanto?

A Yes.

Q What was their relationship to the job that Mr. Pogue was doing?

A They were capable of engineering and designing whatever kind of equipment or vats or collector or what have you and had been working on some pollution control for some cities, I guess they were doing a job for some outfit in New York, some city up in New York State, and they formed a company here in Chicago. And we brought them in because they were better equipped at this than any of us.

Q Were they owned by Monsanto?

A They were a division of Monsanto, yes.

Q And eventually they went out to Outboard Marine and made a presentation of some kind, didn't they?

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A Yes.

Q Were the results of Mr. Pogue's sampling analysis completed by the time you sat down with Mr. Stenberg?

MR. SCHINK: I object to the question. It assumes the meeting with Mr. Stenberg occurred after Mr. Pogue's visit. I think the witness testified his meeting with Nevill and Stenberg was somewhere in the fall or summer of '70, he couldn't pinpoint it.

BY MR. POPE:

Q That is the purpose of the question, Mr. Schink.

A I would only say it had to be before Pogue went up there.

Q Your meeting with Mr. Stenberg?

A Yes.

Q Before March of 1970?

A Yes, it's got to be.

Q That would also make it closer in point of time to the middle of February, 1970. Does that make sense?

A Yes.

Q Therefore, at least as far as you recall, there was no discussion of Pogue's analysis at the time you sat down with Stenberg and talked to him about terphenyls?

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A No, because his statements were things were going to the Metropolitan Sewer District.

Q And the analysis that was done by Pogue ultimately showed that was not true at all?

A Correct. They found Pydraul in some of the effluent.

Q That is what is referred to right here in Exhibit No. 4 of Mr. Pogue, beginning in the second full paragraph, is that right?

A Yes.

Q What was the procedure at Monsanto at this time for conveying information from a call report to a customer, such as a situation where Mr. Stenberg being under the impression as he told you that effluent was going to the sanitary sewer and somebody at Monsanto finding out that that is not true at all, "Water effluent discharges have evident Pydraul content."

Was there a procedure for conveying this information which is an internal Monsanto document to a customer?

A Yes. I would say once the concrete evidence, numbers and what have you existed based on samples that we had, that data would then be presented back to Johnson Motors and we would advise them of what we found

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in those samples.

Q Would that data be taken in accordance with the ordinary procedures that the company had at that time to be provided in writing, the actual numbers of what was found in the samples?

A I don't doubt that we would take what we received from Scott Tucker and give Johnson Motors a copy of it.

Q That would be the ordinary practice?

A Yes.

Q And when you say we, it would be the salesman who would basically do that, is that right?

A Yes.

Q Tucker would provide the analysis data to somebody such as Damiani?

A Right.

Q And he in turn then would show up at Johnson Motors and present the information?

A Correct.

Q That is the way it was supposed to work?

A Yes.

Q As far as you know, is that the way it worked with Johnson Motors?

A To the best of my knowledge.

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Q It was the company position as soon as that information was available to present it to the customer as soon as possible, was it not?

A Yes, sir.

Q Was there ever a proposal that Mr. Pogue or any of the people he associated with at Monsanto presented to Johnson Motors regarding this reclamation project he had been investigating?

A It was determined before we ever got into it, we could not do it economically.

Q The company decided as simply not as it applied to Johnson Motors, but throughout the country that it could not go forward with the project?

A Right.

MR. SCHINK: You are talking about the problems of Monsanto doing the reclaiming itself as opposed to whatever Outboard Marine would do, Mr. Pope?

MR. POPE: As opposed to anything else under the sun, Mr. Schink.

BY MR. POPE:

Q Who conveyed that change of decision to people at Johnson Motors?

A A decision of that type would have to be conveyed by Mr. Damiani.

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Q Do you know that he did or not? Do you know that he did?

A I assume he did and there is no reason to believe that he didn't, but I don't know when that decision was made.

Q Prior to the decision being made, it was your understanding that Outboard Marine was interested in pursuing that proposal, is that right?

MR. SCHINK: Excuse me. I object to the form of the question. It mischaracterizes what the witness said what Monsanto was considering doing.

BY THE WITNESS:

A You see, Johnson Motors was not necessarily a prospect for this program. It was a prospect in a cooperative effort to define with the effort where the Pydrauls were going. They cooperated in letting us take water samples.

Whether Johnson Motors would become a part of the project if we decided to go into reclamation was questionable.

