IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TENNESSEE, NORTHERN DIVISION

GEORGE L. GALYON and wife, DOROTHY GALYON,

and

RALPH HICKEY and wife, GRACE HICKEY, and HUGH HICKEY and wife, THELMA HICKEY,

Plaintiffs,

V.

3-75-198
3-75-199

GENERAL ELECTRIC COMPANY, MOSS TRUCKING COMPANY, INC., MONSANTO COMPANY, and LARRY PRESSLEY,

Defendants

APPEARANCES:

For the Plaintiffs: FOSTER D. ARNETT, ESQ.

For the Defendants: WHEELER A. ROSENBALM, ESQ.

Discovery Deposition of W. B. PAPAGEORGE.

Examination, by Mr. Arnett P. 2

Exhibit One, letter and attachment P. 12
Exhibit Two, letter 12
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The deposition of MR. W. B. PAPAGEORGE, taken by agreement on the 9th day of October, 1975, pursuant to Rule 26 of the Federal Rules of Civil Procedure and applicable statutes, at the offices of Foster D. Arnett, Esq., in Knoxville, Tennessee.

Submission of the transcribed deposition to the witness for examination and reading are waived by the witness and by the parties. The parties by stipulation waive the signing of the deposition by the witness. Errors and irregularities in the manner in which the testimony is transcribed or the deposition is prepared, signed, certified, sealed, endorsed, transmitted, filed, or otherwise dealt with by theofficer under Rules 30 and 31 are waived.

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Having been duly sworn, MR. W. B. PAPAGEORGE deposed as follows:

EXAMINATION

BY MR. ARNETT:

Q You are Mr. W. B. Papageorge?

A Yes, sir.

Q Manager of Product Acceptability for Monsanto Specialty & Process Chemicals Division?

A That is correct.

Q That is a division of the big Monsanto Company which is the defendant in this lawsuit tomorrow: Right,

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sir?

A Yes, sir.

Q Mr. Papageorge, I'm going to ask you some, not many questions, We'll have a short deposition here, some direct and I think fairly simple questions, and I'd like for you to answer "yes," "no," or "I don't know," and then you can explain. All right, sir?

A I'll try.

Q Can you tell us briefly in respect to your background?

A I'm a chemical engineer by training, having received a Master of Science degree ot Washington University in St. Louis, Missouri. My industrial experience covered about thirty years, five with Phillip's Petroleum Company, doing research and engineering work; the remaining years have been with Monsanto Company, covering the spectrum engineering, production, supervision, finally in administrative-type work, and here the past few years involved with primarily a group of products known as polychlorinated biphenyls.

Q Commonly referred to as PCBs?

A That is correct.

Q That has been a major area of your concern, because PCBs are considered to have considerable significance, right, sir?

A That is correct.

Q All right, sir. As a matter of fact, in respect to product acceptability, how long have you been in this administrative capacity we're talking about next preceding this date?

A This is the sixth year.

Q And this has to do with what, produce acceptability for the market?

A Product acceptability not only for the market, but socially, legally, consumer oriented, all aspects.

Q It has a large public relations overlay, I take it?

A Some of that, yes, sir.

Q And a large sales overlay?

A Yes, sir.

Q And it is not a technical job, as such?

A Well, the job is so new I don't know how I'd classify it.

Q I thought you'd been in it the last five and a half years. Did I misunderstand you?

A Yes, sir.

Q Can you explain?

A Well, five years is a relatively short period of time to establish a field as a given type profession.

Q I see, and your job is to, among other things, travel about the country and meet and talk to environ-

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mental groups?

A That is one aspect, yes, sir.

Q And to explain about the environmental impact of the chemicals and products put out by Monsanto?

A That is one aspect, yes, sir.

Q And meet with the news media, and participate in seminars, this type thing, to explain that Monsanto is not a villain, but that its products are acceptable for use? Is that generally ---

A That's one aspect, yes, sir.

