IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEVADA

NEVADA POWER COMPANY,	)	
	)	
	)	
Plaintiff,	)	
-vs-	)	
	)	# CV-89-555-LDG (LRL)
	)	
MONSANTO COMPANY, GENERAL ELECTRIC CORPORATION, et al.,	)	
	)	
	)	
Defendants.	)	

DEPOSITION OF JACK T. GARRETT

On the part of the Plaintiff

March 16, 1993

Concannon & Jaeger
General Court Reporters
705 Olive Street, Suite 604
St. Louis, Missouri 63101
(314) 421-1000

STLCOPCB4025942

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEVADA

NEVADA POWER COMPANY,)
)
Plaintiff,)
-vs-) # CV-89-555-LDG (LRL)
)
MONSANTO COMPANY, GENERAL)
ELECTRIC CORPORATION, et al.,)
)
Defendants.)

* * *

I N D E X

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Deposition Exhibit # 428. 59

Deposition Exhibit # 1473. 89

STLCOPCB4025943

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEVADA

NEVADA POWER COMPANY,)
)
Plaintiff,)
)
-vs-) # CV-89-555-LDG (LRL)
)
)
MONSANTO COMPANY, GENERAL)
ELECTRIC CORPORATION, et al.,)
Defendants.)

DISCOVERY DEPOSITION OF WITNESS, to be used in an action pending in the District Court of the United States, for the District of Nevada, wherein NEVADA POWER COMPANY is Plaintiff, and MONSANTO COMPANY, et al. are Defendants, pursuant to Notice, under the provisions of Rule 26 of the Rules of Civil Procedure, taken on March 16, 1993, at the law offices of Messrs. Rusch & Eppenberger, 100 North Broadway, St. Louis, Missouri, before John T. Concannon, a Notary Public within and for the State of Missouri.

A P P E A R A N C E S

The Plaintiff was represented by Mr. Ralph A. Bradley, of the law firm of Bradley & Merrell, c/o Jones, Jones, Close & Brown, 300 South Fourth Street, Ste. 700, Las Vegas, Nevada, 89101.

The Defendant, Monsanto Company, was represented by Mr. Bruce A. Featherstone, of the law firm of Kirkland & Ellis, 1999 Broadway, Ste. 4000, Denver Colorado, 80202.

The Defendant, Westinghouse Corporation, was represented by Ms. Laurie Basch, of the law firm of Weil, Gotshal & Manges, 767 Fifth Avenue, New York, New York, 10153.

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JACK T. GARRETT,

of lawful age, being first duly sworn to tell the truth, the whole truth, and nothing but the truth, deposes and says on behalf of the Plaintiff, as follows:

DIRECT EXAMINATION

QUESTIONS BY MR. BRADLEY:

Q. Would you please state your name and spell your last name for the court reporter?

A. Jack T. Garrett, G-a-r-r-e-t-t, and Jack is the name, not John.

Q. All right. Mr. Garrett, my name is Ralph Bradley and we introduced ourselves just a moment ago; is that true?

A. Yes.

Q. I represent Nevada Power Company in this lawsuit that they've brought against Monsanto, General Electric and Westinghouse; you understand that?

A. Yes.

Q. If, during the course of your deposition, I ask a question that you don't understand, will you tell me?

A. I shall.

Q. And if you give an answer to one of my questions, I'm going to assume you understood the question. Fair enough?

A. Okay. Good enough.

Q Also, if, since we're starting in the late afternoon and apparently going to go into the early evening, if you ever need to take a break, just let us know and we'll accommodate you.

A. Thank you.

Q. Are you represented by an attorney today?

A. No. Not myself, personally.

Q. When did you first learn that your deposition would be taken today?

A. Approximately three weeks ago.

Q. How did you learn that?

A. Monsanto called.

Q. Who did you speak with from Monsanto?

A. To be perfectly frank, I don't remember. I think it was one of the girls, but I'm not sure of that.

Q. Did you know you were listed as a potential witness in this case?

MR. FEATHERSTONE: Object to the form.

A. No.

Q. (By Mr. Bradley) Do you know whether you were listed as a potential witness in this case?

A. Now? I don't know what I'm doing here if I'm not, but now, I don't know.

Q. All right. May I--

A. Excuse me a moment. If you mean do I know if

I'm a witness for a court trial at some point, no, I do not know.

Q. All right. That was my question.

A. Okay.

Q. Could I have your home address?

A. 429 Geyer, G-e-y-e-r, Forest Drive, Kirkwood, Missouri, 63122.

Q. Do you have a business address?

A. The same, if I'm in business.

Q. Did you review any documents in preparation for today's deposition?

A. No. As a matter of fact, I didn't review any documents at all. I talked but I didn't review any documents.

Q. Who did you talk to?

A. An attorney from Monsanto.

Q. And was it Mr. Featherstone that you spoke to?

A. No. Mr. Featherstone's associate at Monsanto.

Q. And what were you told?

MR. FEATHERSTONE: You're instructed not to answer that question.

MR. BRADLEY: On what grounds?

MR. FEATHERSTONE: Attorney/client privilege.

MR. BRADLEY: But he said you're not his lawyer.

MR. FEATHERSTONE: Well --

Q. (By Mr. Bradley) Was it someone with Mr. Featherstone's office that you spoke to about this?

A. It was somebody from the law department at Monsanto. Whose office he was in, I haven't the foggiest.

Q. Okay. And what did they tell you?

MR. FEATHERSTONE: Well, same instruction.

MR. BRADLEY: How can you instruct him not to answer when he's not your client?

MR. FEATHERSTONE: Because that's, A, not true, and B, the fact of the matter is, Monsanto and it's counsel have a privilege that exists with regard to former employees for matters concerning the scope of their employment while at Monsanto. That's well-developed by the case law.

MR. BRADLEY: My question is, how can you instruct him not to answer when he's not your client?

MR. FEATHERSTONE: I told you the basis for my instruction, Mr. Bradley. If you view the law different than I do, you do. I can't do anything about that.

MR. BRADLEY: I will instruct you to answer. Since Mr. Featherstone is not your attorney, he can't instruct you not to answer.

THE WITNESS: He can instruct me not to answer, can he not?

MR. BRADLEY: He can, but unless he's your lawyer -- The rule is, Mr. Garrett, that if your lawyer instructs you not to answer, you shouldn't answer. If you're not here represented by a lawyer, then there's no lawyer who can instruct you not to testify. So go ahead.

MR. FEATHERSTONE: I have instructed Mr. Garrett.

MR. BRADLEY: Well, why don't --

THE WITNESS: What is --

MR. BRADLEY: Just a moment. I view this as an important matter and why don't we take it up with Magistrate Levitt?

MR. FEATHERSTONE: Are we off the record?

MR. BRADLEY: Yes.

(Whereupon, a discussion was held between Counsel, off the record.)