BY MR. POPE:

Q I see. So when Mr. Pogue was out there in the plant at Waukegan, one of his purposes was to determine the overall question of how does Pydraul get out into

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the environment?

A That's part of it and then it gets out to the Lake, the opportunity to estimate the need on the part of Johnson Motors to have someone reclaim that effluent and return the Pydraul to them.

Q So we are talking about reclamation of Pydraul that has escaped from the plant, are we not?

A Right.

Q And in the situation involving Johnson Motors, what are you talking about? Are you talking about the Ditch that runs north?

A Wherever he took those samples.

Q What was Mr. Pogue telling Johnson Motors as to his purposes in being out there?

A Again, we are going back to early -- late 1969, early '70, not knowing how PCBs, Aroclor is showing up in the environment, going to a customer like Johnson Motors who we had good relationships with and saying, can we work with you, can we take samples, can we find out if Pydraul is getting out of your plant? Where is the possibility that it is getting out, in overflow, from the interceptor pits or whatever, what concentrations are there?

And Johnson Motors was cooperative in

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letting us take the samples, so we come back and we say, hey, there is Pydraul in there and there is this quantity showing up. We give the data to them. We did that with many other customers we selected, to go and talk to, to find out if one, they have a fluid in pits or two, if it is getting out in the effluent.

Q Mr. Pogue's job, I believe you told me this morning, is 100 percent of his time was devoted to Pydraul reclamation.

A The Pydraul reclamation study as a potential business for us.

Q And was that fact conveyed to the people at Johnson Motors?

A I don't doubt it.

Q Do I understand you that when Mr. Pogue was at Johnson Motors, part of his task was to study the possibility of the Pydraul reclamation and the other part of his test was to study how Pydraul escapes from a plant such as Johnson Motors?

A True.

Q Going back to Mr. Schink's objection, assuming some information was conveyed from Monsanto to Outboard Marine that Monsanto was considering a reclamation project, that is reclaiming Pydraul that had already

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escaped from the plant, was it your understanding that people at Johnson Motors were acceptable or enthusiastic about such a possibility as it might apply to their plant?

A Biodize was brought in. Biodize was the type of company that would engineer, design and construct whatever it would take to improve upon the present interceptor system to collect the fluid.

Q I take that to mean yes to my question that Johnson Motors was interested in this process enough to move to the next stage which was bringing in Biodize to examine their plant, is that right?

A Right.

Q And one of the things that Biodize would do upon being retained would be to examine the interceptor pits and examine the rate of flow and whether it was an effective or was not an effective rate?

A Right.

MR. POPE: Let me ask the reporter to mark for identification, a three-page document which appears to be a memorandum from Mr. Fowlkes to Mr. Pogue dated August 11, 1970 as Exhibit No. 5.

(Johnson-OMC Deposition Exhibit
No. 5 marked for identification,
2/16/82, TLU.)

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BY MR. POPE:

Q Mr. Johnson, I will ask you to take a look at Exhibit 5 for identification and tell me if you have received a copy of it on or after August 11, 1970.

A Yes.

Q Can you tell me whether this study that is being referred to by Mr. Fowlkes refers to a fluid absorbent evaluation?

A They looked at various materials which could be thrown on the floor which absorb the Pydraul and then the potential of recovering the Pydraul out of the absorbent.

Q Is that telling us anything at all as to whether the potential reclamation project was still under way at that time?

A I would think so. I would think it is a report on work. Whether the project was dropped at that time and this was a result of work done up to that date, I don't know.

Q If it had been dropped, it hadn't been dropped too much before this, I take it?

A Right.

Q Were there, as far as you know, any conclusions reached, which conclusions were disseminated to your

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customer regarding the best kinds of absorbents?

A I don't remember.

Q And your answer is you don't recall?

A No.

Q I believe you anticipated me a moment ago, Mr. Johnson. There are two memoranda I would like you to take a look at. One is a memorandum from Pogue to Tucker regarding chemical analyses, stream effluent, Johnson Motors, and something else. It's been blocked out and what appears to be a response from Dr. Tucker to Mr. Pogue. The first one is dated October 14, 1970, the second one, October 19, 1970. Take a look at those and tell me if you in fact received copies of those reports shortly after the dates they bear.

A I must have.

Q Those are in fact what we were talking about earlier, are they not, a result of studies, analyses of samples that Mr. Pogue had taken at Johnson Motors?