Q What are the other aspects?

A The other aspects are to work within Monsanto to make sure that our products are truthfully acceptable before they are released to the marketplace.

Q When did you last have laboratory responsibility, sir?

A I never did have a laboratory responsibility.

Q Where did you take your bachelor's degree?

A Washington University in St. Louis.

Q Was it a five-year combined degree?

A It wasn't combined in that sense. I had to earn the credits for the Bachelor's, and then went off to military service, came back and earned additional credits toward a Master's.

Q What unit were you in in the service?

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A The Army.

Q What branch component, sir?

A Three of them. Started off in antiaircraft artillery, then infantry, and ended up Corps of Engineers.

Q When did you take your Bachelor's degree?

A It was awarded in 1943, September, 1943.

Q And your Master's degree?

A 1947.

Q And notwithstanding your Bachelor's in Chemistry, I take it your Master's was in ---

A Chemical Engineering.

Q While you served in the antiaircraft, the infantry, and what else?

A Corps of Engineers.

Q What materials have you reviewed to testify as an employee of Monsanto tomorrow, with some specificity I ask the question?

A Materials? To prepare for tomorrow?

Q Yes, sir.

A The only material I looked at specifically for tomorrow is the -- my responses to the interrogatories, which I submitted several weeks ago.

Q Well, specifically or generally, what other materials did you review in aid of preparing your responses to interrogatories, and in aid of testifying tomorrow?

A ---

Q What data, what figures, what materials, what letters, what correspondence?

A The only information that I recall reviewing were my records regarding my trips that I had taken to establish what date I had visited with regulatory and G.E. people in Knoxville. All of the other information I -- just from memory I recall.

Q Have you ever been to the scene of this particular spill?

A No, sir.

Q Never at any time?

A No, sir.

Q What did you come to Knoxville for?

A I was invited to attend by Mr. -- I think it was a joint invitation, Mr. Earl Leming from the State of Tennessee, and Mr. Jim Kinney from General Electric, both at about the same time asked me to attend.

Q When?

A I think it was early April or late March, 1973.

Q Tell me this, sir: In respect to your testimony, and being with your background, it's important is it not sir, to have a file and maintain and create a file in respect to your investigation, your reports, your activities in

this matter?

A Yes, sir.

Q Where is your file?

A In my office, and in a records center that Monsanto has.

Q You didn't bring it to Knoxville with you?

A Oh, no, sir.

Q Are there copies of your file here in Knoxville, or have you forwarded them here?

MR. ROSENBALM: I do not have them, if that's what you're asking.

A I'm not aware of any, no, no copies.

Q Do you not think with a Bachelor's and Master's degree in Chemical Engineering, it would be very useful and helpful to have reference to such a file and its contents?

A ---

Q In order to testify accurately, and for the benefit of counsel on both sides?

A It all depends on the questions, sir. Some questions I can recall, and some I would have to look up.

Q All right, how big a file do you have, sir?

A As best I recall, there six five-drawer steel file cabinets, plus seventy-two boxes at the center.

Q How many separate files within that?

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MR. ROSENBALM: Are you asking about for this incident? I don't think he understands what you're asking.

Q Yes, sir.

A Oh, for this incident. I don't have any file for this incident.

Q You don't have any file anywhere?

A No.

Q Does Monsanto have any file anywhere?

A No, sir.

Q Did you ever write a letter or report or memorandum on this matter?

A No,sir.

Q Did you ever receive a letter or memorandum or anything in writing on this matter?

A No, sir.

Q You were designated by Monsanto to be in charge of this matter for Monsanto, this chemical spill at Kingston, for the purpose of this and other litigation?

A I don't know that I'd use the word "in charge." I was asked to speak for Monsanto in this matter.

Q In respect to this chemical spill of March 5, '73?

A Yes.

Q To whom -- were you the spokesman for Monsanto in this area?

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A Yes.

Q To whom did you report?