Q. (By Mr. Bradley) Mr. Garrett, as I understand it, you've now spoken with Mr. Featherstone outside the presence of everyone in this room and you're now relating to me that you are here, represented by Mr. Featherstone; is that correct?

A. That's correct.

Q. Have you paid Mr. Featherstone any money to represent you here, today?

A. No.

Q. Have you signed a contract to have him represent you here, today?

A. No.

Q. When you walked in the door to have your deposition taken, was Mr. Featherstone your attorney?

A. According to what he just told me, yes.

Q. He told you he's your lawyer?

A. He told me that the policy is that ex-employees are represented by Monsanto's attorney and he is that person at this hearing.

Q. Okay. So you didn't ask him to be your lawyer, he told you he was your lawyer?

A. That's true. And I accepted that help.

Q. Are you presently employed?

A. No.

Q. You're retired?

A. I am retired from Monsanto.

Q. All right. Let's start with your educational background. Did you attend college?

A. Yes.

Q. Where did you attend college?

A. Oklahoma State University, and the University of Tennessee, Knoxville.

Q. Did you receive a degree?

A. Two degrees.

Q. When did you receive your first degree?
A. In 1948, from the University of - from Oklahoma State University. I received a Bachelor of Science in Chemistry.
Q. When did you receive your second degree?
A. 1950, I received a Master of Science in Chemistry from the University of Tennessee at Knoxville.
Q. Have you attended any course work following completion of your Masters of Science in 1950?
A. Yes.
Q. Tell me which --
A. It would be difficult to define them all.
Q. Roughly, how many courses have you taken since 1950?
THE WITNESS: Define "courses."
Q. (By Mr. Bradley) Have you taken any courses through any accredited university since 1950?
THE WITNESS: For credit?
MR. BRADLEY: Fine. For credit.
A. For credit, no.
Q. (By Mr. Bradley) Did you take any courses at any accredited university past 1950 where you did not receive credits?
A. Yes.
Q. Roughly, how many courses were there?

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A. It would be difficult but I would say at universities, somewhere around ten.

Q. What were the subject matter of the courses that you took?

A. Physical chemistry, industrial hygiene, water pollution control, and toxicology.

MR. BRADLEY: Would you read back that answer for me, please?

(Whereupon, the reporter propounded the previous question.)

Q. (By Mr. Bradley) Where did you take the course work on toxicology?

A. At a meeting of the Toxicological Society seven years ago at the University of North Carolina at Chapel Hill.

Q. Were--

A. Excuse me a moment. Many of these courses are not subscribed by the university. They are simply used as a -- They're part of meetings and so forth, okay?

Q. Was the meeting at the University of North Carolina the only instruction that you have had in toxicology following completion of your Masters?

A. No.

Q. How long was the meeting in North Carolina on toxicology?

A. Three days.

Q. And what year did the meeting occur?

A. Somewhere in the late '50s. I can't tell you any better than that.

Q. Were the instructors part of the staff at the University of North Carolina?

A. No.

Q. Who were the instructors?

A. They were members of the Toxicological Society.

Q. Were you given written materials in relation to that training?

A. Yes.

Q. Do you still have them?

A. No.

Q. What other training have you had in toxicology since completion of your Master of Science in 1950?

A. Hands-on training with Monsanto and its various functions and its various staff members.

Q. Did the hands-on training instruction occur at a special set of meetings?

A. No. It occurred at a toxicological laboratory.

Q. Over what period of time?

A. Probably from 1955 to 1965.

Q. And roughly, how many hours would you say that

you received instruction with Monsanto in its various functions with staff members?

MR. FEATHERSTONE: Object to the form.

THE WITNESS: How many hours?

Q. (By Mr. Bradley) How many hours did you receive this training between 1955 and 1965?

A. Oh, I don't know. Many, many hours.

Q. More than a hundred?

A. Most likely, yes. I didn't add them up.

Q. Any other training that you received in toxicology since completion of your Masters?

A. Other than my knowledge and discussions with the people involved in the manufacture, use, pollution treatment and so forth, of materials Monsanto was interested in, in producing or using as raw materials in any of their processes.

Q. And who would those folks be?

A. Oh, my previous boss, Mr. Elmer Wheeler, now deceased.

Q. Anyone else?

A. Dr. R.E. Kelly, my boss for many years.

Q. Anyone else?

A. And perhaps the Toxicology and Industrial Hygiene meetings of the American Petroleum Institute, Manufacturing Chemists Association, and Organic Chemical

Manufacturers Association meetings, as well as meetings with customers and so forth.

Q. In the meetings that you had with the American Petroleum Institute, did you discuss toxicology of PCBs?

A. I really can't -- It's likely, but I can't say.

Q. In the discussions with the American Petroleum Institute, did you address the topic of Dioxin?

A. I'll have to give you the same answer. It's likely but I can't recall specifics.

Q. Furans?

A. Probably.

Q. In your meetings with the American Petroleum Institute, did you discuss polychlorinated dibenzylfurans?

A. Likely.

Q. Tell me now, what training you had beyond 1950 in industrial hygiene.

A. I went to a two-week long introduction course conducted by Liberty Mutual Insurance Company in Boston.

Q. When was that?

A. It had to be 1954.

Q. Why did you attend that introductory course?

A. Primarily, because my boss told me to, but for purposes of establishing the premise of industrial hygiene, which I did not know since I was a research chemist prior

to that.

Q. What is industrial hygiene?

A. It's a study of industrial operations with the objective of preventing sickness and death among the workers that handle the materials involved.

Q. Did you receive written material as part of this two-week course?

A. Yes.

Q. Do you still have it?

A. No.

Q. What did you do with it?

A. When I cleaned out my office and left Monsanto, it either left then or -- I don't know. I don't know. It disappeared.

Q. Did you have any other training in industrial hygiene following completion of your Master's Degree?

A. No. Other than the fact that I studied and passed the exam for certification by the American Industrial Hygiene Association, a two-day examination.

Q. What training did you have beyond your Master's degree in water pollution control?

A. My Master's degree was not in water pollution control. It was inorganic physical chemistry.

Q. Following completion of your Master's degree, what training, if any, did you receive in water pollution

control?

A. Training with some of the best minds, I believe, at the time, in pollution control.

Q. In where?

A. In pollution control. Some of the best minds. And practical experience with pollution problems at the Texas City, Texas plant.

Q. Who were the people that you were working with regarding water pollution control?

A. My same boss and subboss. Dr. Kelly was my boss for many years, Mr. Wheeler was my boss also for many years. I was moved to St. Louis for the purpose of, for water pollution reasons, because I had done some work on the problem at Texas City.

Q. And Texas - what?

A. Texas City plant.

Q. And what training did you receive following completion of your Master's degree relating to the subject of physical chemistry?