A Right.

Q This memorandum dated October 19, 1970, is that the type of data that the salesman, Mr. Damiani, would have presented to Johnson Motors?

A He could have hand carried it to Johnson, yes.

Q Would it have been the practice when doing that

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for the salesman to sit down with whoever he was telling within the company, to discuss what the findings were and what they meant?

A Certainly.

Q And what action would be called for by the company?

A Certainly.

Q Do you know whether that took place on this particular project?

A I have every belief that it happened.

Q I will never know if that is a yes or a no.

A That's a yes.

Q What is that belief based on?

A That that kind of data was very important, not only to us but to Johnson Motors. And they were co-operating with us and allowing us to take samples and we were obligated to provide the information back, good or bad.

Q Do you have any objective indication that that kind of information was in fact provided to Johnson Motors, objective indication that somebody later told you or you saw evidence of it or somebody later acted like they received it?

A I can remember that Johnson Motors was quite

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concerned that there was effluent getting into their plant, Pydraul getting in.

Q Did you ever talk to Mr. Damiani regarding whether he had provided this October 1970 memorandum to Johnson?

A I can't remember.

Q With regard to that memorandum, it does not list as one of the people to get a copy, Bob Damiani.

A Well, Pogue requested the data. Pogue would have either hand carried this and made a call with Bob Damiani and presented the results or would have sent a copy to Bob Damiani for presentation to the people at Johnson Motors.

Q That is the way it should work under this circumstance, is that it?

A Yes.

Q Can you tell me who Dietrich & Catlevi are?

A Let me look. I don't know either name. I don't know.

Q Was there a general system or practice of sampling at major customers' plants for effluent containing PCBs during this period of time?

A Pogue had selected a number of customers to approach on collecting samples to evaluate in the same

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manner and to provide the results, not only internally to themselves, but also back to us.

Q Would Lester have been one of the places where that would have been done?

A I saw that letter and Lester, not logically because they really weren't a die caster. Obviously Lester had expressed concern or Lester had that system up there and it was one of these that Don Pogue indicated would cooperate with us and we'd get information.

Q In fact Pogue found --

A PCBs.

Q In their effluent as well, is that right?

A Yes.

Q These are the manufacturers of --

A Right.

Q -- the die cast machines themselves?

A There is a Lester and I can't remember. There is a Lester Die Casting or Lester Engineering and then, of course, Lester who manufactured die cast machines and I am not sure on that one.

MR. POPE: I would like the court reporter to mark the letter we are referring to as Johnson Exhibit 6 for identification, being a copy of a portion of a letter from Mr. Pogue to Robert Lester dated October 22, 1970.

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(Johnson-OMC Deposition Exhibit
No. 6 marked for identification,
2/16/82, TLU.)

BY MR. POPE:

Q I show you Exhibit No. 6. It is the letter
we have been discussing, is it not?

A Yes.

Q It would have been Mr. Pogue's practice to
send you copies of various customers to whom he had
called on for purposes of doing this sampling?

A He reported to me.

Q In other words, yes?

A Yes.

Q Did he send you a copy of everything he wrote
relating to Pydraul?

A Yes.

Q I can see why you had such a big stack.

The terphenyl substituted fluid, whatever
its number or designation was, was in fact introduced at
Johnson Motors, was it not?

A Yes. It was tested by them, too.

Q Did you have any further communication directly
with Johnson Motors regarding that substance?

A I don't remember any.

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Q Was it an acceptable substitute for A-200?

A As I remember in all characteristics that they needed, yes. I don't believe there was any decrease in fire-resistance. As far as its lubricating qualities, it was equivalent in performance.

Q I have another document that I believe we used at the Papageorge deposition, Exhibit No. 69 for identification. It indicates you received a copy of this memorandum in its original state.

I presume you did receive a copy?

A Yes, I remember this.

Q Sometime in December of 1970?

A Yes.

Q What was the purpose of that memorandum?

A The purpose of the memorandum was that as we looked at the parts per million and hearing about parts per million, we had to be concerned about bulk shipments and residual material left in trucks. And the ultimate coming out of this was probably we weren't going to be able to supply these kinds of fluids in tank trucks.

Q Are you talking about PCB-bearing fluids now?