A At that time, in 1973, I reported of course to my supervisor.

Q Who is that?

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

Q And his title?

A I ---

Q It would indeed be helpful if you had a file here, would it not, Mr. Papageorge?

A Not to me, sir.

Q I notice you are hesitating answering questions.

A The information you're asking me, I wouldn't keep in a file anyway.

Q Where would you keep it?

A These are job titles for individuals in Monsanto, and they do change with time. If I wanted to find out the exact title, I'd go to the Personnel Department and ask them when the change took place.

Q What was your superior's title?

A At that time he was a group director of the functional products group, which is different from the organization as it exists today.

Q Who assigned you to be the spokesman for

Monsanto in respect to this and other litigated matters?

A My immediate supervisor.

Q The same gentleman you just identified?

A No, sir, I have a different one now.

Q Who assigned you at that point in time to be the spokesman for Monsanto?

A At that time it was Mr. Corey.

Q Have you reviewed any materials whatever in order to testify tomorrow in this lawsuit?

A Just the interrogatories that I mentioned earlier.

Q What materials did you review in order to supply answers to Mr. Rosenbalm for the interrogatories?

A Just the record of my trips that I had made in 1973.

Q Where is the record of your trips in 1973?

A It's in one of the folders in my filing system back at the office.

Q And that is within those filing cabinets you told us before, which is Monsanto's total information on this particular matter?

A I didn't call it total. It's the information I'm aware of. I don't know what else Monsanto may have.

Q I notice that you supplied certain materials with answers to interrogatories, and I hand you a letter dated

December 15th, 1971, from Mr. Howard Burgin, director, and it references an attached article by Dr. Gustafson?

A Yes, sir.

Q Is that a Monsanto official communication written in the ordinary course of business, or a copy thereof?

A It appears to be a copy of one of the letters we sent out.

Q And the attachment went forward with it?

A Yes, sir.

Q Issued by Monsanto as an official act of its people, right, sir?

A It appears to be so, yes.

Q I'll ask you to offer and file that as Exhibit One.

The above mentioned letter and attachment were received into evidence and marked Exhibit One.

Q I hand you another one, sir, and ask you if this is not also an official copy of a communication emanated from Monsanto, a letter bearing date February 18th, 1970?

A This appears to be a copy of a letter we mailed at that time, yes.

Q All right, sir, Exhibit Two to your testimony.

The above mentioned letter was received into evidence and marked Exhibit Two.

Q And I hand you another letter sir, which indicates a copy went forward to you, sir, and it's all marked out. Why did you mark this out, Mr. Papageorge?

A Well, we have a policy at our company -- let me first of all describe what's marked out.

Q That is a copy of an official communication issued by Monsanto, as of date May 11th, 1970: Right?

A That is correct.

Q And that is a copy of the correspondence, the same as the others, kept in the ordinary course of business by Monsanto?

A Right.

Q All right, sir, now what is marked out?

A What is marked out is any reference to a customer, his address, and the name of his people.

Q Why did you mark that out, at the top of what I'm going to ask you to offer and file as Exhibit Three to your testimony?

The above mentioned letter was received into evidence and marked Exhibit Three.

A We have a policy in our company not to divulge specifics relating to our customers and their operations, and the products and amounts they buy from us.

Q Even in response to a Federal Court pleading? United States District Court pleading?

A That's my understanding, sir, yes.

Q And that is the reason you marked these things out?

A That's right, sir.

Q All right, sir, I notice copies of this went to all transformer customers of Monsanto. I assume that General Electric at Rome, Georgia, was such a customer?

A That is a good assumption.

Q Well, is that true, to the best of your knowledge?

A To the best of my knowledge, yes.

Q What did you mark out here on paragraph one?

A It's difficult to make out.

Q I understand you didn't intend for those counsel to read it, but I'll have to ask you to try to make it out or recall from your memory what you struck out there on paragraph one of this Exhibit Three to your testimony?