A. Other than meeting, regular meetings with the American Chemical Society at their South Texas group, probably none.

Q. Have you had your deposition taken before?

A. Yes.

Q. When?

A. Oh, my stars. I don't know when.

THE WITNESS: How many or when?

MR. BRADLEY: Well, I'm going to ask both. So however you want to answer it.

A. The last one was about two months ago. I had about fifteen.

Q. Where did the last deposition occur?

A. St. Louis.

Q. In what kind of case?

A. You know, after all the times I have been involved in this mess, I can't even remember what was the case.

Q. Did it involve PCBs?

A. Not specifically.

Q. Do you recall what the general nature of your testimony was during that deposition?

A. I can't even recall the subject. I'm sorry. Really sounds stupid but it's true. I don't recall the subject now. I could probably refresh my memory if I got to my office.

Q. In the --

A. It had nothing to do with PCBs, by the way.

Q. You estimated maybe fifteen times you have had your deposition taken?

A. Yes.

Q. Were -- Did any of those occasions involve PCBs?

A. Specifically as a major subject, no. As an ancillary subject of chemicals that we handled and for reasons of that, yes.

Q. Do you recall the case names of any of those cases where you gave depositions that touched on PDBs?

A. No.

Q. Do you recall if one of them had to do with a case in San Francisco?

A. I really don't know. I have had depositions dealing with product handling in very many number of cases. I don't recall specifically a San Francisco case.

Q. Do you recall whether you kept copies of any of the transcripts of the depositions in which you gave testimony?

A. Absolutely not.

Q. Do you know whether Monsanto has copies of those?

A. You would have to ask them.

Q. Well, after -- Did you have your deposition taken at any point when you were still a Monsanto employee?

A. Yes.

Q. And do you know whether Monsanto kept a file that included a transcript of your deposition?

A. I haven't the vaguest notion, actually. I think if the case was completed, because of the massive amounts of documentation, it probably would have been disposed of, based on their document retention program.

Q. What is their document retention program?

A. It's nothing more than a program to keep from filling the entire country with files. Anything that's important enough can be, I presume can be put on discs and so forth. Right now, I don't know where any of them are, nor have any idea if they're stored or what.

Q. During the time that you were employed at Monsanto, was there more than one retention policy?

A. As a chemist and later, as a manager of a small section in the research department at Texas City, it made little difference to me what happened to the documents. We could fetch them back if they were fresh. If they were not, they probably went to St. Louis, but I do not know.

Q. My question was whether or not you know if there was more than one retention policy for documents during the course of time you were employed with Monsanto.

A. The only policy I knew was the one in St. Louis. As near as I know, if there was one in Texas City, I never got a jump on it. We had one policy. That policy went through from virtually the time I came to St. Louis,

or a form of it, all the way to the time I retired.

Q. Did the policy allow the destruction of certain types of documents if several years had -

A. Yes.

Q. - passed?

A. Yes.

Q. And was there discretion given to employees as to whether to maintain documents beyond that several year period?

A. Very little discretion.

Q. So for the most part, you were supposed to discard documents that were over two years old?

MR. FEATHERSTONE: Are you using two years as an example?

MR. BRADLEY: I'm asking whether it was two years.

A. I believe it was five. I believe.

MR. BRADLEY: All right.

Q. (By Mr. Bradley) More than five and less than ten?

A. I don't know. We had to look at them on that basis, on a five-year basis. Every document we kept, we had to make a special provision for.

MR. BRADLEY: Would you read that answer back to me, please?

(Whereupon, the reporter propounded the previous answer.)

A. For retention, okay?

Q. (By Mr. Bradley) Was the retention policy written?

A. Yes. So-called Red Book.

Q. Pardon me?

A. A so-called Red Book.

Q. During the time you were employed at Monsanto, do you know whether any documents were destroyed outside the retention policy?

A. No, they were not.

Q. At least, if they were, you don't know that?

A. Not in my section, they weren't.

Q. Have you ever given testimony in a trial?

A. Yes.

Q. Which trials?

A. As a consultant in the trials connected with the St. Louis School Board's asbestos program.

Q. Any other trials?

A. No.

Q. What did you do when you graduated with a Master's degree?

A. Picked up my wife and my two tattered kids and moved from Knoxville to Texas City, Texas on the basis of money given me by the Government, returning portion of my

Government insurance, or I never would have been abie to.

Q. What did you do in Texas City, Texas?

A. I was in the research department of the Texas division of Monsanto.

Q. What was your job title when you began that employment?

A. Research chemist.

Q. What work did you do as a research chemist at the Texas division of Monsanto?

A. Virtually all organic -- I am an inorganic physical chemist and did virtually all organic, but that's beside the point. I did work on the process for several organic chemicals and worked on processing each improvement to make them more efficient.

Q. What product were you working for at Texas City?

A. Styrene, eythel benzene, acrylonitrile, a-c-r-y-l-o-n-i-t-r-i-l-e, and it's precurser, hydrogen cyanide.

Q. Who was your immediate supervisor?

A. There were a number of them, and I can't -- To tell you the truth, I can't recall the name of him. My boss was the director of research, and it was a small department and people were -- It was almost a boss/individual relationship.

Q. How long were you a research chemist at the Texas division of Monsanto?

A. From 1950 to 1954.

Q. During that period of time, did you work at all with Monsanto products that contained PCBs?

A. I don't think so. It wasn't an issue of great knowledge, if that's what you mean, no. As a heat transfer medium, it might have been, I don't know. But directly, no. Not to my knowledge, in my processes or any of my process operations, no.

Q. In 1954, what did you do?

A. I got taken to St. Louis by Dr. Kelly.

Q. How did that occur?

A. I goofed off and gave a paper on pollution control in New York at an MCA meeting, that's Manufacturing Chemists Association, now known as the Chemical Manufacturers Association.

Q. I take it, he liked your paper and contacted you?

A. Not necessarily. I think what he did, he was told to begin to supervise information as a center source for information on pollution control for the whole company and he went out looking for a man with some pollution control experience.

Q. What was your job title when you first began

working in St. Louis?

A. Industrial hygienist and water pollution advisor.

Q. Was there a time when your job title changed?

A. Yes. Many times.

Q. Okay. What work did you do as an industrial hygienist and water pollution advisor when you first started with Monsanto in St. Louis?

A. I represented the company on the pollution committees of the Ohio River Valley Sanitation Commission, known as ORSANCO; on the water pollution committee of the Manufacturing Chemists Association, now the CMA; the water pollution committee of the American Petroleum Institute, Production Division, and when I found time, a little work for the company.

Q. When you worked for the company, what did you do?

A. Started beating people about pollution control. I went from plant to plant to plant. We did surveys with the plant people in connection with what they were discharging and where. We did the entire corporation and started working on getting rid - going to work building either pollution treatment plants or managing pollutants through the cities' or communities' treatment facilities.

Q. At that time, how many plants were you working

with?