A We are talking about initially PCB-bearing fluids and then, of course, later the terphenyl combination with monochlorobiphenyl. As we look at these things,

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when you started looking at the drums, for example, and saw what can be left at the bottom of the drum and the next was what about the tank truck shipments and how good are the customers in draining all of that out of the tank truck and based on our surface attention, what was in the tank truck, what does he do with the tank truck after it is dumped and who was it, Gordon, must have been in traffic or something and provided this list to Papageorge of who were the carriers we shipped Aroclors and what were the customers involved.

And then, of course, the plant which they came from, these are all carriers in Arkansas.

Q They seem to indicate to me that as of December 1970, Johnson was using a substance called A-200B, is that correct?

A That's what it shows.

Q Was that as far as you know, the terphenyl you have been referring to?

A Yes, sir.

Q That terphenyl contained PCBs, didn't it, that substance, that fluid?

A Eventually it was defined that it contained PCBs.

Q As sold?

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A Not intentionally, but in the system, right.

Q But as sold?

A As sold, contained, yes.

Q This is a one-page exhibit which I will ask the reporter to mark as Johnson Exhibit No. 7, being a memorandum from Mr. Pogue dated February 19, 1971.

(Johnson-OMC Deposition Exhibit
No. 7 marked for identification,
2/16/82, TLU.)

BY MR. POPE:

Q Calling your attention to this memorandum, Mr. Johnson, did you receive a copy of that memorandum sometime on or after February 19, 1971?

A Sure.

Q Does that memorandum indicate to you that the reclamation project we have been discussing today was still alive as of that date?

A Yes. I would say it was potentially alive.

Q The decision that we have been talking about, that had not been made as of February?

A Looking at those, it hadn't.

Q Had you been asked to provide other persons in that group with information regarding the likely needs of your customers in terms of volume if this project went

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forward?

A Pogue had done that.

Q He had himself a survey of some customers?

A Yes.

Q Was that directed to quantities of materials, both inside a plant as well as that which had escaped from the plant?

A It looked at geographical areas of the country, volumes sold, projections in terms of what might be reclaimed inside plants, potentially may be getting out in effluent and also possibly reclaimed, Oil-Dri, the other materials that exist within a plant to see if that fluid could be recovered from those, so yes, the project was still going on and he was also looking at the Therminol, but this was now based on terphenyls.

Q It sounds like the survey he conducted was very extensive, is that right?

A Yes, and he was very insistent upon a decision.

Q Was it reduced to writing, the survey?

A Yes.

Q Circulated among various people such as you are listed on the top of Exhibit 7?

A There were maps and projected sites and looking at geographical areas as to whether you could do this or

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not.

Q Was the change in reformulation of fluids, did that make the reclamation project more important, less important or have no effect?

A It had no effect. The reclamation project could have flown, gone to phosphate esters.

Q It appears to me from this Exhibit No. 7 that the reclamation project by February 1971 had grown to include incineration. Was that true?

A I don't remember.

Q Does that refresh your recollection?

A Well, I know if you go back to your other things, they were still talking about the Rocklins, Purle. They were talking about, yes, I'm sure he was encompassing the incineration unit that was going in at Krummrich.

Q As of this time, was it still Monsanto's recommendation that an independent contractor such as the company in St. Charles, Missouri, reclaim used Pydraul and allow us to reuse it?

A Findett was still reclaiming, yes.

Q And --

A Other were, too, then.

Q After you ceased selling PCB fluid, did you continue recommending Findett as a service for the

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reclamation of Pydraul fluids including those that contained PCBs?

A Findett could reclaim fluids and was reclaiming fluids coming out of machines that may have had PCBs in them, yes.

Q There was some basic change in the company's policy?

A No.

Q This document may have been identified during the Davidson deposition, but I am not sure. I would ask the reporter to mark as Exhibit No. 8 a two-page memorandum, call report dated April 28, 1971.

(Johnson-OMC Deposition Exhibit
No. 8 marked for identification,
2/16/82, TLU.)

BY MR. POPE:

Q I show you this call report dated April 28, 1971 and ask you if you received a copy of that shortly after it was prepared?

A I would assume I received a copy of it.

Q You hadn't been out to Johnson's plant since your visit with Stenberg in early 1970, had you?

A No. My job had changed at this point and I was back in Field Sales responsibility and not directly

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responsible for the Pydraul. Indirectly, yes.

Q By this point had Wilson Overall taken over as salesman for selling to Johnson Motors?