A ---

Q I notice you're holding it to the light to see if you can read through the magic marker strike-out.

A Yes, I think what I see in there is General Electric -- and there's a word I can't make out -- no, no, that is "Federal Pacific," something company. "Federal Pacific," and I can't make out the third letter.

Q And the carbon copies likewise are marked

out on this Exhibit Three to your testimony?

A Yes, they are.

MR. ROSENBALM: Isn't that evident from the exhibit, Foster? It speaks for itself.

Q I'm asking what was marked out there, sir.

A This is the name of another individual within that same company, and the address of his company.

Q What individual was it?

A I see here the letters "M, S, O, P," and I can't make out the rest.

Q We'll treat that, if you have no objection sir, as Exhibit Three to your testimony.

MR. ROSENBALM: We have no objection to your discovering it. It is not competent evidence, and for that reason would be objected to.

Q So you are the gentleman who is responsible for the answers made to the interrogatories propounded to the defendant, Monsanto, in this litigation, as I understand it?

A Yes, sir.

Q Now let me ask you this: I take it these exhibits, One, Two, and Three, speak for themselves: Right?

A ---

Q Have you anything to add or detract from the contents of these letters, which I'm sure you've seen before?

MR. ROSENBALM: That's not a proper question. If

you have anything to ask him ---

Q Have you seen Exhibits One, Two and Three before today?

A Yes, sir.

Q On a number of occasions?

A Yes, sir.

Q Do you take exception to any comment or remark in any of those letters?

A Not as it appears, sir. I do not know in what context it will be used , and I can't really respond to your needs here.

Q Well, in effect, as far back as 1970, Monsanto recognized PCBs and its product Aroclor, which was an askerol preparation, presented significant environmental hazards?

A That is correct.

Q And Monsanto offered to its customers, "Hey, you ship back this product of ours which you have. We'll pay you the full price, pay shipping prices, and destroy it?"

A In some certain specific cases.

Q Did they do this with General Electric at Rome, Georgia?

A No, sir.

Q Why not?

A Because that was a use that was considered

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to be justifiable under the conditions that we find ourselves in.

Q So you and I won't spar back and forth, you mean in a closed system?

A In a closed system, as a dielectric insulating fluid, for which there is no known alternative, which is not only a good fluid for electric purposes, but is also fire resistant.

Q You knew and recognized that if it got out of a closed system into any kind of an open configuration, or open system, it presented severe significant environmental hazards?

A It had the potential for presenting problems.

Q And this included wild life, this included plant life, and this included animal life?

A I don't know about plant life. I have no evidence that PCBs affect plant life.

Q You are not aware of the fact that TVA for many years used it as a defoliant in connection with its transmission lines, PCBs?

A I'm not aware of TVA's activities in this area. There are examples, however, where PCBs were used as the solvents inwhich a defoliant material was added. The active ingredient was something other than PCB.

Q But in respect to these products, including

this product which was the same or substantially similar as that which is involved in this incident of March 5th, 1973, as far back as 1970, it was acknowledged February, 1970, by Monsanto, that this product manufactured by Monsanto as a component of General Electric's fluid, presented significant severe potential hazards for animals and wild life: Is that true or not true?

A No, it's not true in terms of the animal part. The wild life, at that point in time, 1970, we were aware of its existence, presence, in wild life. I have no recollection at all that in 1970, other animals might be affected.

Q You had no evidence, and there was nothing in literature about human beings being affected by ingesting; animal life, fish life, fowl life, affected by PCBs?

A Human beings, none of those kind of exposures in 1970.

Q Let me ask you this, sir: By the summer of 1972, was it not within your knowledge, was it not within Monsanto's technological competence, to recognize that exposure to PCBs of the type Monsanto was supplying for applications like G.E. was using it for, presented indeed significant and important adverse effects upon human beings?

A The material of the type that G.E. received then, and receives today, has never been involved in human or

animal exposures, even in accidental situations.