A. Forty-three, I think it was.

Q. Did any of those plants manufacture products containing PCBs?

A. Two of those plants -- When I first came to Monsanto, two of them manufactured PCBs.

Q. Which were those?

A. Anniston, Alabama, and East St. Louis, Illinois, known in Monsanto as the Anniston and the Krummrich plant, K-r-u-m-m-r-i-c-h, plant.

Q. Did you write a report relating to your work at the Anniston plant?

A. My stars, I don't know. Probably. I'm sure we did, because we worked a long time on the process there. Not PCB process. There was dye in their other process at that plant and I worked with the State of Alabama authorities on that plant and on that river, which fed the, one of the reservoirs of the state.

Q. So you didn't work with the Anniston plant regarding products containing PCBs?

A. No. I worked with the Anniston plant, and by that time, I do not believe they were making PCBs but I can't be absolutely positive on the timing here. We're talking thirty years ago plus.

Q. Did you write a report regarding the work you

did at the Krummrich plant?

A. I probably wrote a hundred reports - I don't have the foggiest notion where they're at - and on a number of subjects. I studied every operation in the Krummrich plant, every single one of them, outlined them with the safety people there, went over the industrial hygienicity for each plant, for each employee.

Q. I take it, then, you worked with products containing PCBs at the Krummrich plant?

A. I worked with the PCB production department, yes.

Q. And do you recall what, if any, instructions you gave regarding industrial hygiene for the employees at the Krummrich plant working with products containing PCBs?

MR. FEATHERSTONE: Object to the form of that questioning.

THE WITNESS: What?

MR. FEATHERSTONE: I object to the form of the questioning. We have no idea what he's talking about, and when.

MR. BRADLEY: When Mr. Featherstone makes his objection, he does that for later purposes, and unless he instructs you not to answer, the rule is that you're supposed to answer.

A. We did -- We made reports regularly, myself

and later, my people. I had a great number of people later on.

Q. (By Mr. Bradley) Do you recall the first time you worked at the Krummrich plant regarding industrial hygiene for employees working with products containing PCBs?

A. Not the first time. It was not one of the most difficult problems we had. We had no problems with the employees there. We had other departments that needed a little more help initially, but we did finally do them all, including that department.

Q. Do you recall roughly what time you did that department at Krummrich?

A. No, I really don't. It would be a pure guess.

Q. Do you know whether it was before or after 1960?

A. To be perfectly honest, it could be either, before or after. Probably after.

Q. Whenever it was, do you recall what instructions, if any, you gave regarding industrial hygiene for the employees at the Krummrich plant working with products containing PCBs?

A. Specifically, no.

Q. What was your next job title?

A. Manager of pollution control.

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Q. When did you obtain that job title?

A. Somewhere probably in the early '60s.

Q. What work did you do as manager of pollution control?

A. Went back through the company corporate plants, plant by plant. I went through each plant with the division personnel; went over the pollution control, then what we considered problems; recommended and had certain pollution control facilities installed, or contacted contract engineers to do it in a great number of plants.

Q. How long were you the manager of pollution control?

A. Until I became manager of pollution control and industrial hygiene, which was another few years. I can't tell you exactly.

Q. In your work as manager of pollution control, did you work on any matters involving PCBs?

A. Yes.

Q. Describe those for me.

A. Within the process itself, and it's handling, and within the processes at Anniston and Krummrich both, both produced PCBs. Anniston, during that time, Anniston went out of the business and Krummrich became the only plant, but in the meantime, we had collected it, tested it, sampled throughout the system and sampled through their

safety department; we taught them how to do the sampling and testing - chlorine for PCBs, and anything else that might have been involved. We did it to every operating department in the corporation.

Q. What work did you do within the process, itself, relating to PCBs

A. We went through the processes themselves with the process people, engineering people, to discuss what could be done, if anything, where it was necessary, to remove or to allay either pollution or materials getting into the working environment.

Q. By "process," you mean the manufacturing process of Aroclors?

A. That's correct.

Q. As manager of pollution control, do you recall giving any instructions to either Anniston or Krummrich regarding the handling of products containing PCBs?

A. Gave them the same instructions we would have given them, and did, for any chlorinated aromatic hydrocarbon. We never had a case of overexposure in the history of the operation.

MR. BRADLEY: I'll move to strike that last part of that answer as nonresponsive.

THE WITNESS: But it's true.

MR. BRADLEY: I move to strike that comment,

too.

Q. (By Mr. Bradley) Were there written instructions for Monsanto plants working with chlorinated aromatic hydrocarbons while you were manager of pollution control?

A. Yes.

Q. Were those instructions kept in a file?

A. I haven't the vaguest notion. All I know is we gave instructions to their safety department and backed it up with inspections, as to handling procedures that must be used. Most of which were, by the way, in place already.

Q. Which department or division were you working in as manager of pollution control?

A. Medical department.

Q. Do you recall, during the period of time you were manager of pollution control, what the instructions were for employees working with chlorinated aromatic hydrocarbons?

A. They were routine instructions in connection with don't inhale any vapors from the hot operations, don't get the hot stuff on you because it will burn, thermally burn. We never had a case.

MR. BRADLEY: Move to strike the last portion of that answer as nonresponsive.

MR. FEATHERSTONE: Which portion specifically,

Mr. Bradley?

MR. BRADLEY: "We never had a case."

MR. FEATHERSTONE: All right.

THE WITNESS: Phrase it differently.

MR. FEATHERSTONE: You don't have to worry about it.

THE WITNESS: Okay.

Q. (By Mr. Bradley) Was there a period of time when you no longer had any responsibility for instructions given to workers working with chlorinated aromatic hydrocarbons?

A. Yes.

Q. When was --

THE WITNESS: You mean in person? You mean me, in person?

MR. BRADLEY: You, personally, or if you were responsible because the task was delegated to an employee of yours, I still consider you responsible.

A. It would be delegated to employees of mine in my section.

Q. (By Mr. Bradley) All right. And when it was delegated to employees in your section, did they, those employees, still report to you regarding the written instructions given for workers working with chlorinated aromatic hydrocarbons?

A. Yes.

Q. Was there a point in time when you no longer had employees who were delegated that responsibility?

A. No. But the pollution control part of it was separated at one time and I was given a chance to do either one, and I took industrial hygiene.

Q. Was there ever a period that you're aware of where the instructions changed that were given to Monsanto workers working with chlorinated hydrocarbons?

A. No.

Q. As manager of pollution control --

THE WITNESS: Excuse me a moment. Were the instructions changed? Were the basic premises changed, is that what I mean? Department group was bigger and smaller, there were more employees, less employees. That isn't what you mean. You mean did we change the instructions in any way in connection with the actual operation of the department?

MR. BRADLEY: Yes, that is what I meant.

A. Okay. No.

Q. (By Mr. Bradley) In your work as manager of pollution control, did you perform any tests to determine whether PCBs were escaping from the Monsanto plants that produced products containing PCBs?