A Must have.

Q Can you tell me who Monsanto-EnviroChem is?

A That is the Biodize.

Q They just changed their name?

A Yes.

Q Is this a report of the meeting you referred to earlier whereby we, then talking about Biodize, the people from Monsanto on reclamation came out and made a presentation or recommendation to Johnson Motors?

A No, I would say the material you present on effluent was presented long before this.

Q I am sorry, you did not understand my question.

A Okay.

Q Earlier you told me that ultimately Biodize or EnviroChem was brought out to Johnson Motors and my question is is it your understanding based on the dates set forth in Exhibit No. 8 that that is a report of that meeting?

MR. SCHINK: I object to the form of the question. It assumes there was a single meeting. I don't think there is anything in the record indicating that.

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In fact you showed him documents from earlier dates that also referenced Biodize personnel being at Johnson Motors.

Q Can you tell me, Mr. Johnson -- I don't want to put words in your mouth --

A I can only assume that the meeting was called by EnviroChem, wanting to go back and talk to Johnson Motors people and as he states in here, to bring the data together to determine if gathering and reclaiming the fluid could affect a cost savings to Johnson Motors.

Damiani is gone.

Q Who is Jerry Davidson?

A Jerry Davidson came in from the West Coast as salesman and took over as Tech Service representative for Industrial Fluids.

Q From the tone of this memorandum, it appears that the Monsanto reclamation project of reclaiming Pydraul that has escaped from the plant for its normal uses is still viable. Is that true?

MR. SCHINK: I object to the form of the question. The project earlier was Monsanto performing reclamation. Now you are talking about something going on at Johnson Motors. They are two different subjects.

MR. POPE: No, they are not.

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MR. SCHINK: I object to the question.

MR. POPE: You already have.

MR. SCHINK: Basically the prior testimony is misleading.

BY THE WITNESS:

A Our group was not going to install equipment.

BY MR. POPE:

Q Right.

A Our group was not going to be responsible for the collection. Our group if it did anything would pump out of the interceptor, reclaim the fluid and ship it back to Johnson Motors.

Q So the responsibility for any engineering work would be with EnviroChem to install interceptor pits, to install collectors, to build them or do whatever was necessary to improve the reclaiming of fluid?

A Separate, reclaiming or collection from actually reprocessing the fluid.

Q We talked earlier about the possibility of reclaiming fluid from a place such as the bottom of an interceptor tank and General Motors in New Bedford, for example.

A Right.

Q In your category of we versus they, Monsanto

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versus Monsanto-EnviroChem, how does that fall if the customer had that situation? Who in your understanding would have dealt with that?

A EnviroChem would have presented a proposal to Johnson Motors to construct -- let us go back, to engineer, to design, construct and place in operation a system for collecting effluent from the plant.

Q To replace the one they have and expand it or whatever?

A Yes, right.

Q In an engineering sense?

A Yes.

Q And if that had been done, would there then be under the proposal a role for the Pogue group to reclaim the fluid that was collected?

A Okay, two ways: If EnviroChem had done what they were proposing to do, Johnson Motors might decide to install or operate their own facility to reclaim the fluid, or on the other hand, might consider our group taking the fluid from the interceptor pits designed by EnviroChem. They would reclaim it and supply it back.

Q Going back to my original question, does that memorandum tell you anything at all as to whether that proposal, Mr. Pogue's work was still viable or had been

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determined to be uneconomical?

A I would say at this point it still wasn't terminated but it was on its last legs, had to be.

Q As of April of 1971, were customers such as Johnson Motors being told that it was at least, hadn't been ruled out yet, the possibility of Monsanto or Monsanto-EnviroChem reclaiming the fluid from the bottom of a ditch filled with water such as they had referred to in that memorandum?

A The possibility was there.

Q And that was one of the things that the Johnson Motors people were interested in pursuing, was it not?

MR. SCHINK: When?

MR. POPE: As of April 1971.

MR. SCHINK: Object, no foundation.

MR. POPE: Or periods earlier than that.

MR. SCHINK: I object, no foundation.

BY THE WITNESS:

A I really don't know, I really don't. Please understand there was always the opportunity for Johnson Motors to continue with what they were doing and reclaim their own fluid if it was collected.

BY MR. POPE:

Q We are not talking about that now. We are

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talking about when they found their fluid outside the plant. That is what we are talking about.