Q Let me ask you this question: I take it that would certainly not suggest that there be a deliberate exposure to animals or humans to this product which was being supplied by Monsanto to G.E., would you?

A Certainly not.

Q And why not?

A Because it's known that chlorinated hydrocarbons, of which these materials represent a number ---

Q Part of the family?

A Part of the family, do have advers effects upon animals, including the human, at high levels. What we don't know is what is that level.

Q What you don't know is how much is collected and retained in the fatty tissues?

A That is correct.

Q And what you don't know is the life of these materials?

A That is correct.

Q And it is known that the life of these materials is very, very long, and deteriorate very, very, and degrades very, very slowly?

A I don't know what you mean by "very slowly," or "very long."

Q How long does it take for these materials

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to degrade?

A I wish I could give you a specific number.

Q Give me a range?

A I'd say, and this is speculation on my part, that ---

Q I'm asking for your best judgment.

A Best judgment, I would speculate that some of the PCBs may exist as long as decades in the environment.

Q May exist as long as a hundred years?

A I don't buy that concept.

Q How many decades?

A Two, three.

Q Four?

A I won't quibble another one, but certainly not hundreds of years. On the other side of the coin, some of these PCBs last only hours in the environment.

Q How many manufacturers -- you're not suggesting in your testimony today that the PCBs involved in this March 5th, 1973, incident, lasted only hours in terms of life, are you?

A I'm going to suggest that some of the lower chlorinated isomers, yes, would -- that's the individual members of the family known as PCBs, would last hours.

Q And the other, higher, chlorinated isomers in that product would have lasted how long?

A These types that we referred to earlier as lasting for decades.

Q Okay. It had some of both in this spill?

A That's true.

Q All right, sir, as a matter of fact, as of March, 1973, is it fair to assume that Monsanto was the only manufacturer in the United States supplying PCB products of this type to the market?

A No, sir.

Q Who else was?

A I haven't been able to prove it, but I have heard, although no one is talking, that others have on occasion produced chlorinated biphenyls, and have sold them on the marketplace.

Q As late as 1973?

A Yes, sir.

Q Is it not a fact that in 1973, the only acknowledged producer of PCB in the United States of America was Monsanto?

A The only -- I think it's more accurate to say sir, the only producer who would admit to producing polychlorinated biphenyls was the Monsanto Company.

Q Therefore, the only acknowledged producer?

A All right, sir.

Q And the other two major suppliers were in

Japan: Is that true or not true?

A I don't believe that's true, sir.

Q Now let me ask you this: These materials that were spilled down there on March 5th, 1973, in respect to human tissues, certainly were recognized as irritants, were they not?

A First of all, you put me in a very difficult position, because ---

Q I don't intend to, sir, I'm just asking a question.

MR. ROSENBALM: Let him finish.

A What is difficult for me, I have never seen the material, never had a sample. All I can tell you is that others have told me what this material was, and I have to accept their word, and these others are people such as Mr. Leming that I mentioned earlier, and the G.E. people, and they are the ones that told me that the PCBs were involved. That's my personal ---

Q All right, sir, so you don't actually, of your own knowledge, know what kind of materials were involved in the spill?

A If by knowledge you mean by my personal involvement, and analysis, what-have-you, that's correct.

Q Let me ask you this: Are you aware of the fact sir, that -- you have talked to Mr. Leming many times,

have you not?

A Several times. I did not keep a record, no.

Q Can you tell us sir, why all this material was packed up in a sealed barrels, and taken to New York, and Texas, and buried in safety vaults, special safety vaults?

A I do not know why it was done. It was done against my recommendation.

Q I see, you disagree with that action?

A That's right.

Q You say you never undertook to sample any of this material?

A I was never given an opportunity to.

Q How many times were you in Knoxville, sir?

A Just once.

Q You only came to Knoxville once, and that was in March or April? 1973?

A Yes, sir.