A. Yes.

Q. And did you write reports regarding that situation?

A. There were obviously reports written. I don't know whether the plant did or whether we did. The answer is, I simply don't know.

Q. Do you recall whether that information was related to any Governmental agency?

A. Yes. We related it to the Federal Government completely.

Q. And do you recall who, within the Federal Government, you related it to?

A. Two different agencies, and I don't recall -- See, I was on the National Drinking Water Counsel for four years, appointed by - I can't remember the secretary now who appointed me. I spent one year. And then three years - one year term - and then a three year term on the National Drinking Water Advisory Counsel to the EPA, and we made the standard. We made most of the current basic framework standards that are used today by EPA.

Q. You don't recall, though, when you located PCBs outside the Monsanto plants, which Government agencies you reported that information to?

A. We sampled the river, the Mississippi River, on a number of different occasions up and down that river and to be perfectly frank with you, we never could find a

lot of these materials at all. Not just the PCBs, but other chlorinated aromatics. So we assumed they were taken up in the pollution control facilities within the plant or they were outside the analytical range.

Q. Did you make reports to any Government agency then, indicating that you found --

A. Yes. The State of Illinois Pollution Control authorities in Springfield, and later, there were reports made, and I did not make them, so I really would not - from the plant, but I can't tell you because I don't know who did it.

Q. Were you the author of the report to the State of Illinois?

A. I took them up and talked to the State of Illinois Pollution authorities many times but it was not just PCBs, now, you understand.

Q. Were you the author of the report that went to the State of Illinois regarding PCBs?

A. I don't recall the author, whether it was I or one of my people or one of their people. It was an analytical job, and I don't know.

Q. What years are we talking about here?

A. Gosh, I really -- Has to be in the '60s sometime, probably into the early '70s.

MR. BRADLEY: I'm sorry. I didn't hear.

A. And probably into the early '70s.

Q. (By Mr. Bradley) Do you recall the year that you became manager of pollution control for industrial hygiene?

A. No. Pollution control and industrial hygiene. Had to have been in the late 50's, I guess. No, I don't recall the time exactly.

Q. But you became manager for pollution control and industrial hygiene after you finished your work as manager of pollution control?

A. Yes. Then I became -- Then I became director of industrial hygiene and health service records, through the medical department at Monsanto.

MR. FEATHERSTONE: Read back that answer.

(Whereupon, the reporter propounded the previous answer.)

A. Those were our health computer records.

Q. (By Mr. Bradley) Do you recall when you became director of industrial hygiene and health services records?

A. Well, it's difficult to say. Director is a different salary level, is the only reason they use manager and director and so forth. This is not a director, like a staff director. It had to have been sometime in the late '60s.

Q. What work did you do as manager for pollution

control and industrial hygiene?

A. By this time, I had some employees and they did - they were industrial hygienist, one of which also had been trained in pollution control, as well, and we used them as needed. Generally, they were assigned a group of Monsanto plants. A man would have six or eight Monsanto plants, maybe as many as ten or eleven, and he would handle the industrial hygiene problems and pollution problems up to a point in all of those plants and report back to me. I then either went out with him to the plants, discussed it or if he could handle it himself, he did it himself. Later, we had -- The vice-president called us in and said, "I've got to separate these functions, they're getting too complex. So take your choice, Jack. Do you want industrial hygiene or pollution control?" I took industrial hygiene. I thought it was then the most imperative thing. Another man in the engineering department at Monsanto took over the pollution control function.

Q. Why did you determine industrial hygiene was the most imperative of the two?

A. Because I thought at the time we were doing very well with pollution control and the real challenge was in industrial hygiene.

Q. Why was that a challenge?

A. Many of the questions in connection with industrial hygiene had not been answered. Collectively - this the nationally - all you had to do is read the literature and we were working on those things and solved the majority of them.

Q. Which questions were not answered?

A. The long-term low level exposure to organic chemicals of many kinds, not just PCBs. In fact, PCBs was simple compared to some of them; and the health records that go with them. We had complete health records. Monsanto had been giving physical exams since 1936, so we had detailed health records on all of our employees, and going over those records and following the sequence of events to determine if we had any problems that were unusual to an individual department or set of products.

Q. Why did Monsanto begin giving physical exams in 1936?

MR. FEATHERSTONE: How is he supposed to know that? He wasn't even there.

MR. BRADLEY: Do you have an objection?

MR. FEATHERSTONE: Well, lack of foundation for the answer.

MR. BRADLEY: Fine. Go ahead and answer.

A. Because it was smart and intelligent. It means a lot to people.

Q. (By Mr. Bradley) Why was it smart and intelligent?

THE WITNESS: To do physical exams?

MR. BRADLEY: Yes.

A. It was the only way you could determine if you were harming the employees or not. During the World War Two, the company manufactured ammunition and everything else in the crappiest places you ever had seen or we would have lost the blocdy war. At that point in time, the physical exams continued.

Q. Was there a protocol for the medical exams?

A. There was a standard exacted for the basic -- Ask Kelly about this. Ask Dr. Kelly about this. There was a standard set up of what we wanted to do, but you then had to look at the individual products and product lines to see if there was a discrete type of medical function or malfunction that could be identified, and we looked for that. We had doctors in all the plants, too.

Q. The decision -- Well, let me ask it this way. Do you know when Monsanto first began its work with products containing PCBs?

MR. FEATHERSTONE: What work are you talking about?

MR. BRADLEY: Any work.

MR. FEATHERSTONE: Object to the form.

A. The manufacture of it began long before I joined Monsanto.

Q. (By Mr. Bradley) Did the manufacture of it begin when Monsanto took over Swan Chemical?

MR. FEATHERSTONE: Object to the lack of personal knowledge.

A. The records so indicate.

Q. (By Mr. Bradley) All right. And do the records indicate that happened around 1933, 1935?

A. I can't recall that.

Q. Do you know if there is -- Have you reviewed any documents indicating why Monsanto began giving physical exams to its employees in 1936?

A. I don't have to have anybody tell me. It's a good idea.

Q. Have you read any documents indicating why Monsanto began giving physical exams to its employees in 1936?

A. I don't know what you mean by documentation. Dr. Kelly became the physician in charge of Monsanto medical at the time when the primary functions were two or three plants. He set the policy up as a policy to aid and abet good health on the part of our employees, and a signal if there was bad health developing in any one place. Physical exam did that. It's still going on today.

Q. My question is, have you seen anything written by Dr. Kelly, or by anyone else, that would indicate why Monsanto began giving physical exams to its employees in 1936?

A. No. And I haven't seen any darn medical bulletins why they put tails on airplans, but they do it because they won't fly. I'm sorry. I don't understand that question. It makes no sense.

MR. FEATHERSTONE: Mr. Garrett, he's asking you if you've seen any written document that states there are some other reasons, and I guess the answer to that is no?