A But if it is found outside the plant and Johnson Motors through their own engineering were to put in the appropriate interceptors, EnviroChem were to put in their own interceptors, Johnson Motors could have taken out the fluid out of the bottom of those pits and reclaimed it themselves and would have precluded our side of Monsanto doing anything.

Q I understand that. The dialog between various employees of Monsanto and various employees of Outboard Marine for some time prior to April 1971 had been on the subject of the possibility of reclaiming Pydraul that escaped from the interceptor, had it not?

A It started out to define was it there. Then it was defined that it was there. Then the question is how do you collect it and then after you collect it, the question is how do you reclaim it.

Q That dialog had gone on just as you said for some time, is that right?

A Right. None of that was answered. None of that was ever resolved, to my knowledge, that Outboard Marine went ahead and retained either Monsanto-EnviroChem or some other engineering firm to design the facilities

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to collect fluid that was getting out of the plant in the water effluent.

Q That would be a prospective application, is that right, to design a system from having it happen in the future?

A Right.

Q What about the fluid that was already there? That was within the concern of Outboard Marine to capture that, was it not?

A Not to my knowledge.

Q Did you in connection with that last answer, did you note that Mr. Overall states:

"The Pydraul at the bottom of the Ditch and in the oil separator seems to be very concentrated...

It doesn't appear as if reclamation of this material would be very difficult."

Q Isn't it true that what he is talking about is reclaiming fluid at the bottom of the North Ditch near the oil interceptors?

A Based on that then I would have suggested that Milt Tegethoff go up there and take a look at it from the Findett Service, if that was possible, because he's capable of doing it.

Q Did you do that?

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A I think Milt Tegethoff was up there at Johnson Motors for years talking about reclamation.

Q Did Mr. Overall report directly to you at this point in time, April of 1971?

A No, he would have reported through a Regional Manager.

Q Who would that have been?

A I knew you'd ask the question. Let me go back. Maybe I can tell.

He would have either reported to Raleigh Garcia or after that, I'd have to get the name for you. I can't remember.

Q At any point in time, did you sit down with Mr. Overall or anyone else that was above him in the sales or marketing area and ask him what was happening out at Johnson Motors with these various visits and call reports?

A Based on this kind of data, I think that Pogue would have been intimately involved with Wilson and what was happening at Johnson Motors, and at that point Don Pogue would have been reporting to Larry Bradford.

Q Don Pogue was then reporting to Bradford instead of you?

A Right, along with Jerry Davidson reporting to

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him and/or to Cuming Paton. I don't remember. They changed the damn group over there so fast.

MR. POPE: Would you mark as Johnson Deposition Exhibit No. 9 for identification a two-page memorandum dated 7/7/71 from Mr. C. T. Decker to Johnson Motors, on-site effluent treatment and Pydraul recovery program.

(Johnson-OMC Deposition Exhibit
No. 9 marked for identification,
2/16/82, TLU.)

BY MR. POPE:

Q Mr. Johnson, I'm going to hand you Deposition Exhibit No. 9 for identification and ask you if that is a copy of a report that you received on or about July 7, 1971 regarding activities of Johnson Motors.

A I would believe so.

Q As of that point in time, was the potential Monsanto reclamation project still viable?

MR. SCHINK: By viable, you mean still under active consideration by Monsanto?

MR. POPE: Not yet ruled out because of economic considerations, Mr. Schink.

BY THE WITNESS:

A I would believe by that date it was out of the picture as far as us reclaiming Pydraul.

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BY MR. POPE:

Q That is, the decision on economics had been made?

A Yes.

Q With that in mind, tell me what the reference is to our Pydraul recovery program.

MR. SCHINK: You are speaking now of Mr. Decker's language?

MR. POPE: I believe he is the author of this.

BY THE WITNESS:

A I would say what you are looking at now is the fact that EnviroChem is still looking at the project to install, evaluate and whatever they have to do for a recovery program for Pydraul, but by that point we in St. Louis had made the economic judgment that we could not economically get into Pydraul recovery and do the job.

BY MR. POPE:

Q Had that information been conveyed to Outboard Marine?

A I don't know.

Q Was it the company policy to convey that information as soon as the decision had been made to customers who had been working with the company for some time on

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the question of --

A Sure, sure.

Q Under present are three people listed. Were they all Monsanto people as opposed to Biodize or EnviroChem?