Q Did you ask for -- are you aware they transported some fourteen to sixteen thousand barrels of soil to Texas and New York?

A I am aware of the transport of soil, but I am not aware of the total pounds or number of barrels.

Q Have you reviewed Mr. Leming's report of January 31, 1974, entitled "Summary and Conclusions?"

A I have never seen it.

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Q Did you ask to see or evaluate, or have independently tested this material or this contaminated soil?

A No, sir.

Q Did you not think it would be important to you to do this, or have Monsanto to do this?

A No, we decided, discovered early, that competent laboratories were involved, and we would add nothing to this situation.

Q Let me ask you two or three last questions, if I may. Based upon what you know and what you've been told by Mr. Leming and so forth, can you tell us sir, if it's not a fact that these materials which were spilled were, in respect to human and animal life, irritants, if a human or animal were exposed to them?

A Well, sir, in all my exposure with PCBs, I have never heard the expression "irritant" used describing these materials.

Q I ask you to identify these two photocopies sir, attached as copies to your answers. Can you recognize this, sir? These are part of the seals?

A Yes, sir.

Q And these were what were on the shipment containers where Monsanto sent its products to G. E. in Rome, and others?

A All right, sir.

Q I ask you sir, whether or not this suggests to you that the material was an irritant, upon exposure to human beings?

A Well, all right. I think our problem is my understanding of the word "irritant." The wording here, under "Caution, contains chlorinated hydrocarbons," would suggest that any individual exposed unduly to these materials would see some of these -- would have an effect.

Q Do you see the word "unduly" there, sir?

A No, sir, but that's ---

Q All right, do you see the word "irritation" down here, sir?

A All right, yes.

Q Would you agree this product is an irritant to human beings who are exposed to it, animals exposed to it?

A Well, I think my problem is defining "irritant."

Q Well, I define the term irritant as a substant that is not corrosive, but is an irritant, in terms of reaction, or adverse effects upon human tissue.

A All right, okay, I'll accept that definition.

Q One last question, and I'll ask you to offer and file that as Exhibit Four to your testimony.

The above mentioned document was received into evidence and marked Exhibit Four.

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Q One last question: In respect to animals and human beings, would you agree sir, that these materials, according to what you understand and have been informed, had a toxicity in respect to animals and human beings who were exposed to it?

A Yes, just like every other material, sir.

Q Like water?

A Just water, yes.

Q Like milk?

A Yes.

Q But it's not toxic in the sense in which you know it?

A I have perhaps different definition of toxic than you do, sir.

Q Well, let me ask you this. I refer to toxic as material which has a capability to produce personal injury or illness to man, through ingestion, inhalation, or absorption, through any body surface. Would you not agree this has that toxic capability?

A At appropriate levels, yes.

Q And the levels you understood existed on 3-5-73, four and a half miles south of Kingston?

A I don't know what levels existed then.

Q Assuming that everything you've been told about it, would you agree that those levels which existed,

based upon your information, had that toxic capability?

A No, I can't, not based on the animal studies we conducted.

Q Would you agree that is has the capability, this material you understood was spilled down there, has the capability of being absorbed through the skin?

A Yes.

Q And if it is -- one last question: If it is ingested within the body, and particularly within the lining of the lungs, would you not consider it to have a significant hazardous toxic effect, if ingested within the lungs?

A I'm not qualified to speak on that.

Q You have no opinion, one way or another?

A No, sir, that's a medical question.

MR. ARNETT: Thank you very much, sir.

AND FURTHER DEPONENT SAITH NOT.

W. B. PAPAGEORGE

BY: Peggy C Welch
Court Reporter

Sworn to before me this the
9th day of October, 1975.

Peggy C Welch
Notary Public at Large
My Commission Expires 4/24/79.

CERTIFICATE

I certify the witness was duly sworn by me and that this deposition is a true record of the testimony given by the witness.

Peggy C Welch
Court Reporter

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