A. No, it's not the answer. It's replete in the literature connected with health effects on workers of any variety.

Q. (By Mr. Bradley) It's replete in the literature the reasons why Monsanto began --

A. No. Why anyone would do physical exams on their employees. We did too. I think that's the best answer.

Q. Well, I know that this topic is apparently upsetting to you, but I'm interested in finding out whether these documents that indicated why everybody was giving physical exams to their employees are documents that were maintained in Monsanto's file system somewhere?

THE WITNESS: The reason for it, or the documents of the health status of the employees?

MR. BRADLEY: The reason that you began giving physical exams to employees in 1936.

A. I would suggest that you ask the person who started it. That's Dr. Kelly.

MR. BRADLEY: I will ask him. I take it, you haven't -- I actually want to know now whether you've seen anything written on why Monsanto started that practice. That's really all that I'm asking, if you have seen anything written that would describe why Monsanto started that?

A. No. I would have considered it unnecessary.

Q. All right. Was the standard set up by Dr. Kelly for the physical exams written?

A. I don't know whether they were specifically written. Full physical can be a normal affair. What special things he did, I don't know. Kelly would have to answer that.

Q. Do you no whether special standards were set for employees working with PCBs?

A. In a company that manufactured a whole host of chlorinated aromatics, all of the chlorinated aromatics, there were special standards if they were intelligent to do. In most cases, they were not. They were given a full

physical examination. In some cases, working with them, they did tests of - did some tests on them. You'd have to ask Kelly why and what they did, but by and large, an employee at Monsanto got a full screening physical exam periodically. Added to that would be any special examination that Dr. Kelly deemed necessary to observe progression of that employee's health.

Q. And there were doctors in all of the Monsanto plants?

A. Either doctors full-time or doctors part-time.

Q. And would that be true from 1936 forward?

A. I don't know. You'd have to ask Kelly. It was true when I came to work for Monsanto. The one we had in Texas City was a part-time man.

Q. And I take it, the doctors in the different plants when you began working for Monsanto were the doctors who did the physical exams?

A. Some. Some were full-time Monsanto employees. Most of them were contract physicians or physician groups that did it. We sent the new employee down to their office and they gave them the physical and the physical exam results on our forms came out and they were filed.

Q. Do you know whether the physicians that were contracted out had any special training in symptoms of people who were poisoned by chlorinated aromatic

hydrocarbons?

MR. FEATHERSTONE: Object to the form.

A. I don't know.

Q. (By Mr. Bradley) Do you know whether the doctors contracted out by Monsanto to do the physical exams of employees had any special training?

A. You'd have to ask them. No, I don't know. I'm sure if there was something germane to be done specific above the current, the then current full examination, it would have been done. Our purpose was to protect the health of the workers. If it required a specialty test, we'd do it.

Q. What work did you do as director of industrial hygiene and health services records?

A. Supervised the industrial hygiene group which, by this time was probably, with the secretaries, probably fifteen people, and supervised the group in the health services computer system, which contained twenty-four people.

Q. What would the people in the health services computer center do?

A. The plant would send in their physical exam forms, finished forms, and any special exam material. Results would be sent in, punched into the commuter cards under the man's name and put into the computer file. We

had a computer system on every employee at Monsanto.

Q. When did Monsanto first begin its computer system covering every Monsanto employee?

A. God, they worked for me. I can't recall exactly. It had to have been early '70s, late '60s. Early 70's, I would believe.

Q. In the early '70s, roughly, how many employees did Monsanto have?

A. Somewhere around fifty thousand. That could be twenty percent one way or the other.

Q. Over the period of time you worked with Monsanto, was the standard for the physical exam ever changed?

A. We added to the exam in some plants because of materials handling.

Q. Would that have been set up as an addition to the standard?

A. No. If a person showed some kind of physical problem and it had to be taken care of by periodic testing, Dr. Kelly would put it in and it would be recorded in the files with the computer setup, but primarily everybody got a standard physical exam except in many plants, we had special tests that were done on individual workers or groups of workers and those were also put in the computer.

Q. Did you have special exams for workers working

with PCBs?

A. I don't think so. I really don't think so. I don't think there was anything that you could find as a separate test.

Q. In your work as director of the health services records, did you ever access information on the health of Monsanto employees without identifying the employees by name?

A. Many times. I didn't. It was done by someone.

Q. How long were you the director of industrial hygiene and health services records?

A. Until I retired.

Q. I'm now going to show you what has been marked as Plaintiff's Exhibit 1427 and ask that you review that document.

MR. BRADLEY: Actually, if nobody minds, I'd appreciate a five minute break.

(Whereupon, a five minute recess was taken.)

THE WITNESS: This you have given me?

MR. BRADLEY: Yes. Can you tell me what Plaintiff's Exhibit 1427 is?

THE WITNESS: Ask the question. I didn't hear it.

MR. BRADLEY: Oh.

Q. (By Mr. Bradley) Can you tell me what it is. What is this exhibit?

A. This is an analytical setup, including diagrams, from an electronic capture fingerprint, which each compound has its own specific fingerprint, you can't fool with it, done on some samples, to the best of my knowledge, of material from NCR.

Q. What is material from NCR?

A. NCR is National Cash Register Company, and these things went with their people, analytical people, from NCR. Tucker was an analytical chemist of considerable skill.

Q. This is dated December 3, 1969?

A. That's what it says.

Q. And the samples were run to, in part at least, to determine the presence of Aroclor?

A. Yes.

Q. And this document was apparently sent to you, J.T. Garrett, and C. Paton; is that correct?

A. Yes. Paton was Tucker's boss at the time.

Q. Do you recall reviewing this document?

A. No.

Q. Does this appear to be a true and accurate copy of the document sent to you and to C. Paton on December 3, 1969 with the subject of Aroclor wildlife, NCR

water samples?

A. If Dr. Tucker said it was true, I'll buy it. He was a first-class analytical chemist, particularly graphic analytical chemist.

Q. Is this the sort of document that Monsanto would maintain in one of its files?

A. I don't know. The only reason this might be maintained is because it was part of the analytical group and may have ended up in their files. Normally, my copy of it -- This probably went into the analytical group's Aroclor file. My copy would have been destroyed by the retention program.

Q. Was there a different retention program for different departments?

A. No.

Q. Why would the analytical department maintain a document longer than you might?

A. I don't know that they did. I'm saying it might have been. You asked me where it came from. I don't know. It is not -- It's nothing more than showing the difference in the electron capture screens, what he saw, and Dr. Tucker, if he said he saw it, he saw it. He was an excellent, excellent spectroscoper.

Q. I'm now going to show you Plaintiff's Exhibit 438 and ask you to review that, if you would, please.

A. Yes. Mr. H.B. Patrick was safety director at the Krummrich plant at the time. Department 246 was an Aroclor department at the W.G. Krummrich plant in Sauget.