A Well, he is the Monsanto with the EnviroChem Division or Biodize as it was known at that time. I don't know Dr. Azad. I remember this fellow.

Q Referring to Decker?

A Yes.

Q Decker was the one who was in charge of Biodize at that stage?

A Well, his title was Sales/Marketing Industrial Water Pollution Control Department, so I assume that was the title he held within EnviroChem or Biodize, whatever you want to call it.

Q Overall was one of your salesmen, was he not?

A Here he is cited as Project Manager for Pydraul Reclamation.

Q I take it there is only one W. W. Overall in the company then?

A Let's go through a sequence of replacements for Damiani, and to the best of my knowledge, that would be Weyland. And Bob Weyland came up to Chicago and was

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covering the area for a period of time. Wilson and I am foggy on how Wilson gets into this project. I don't know whether he replaced Pogue or was he working in conjunction with Pogue, but I would say that Pydraul recovery, per se, being done by the Fluids Group should have come to an end by this point.

Q Do you know what the reference is here to Phase 1 and Phase 2 of the proposal?

A Well, cost for Phase 1 for the on-site study evaluation and laboratory program was \$14,500, and to me that means picking up samples, surveying the site, doing whatever is needed in preparation for a program to put in the kinds of interceptor system to collect fluid. And many times those engineering programs are presented in phases and companies will take Phase 1 this year or this six months and the next six months they will implement Phase 2.

Other times companies prefer to have somebody do Phase 1 and have another later do Phase 2.

Q So far as you know, what was being presented to Johnson Motors for their approval was the program whereby engineering and construction work would be done to prevent any further effluent discharging, is that right?

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A Right, by EnviroChem.

Q There is reference to the Industrial Water Pollution Control Department in Chicago, is that it?

A EnviroChem.

Q EnviroChem?

A Yes.

Q Do you know whatever came to pass with regard to this proposal?

A No, I don't.

Q Do you know whether anyone from Monsanto ever reported to Outboard Marine that reclamation of Pydraul from the bottom of the North Ditch around the oil interceptor was uneconomical or impractical?

A No, I do not.

Q I have two copies, Mr. Johnson, of a memorandum dated January 19, 1972 with various people's handwriting on it.

Would you look them over and tell me if that is your handwriting on either of those two pages?

A None of it is mine.

Q Try the second sheet.

A Not mine.

Q Thank you.

Calling your attention to what was marked

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as Papageorge Deposition Exhibit No. 50 for identification, being a letter from you dated June 11, 1970, can you look that over, please, and tell me if that is in fact your signature?

A It sure is.

Q Do you recall preparing that letter?

A Yes.

Q And at whose direction, do you know?

A Don Olson.

Q What was the purpose of the letter?

A This went out to all the customers buying those products.

Q Which products were those?

A It says 625A, AC-A, AC-A Winter Grade and 540 designation of the new ones with the A.

Q What did that letter add to the letter that went out in February with regard to the same products?

A Could I see the letter that you are referring to?

Q Sure.

A This letter stated the products containing Aroclor 1254. This letter stated they had been reformulated and claim -- at some point here, we are telling the people what products contain 1254 and 1260. This

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tells them they are being replaced by all AC, so the sequence of events was to move toward this point of alerting the customer of which ones contained 1254 and 1260.

Q And "this one" referring to the letter telling them the products were now reformulated in late June 1970?

A Right, that was June 1970.

Q Papageorge Exhibit 50.

Was it your intent in that letter to go to the customer and only the customer of the five products listed there?

A I don't really remember. When we generated the mailing lists, it would be my belief this letter went out to those people buying 625-A, AC-A, AC-A Winter Grade and Pydraul 540.

Q It wouldn't make any sense to anybody else, would it?

A Correct.

Q The statement is made here that new formulations will be shipped in as inventory is depleted in warehouses around the country.

A Right.

Q What was the purpose of that requirement?

A Because there were some warehouses that might

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still have material in them, but most of the warehouses didn't have anything in them, because from the time of this point and the reformulation effort, as I told you earlier, we were out of the fluids.

Q If the purpose of reformulating the new fluids was because of information of some potential damage to the environment --

A Right.

Q -- why wasn't there a recall of those fluids available and once the new ones were available?

A I don't remember if it was brought back or not. I know there was material in some warehouses or could have been in some warehouses.

Q And your direction or your statement here in Papageorge Exhibit 50 is that as inventory is depleted in warehouses around the country the new orders will be shipped per your orders?

A For the most part, it didn't exist.

Q Was there a discussion in-house Monsanto?

A About bringing fluid back?

Q About recall.

A I go back to the point at which we were trying to reformulate and once the formulations were tested, we probably didn't manufacture any of the old products

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for two or three months.

The question, was there any out there, there weren't any because we were shorting customers at that point and back ordering them and telling them we don't have any more of the old fluid, you have to wait for production of the new.

Q So as you recall, this statement is more or less superfluous --

A Basically it's superfluous because actually it covered material out there and we don't have and you don't have and you're right, on a day-to-day basis when that letter is written and new material is available and you are still talking about a week or two to get it out to California.

Q Similarly Papageorge Exhibit 51, dated August 27, 1970, is a similar letter with your signature, is it not?

A Right.

Q And is that basically the same letter with regard to --

A Pydraul F-9.

Q F-9?

A Right.

Q That would be the intent that that would go to

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the then current users of F-9 as you understand it?

A Correct. And your current user was defined as anybody who had bought the product for the previous three years.

Q For the previous three years or during the previous three years?

A The current year plus the previous two.

Q But somebody who bought any during that period of time?

A Yes.

Q Papageorge Exhibit 52 is a letter from Mr. Bradford dated February 1, 1971. Can you tell me why he signed that letter and you signed the earlier two?

A Because my position had changed and he became the Product Manager for Industrial Fluids.

Q Can you tell me, that says within the next 60 days they are going to ship the fluid as other letters did, right?

A Yes.

Q The other exhibit that we looked at indicated that A-200B was already being used by Johnson Motors at that time.

A I remember a correction of it. In fact it said something rather different. It said that, however,

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Pydraul A-200B, the replacement product, will be made or shipped. It doesn't indicate it was at that time.

Q I would like to know what the rest of the letter is supposed to be.

A I am just reading what it says with an asterisk and that is exactly what it says, Mr. Pope.

MR. POPE: Again, if we had a better example. The evil of the practice of cutting off the letter --

MR. SCHINK: That's mine.

MR. POPE: Do you want to show it to the witness?

MR. SCHINK: Yes, sure. What is the question?

BY MR. POPE:

Q I believe your testimony was, Mr. Johnson, as of this date Johnson Motors was using A-200B. Is that now wrong, with Mr. Schink's assistance?

MR. SCHINK: Mr. Pope, I don't believe that is what he said. I was objecting to your mischaracterization of that document. The document does not say that on its face, that as of that date Johnson Motors was using A-200B and in fact it suggests the contrary, that that will be made and shipped in the future.

MR. POPE: You weren't objecting to my characterization, Mr. Schink.

MR. SCHINK: Is there a question?

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Would you read the question back, please?

MR. POPE: I had a question and you made a long objection.

(Question read.)

MR. SCHINK: I object to the form of the question.

BY THE WITNESS:

A As I told you before, when A-200 was developed, A-200B was developed, since Johnson Motors was the main customer, they were given new fluid in advance for trial purposes.

As far as the country was concerned, it was basically Johnson Motors buying A-200 or A-200B.

The question of whether we shipped A-200 as of December 2 to Johnson Motors, A-200 followed by this letter, our great concern was to get them onto B. The follow-up to this would have been going out to the few very small drum customers who still might be using Pydraul A-200, to alert them in advance all along as was always done with Johnson Motors.

BY MR. POPE:

Q Because of your relationship with them, you wouldn't hold up deliberately the letter that was being prepared to be sent out to the whole country?

A No, I doubt that in December Johnson got two

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drums.

Q Exhibit 69 refers to tank trucks?

A Right. In other words, drums were supplied to them so they could trial them out in the machines, put the 200B in and test it for 60 days, 90 days, and test it so that they were compatible.

Q After your job changed so that, as you say, Bradford would be signing the letters like this, what was your position?

A Field Sales Manager for Fluids and Paper.

Q You were still concerned in your job --

A With fluids.

Q -- with calling on customers and their reactions to decisions made by Monsanto, were you not?

A Yes.

MR. POPE: I think we can take a break here and finish up sometime in the morning.

THE WITNESS: Right.

(At 5:10 o'clock p.m., the deposition was adjourned to resume at 10:00 o'clock a.m. on Wednesday, February 17, 1982.)

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