Q. And this document has a date of November 14th, 1955?

A. Yes.

Q. And about two-thirds of the way down, it has "Jack T. Garrett" printed above that, and has a signature. Is that your signature?

A. That's right.

Q. Is this a document that you wrote?

A. Yes. Apparently. I wrote thousands of them but yes, apparently it's mine.

Q. Does it appear to be a true and accurate copy of the letter that you wrote back on November 14th, 1955?

A. It's a copy of a series of documents written to Mr. Patrick concerning eating in the processing operation at the Krummrich plant, which is a miserable habit and we wanted it stopped.

Q. And is this the sort of document that you maintained in your files at Monsanto?

A. Probably would have, except this is a document that would have been destroyed by the document retention people. By the way, there were people who came around and looked into my files and asked me questions about them.

"Do you want to keep this?" "Why should you keep this."

Q. When did they do that?

A. At least once a year. I guess the last two or three years when I was there.

Q. Did they do that for anyone else?

A. All of Monsanto.

Q. Did they tell you why they were doing that?

A. Yes. They didn't have enough room, and the building wouldn't stand any more file cabinets, full file cabinets. They would collapse.

Q. Did they tell you whether they were attorneys?

THE WITNESS: People that did this?

MR. BRADLEY: Yes.

A. They were from the personnel department. They gave you a chance to hold it. If I wanted to hold my copy of this, I could have. Don't get me wrong. I'm not saying that they arbitrarily said "Let's throw this file cabinet in the river." Not that it wouldn't be a pollution hazard, but the point is, we could have retained it but the problem is, how many documents do you retain? This is a document that is of a subject that we are all aware of, and that is eating in processing operations, particularly true in health related organizations within the industry. They were eating in the Aroclor department. We told them to quit.

Q. Who was responsible --

A. And they quit.

Q. Who was responsible for sending around the people from the personnel department to help identify documents to be retained and those to be destroyed?

MR. FEATHERSTONE: Object to the lack of foundation.

A. I have absolutely no idea. I'm sorry. Excuse me.

MR. FEATHERSTONE: That's all right.

A. I have no idea.

Q. (By Mr. Bradley) In looking now at the Exhibit, 438. Was there data within the medical department that indicated that Aroclor vapors could contaminate lunches?

A. No. And they couldn't have.

Q. And upon what information did you rely on when you said "It is the opinion of the medical department that the eating of lunches should not be allowed in this department for a number of reasons. Number one, Aroclor vapors and other process vapors contaminate the lunches unless they were properly protected?"

A. It started when we began to look in the -- You don't realize it but in the early part of my career at Monsanto, we still used ice condensers filled with chopped

ice, and a guy chopped it and put it in there. This was to cool the condenser that would condense materials. We had a terrible time at Krummrich because it was the last plant where we got rid of all those old ice condensers. We had a terrible time because people put their lunches in the damn thing because there was ice in it, and that's what started this ruckus about quit exposing people to unnecessary exposures of any chemical, which is not a very smart idea. So we started in this route, and this happens to be the one we wrote on the Aroclor department because we found the Aroclor guys with their lunches stacked all over the place. We made them -- What we did, we made them put the lunches in the compartments - in the lunchroom and go to the lunchroom to eat.

Q. Was there some information that you relied upon in determining that lunches shouldn't been exposed to Aroclor vapors?

A. No. Lunches shouldn't been exposed to any chemical vapors, period. We made products at Krummrich a hell of a lot more toxic than Aroclor was.

Q. When you wrote this, was it your opinion that Aroclor vapors were toxic?

A. It was my opinion that -- I had no opinion, in essence, of what toxicology might have been connected with anything that would absorb on anything, but I said if

you're going to get rid of a problem in a plant as big as Krummrich, you had to get rid of all of the eating in the processing departments. You don't get rid of just some of them. You either quit it or you let anybody eat anything they damn please anyplace. So this was part of our efforts to get rid of eating in the processing departments. Most of the plants prohibited it to start with, and the Queeny plant had always prohibited it, right across the river from this plant. We had a long running argument with the Krummrich plant about stop the lunch storing in the damn processing department, where there was a possibility of it being contaminated with the products, or materials in those processes, and believe me, some of them were very, very, toxic. This just didn't happen to be that toxic.

Q. When you wrote this back in '55, did you do any review of any documents to determine the toxicity of Aroclor vapors?

A. No. I went through all of the departments that had eating in the departments and stopped it because -- The union over there had rotated bidding. This is completely rotational bidding, on the basis of seniority. A man in the Aroclor department could be anywhere in the plant every time they rebid, and frequently was. If you didn't stop it, we were going to have a damn mess all over the plant continuously. We had a hell of a battle. We

finally stopped it. They did not do it anymore. It's dangerous to eat in a damn chemical processing operation, I don't care what it is.

Q. When you wrote this, was there any information that existed regarding the toxicity of Aroclor vapors?

A. No. In the wipe samples we took -- We took wipe samples using a pad, which is standard procedure - Feds do it all the time. We did it long, long, long before they did. You wiped down metal materials and go through very fancy analytical methods using an electron scope to see if there was anything there. In almost any case where you had open processing, open processing, shovels and so forth - and believe me, there are a lot of wheel barrels and shovels in Krummrich - those processes would show evidence of chemical materials. We gave every employee in this plant one day's clothing every damn day, In several of the departments, they had new shoes everyday that had been covered with oil to prevent materials from absorbing. Every single operator in this plant was issued new clothing, and socks and underwear and a jacket, and the same was true at the Queeny plant.

MR. BRADLEY: No, Bruce. If you're going to say it, say it out load.

MR. FEATHERSTONE: Off the record.

MR. BRADLEY: No.

MR. FEATHERSTONE: Yes. Then you can put it on the record if you'd like.

(Whereupon, a discussion was held between Counsel and witness, off the record.)

Q. (By Mr. Bradley) When did Monsanto start providing new clothes for its employees working with - First of all, did Monsanto provide new clothes for the employees working with PCBs?

A. Yes.

Q. When did that start?

A. It was going on when I came. That was in the '50s.

Q. Did Monsanto provide --

A. Excuse me. The new clothes were provided daily. Laundered clothes everyday.

Q. (By Mr. Bradley) And the new shows, were those provided daily?

A. They were rotated and they were recoated if need be. Now, I'm not sure if that went on in this department. It went on in many departments. They were recleaned and recoated.

Q. And that would be true for employees working with PCBs?

MR. FEATHERSTONE: He just said he wasn't sure.

A. I'm not sure of that. With highly toxic substances, yes.

Q. (By Mr. Bradley) And the change of socks, was that --

A. Yes, that was part of it. Socks, underwear and coveralls.

Q. And was that true for employees working with PCBs?

A. The PCB Department -- When I first went to the department, they had what they call toxic clothes. This offended my nicety, "toxic clothes." It sounded to me like clothes that were toxic and actually, what they were was company clothing for people to use in toxic departments, or in departments that contained what was classified as toxic materials. This had been going on for years before I ever came to St. Louis. Okay? We straightened this thing out so that people that worked in various departments got company clothing. The union came along and negotiated company clothing for all Krummrich plant employees. So I don't know how they got them. They had company clothes.

Q. Did the workers working with PCBs have the company clothes that included the socks and the underwear?

A. To the best of my -- I don't know. That's the best -- I don't know. They had company clothing. How

extensive, I don't know.

Q. Did you read anything that was written that explained why Monsanto had company clothes for employees working with PCBs before the union got involved?

A. No.

Q. Okay.

A. It was a company plant deal.

Q. Was it something that was generated from the medical department, do you know?

A. No, I don't think so. I think it may originally have been generated by Dr. Kelly back in late '30s. He may have made them give clothing to certain departments then, based on the knowledge they had then of those departments. I don't know. I know that the company clothing issue was a settled issue when I came to St. Louis.

Q. Looking now at Exhibit 438 there, looking at number three. You state, beginning with the second sentence, "While the Areclors are not particularly hazardous from our own experience, this is a difficult problem to define because early literature work claimed that chlorinated biphenyls were quite toxic materials by ingestion or inhalation." Did I read that correctly?

A. That is correct.

Q. What early literature work claimed that

chlorinated biphenyls were quite toxic materials by ingestion or inhalation?

A. I have absolutely no idea. Came out in the medical literature, though, apparently.

Q. Do you recall whether you reviewed medical literature that indicated that chlorinated biphenyls were quite toxic materials by ingestion or inhalation?

A. Keep in mind that in chlorinating, you have also chlorine problems, and we all know that's a dangerous material; and also, that in a plant like the Krummrich plant, that manufactured over a hundred products, vast numbers of which were made by aromatic hydrocarbons, most of the aromatics which were manufactured were hazardous. The plant then addressed the company clothing issue, which had been started before the war, I guess. I don't know. What I was trying to do is to stop them from eating in the departments. I don't care if they're not hazardous. If you rotate employees from one development to another, they're going to eventually get into a hazardous department and get food, smear that stuff on their food. We were trying to get rid of eating in the departments, and we did. It's a difficult task, believe it or not, to change operators' habits. They're like anybody else, they develop a habit, they want to keep it. We declared it hazardous as an issue. As I said, there is no evidence that Aroclors,

in any kind of context that a man would normally get from the air on his food, was not probably a hazard. It was not probably a very serious hazard, if a hazard at all, but there were departments that we manufactured amine compounds that were very, very toxic, and these same people could be in and out of any department in the plant and we - you could not stop the eating in the amine departments, and we tried that. So we stopped it in the entire plant, in that plant and in the Queeny plant across the river, because of the number of toxic materials that they were handling. Now, to say this is toxic from the standpoint of the possibility of them absorbing through their food is really a punch line. We're trying to stop them from eating in the operating departments at the W.G. Krummrich plant, and we did. This is part of it.

MR. BRADLEY: Would you read the question back?

(Whereupon, the reporter propounded the previous question.)

A. Incidently, they are. But I go back to my argument that what we were trying to do -- I'd been there six months when this was written. I was trying to do what Dr. Kelly wanted done, and that was to stop eating in the operating departments, and we got it done.

Q. I'm now going to show you plaintiff's Exhibit 428 and ask you to review that.

A. Yes.

Q. Have you seen that document before?

A. Probably. I've seen a great many discussing that particular group.

Q. This is a March 6, 1969 innerdepartmental memo to E. Wheeler; is that correct?

A. Yes. From Bill Richard, W.R. Richard.

Q. And it indicates that you were sent a copy; is that correct?

A. Yes, I got a copy.

Q. And is this a fair and true copy of the document that W.R. Richard wrote to E. Wheeler?

A. As far as I know, yes.

Q. And is this the sort of document that you maintained in your files at Monsanto?

A. I would maintain them in my file.

Q. Looking now at the bottom of page two, where it says, "Well prepared discussions with Ind. Bio-test, Monsanto biochemists, the medical and legal departments must take place now." Do you know if those well prepared discussions with those departments took place?

A. Well, you're talking about problems proposed by the Environmental Defense Fund. The Environmental Defense Fund is an organization started in Long Island by a bunch of lawyers and millionaires, all of them --

MR. FEATHERSTONE: The question is, did the discussions take place, to your knowledge, the ones he referred to at the bottom of the page.

A. I can't recall. They probably did, but can't say that they did.

Q. (By Mr. Bradley) Have you ever had a conversation with anyone from Nevada Power Company?

A. Not to my knowledge.

Q. Have you ever had a discussion with anyone who said that they were making an inquiry on behalf of Nevada Power Company?

A. No. Not to my knowledge.

Q. Do you know whether customers of Monsanto's working with PCBs were ever informed that Monsanto workers working with PCBs got clean clothes every day from the company?

MR. FEATHERSTONE: Object to the form of the question.

A. Because the clothing was provided as a plant and subsequently a union issue, it was not issued because of PCBs. We would not have ordinarily changed workers' clothing in the PCB department.

MR. BRADLEY: I move to strike the answer as not responsive.

Q. (By Mr. Bradley) My question is, do you know

whether customers of Monsanto were ever informed about the clothing policy for workers, for Monsanto workers, in chlorinated - working with chlorinated aromatic hydrocarbons?

A. I go back and say at Queeny, at Krummrich, the issue was lunches in the operating departments, not whether we gave them clothing or not, and the way we did it was issued company clothing to everybody in the plant and forced them out of the operating departments and to eat in the lunchrooms which were provided. Because of rotating bidding, a man can be in the Aroclor department today and in the, in one of the highly toxic departments tomorrow, and we did not - he would take his bloody lunch along and we didn't want him to do that, so we said we'll change the clothing, give everybody clothing and stop eating in any of the departments. You eat in the lunchroom. Now, the issue was one of eating in the lunchroom and the possibility of getting products, or raw materials that were, in fact, toxic on their lunchbox, bags - and they used the bags in the damndest sort of ways you've ever seen. They'd put them in our condenser boxes and everyplace else. It was a dangerous and hazardous issue. We stopped it in most plants without all that trouble. We had trouble in the Krummrich plant.

Q. My question was, did you tell customers of

Monsanto about the clothing policy that you had for your workers working with the chlorinated aromatic hydrocarbons?

A. No. We didn't do it at Anniston. It was a specific, special issue connected with that plant, particular plant, and its union structure.

Q. Excuse me. Did Monsanto inform its customers in 1955 or later that it shouldn't allow its employees to eat around Aroclor vapors?

A. I told many customers of ours not to allow their people in areas where there were toxic materials, okay? That's a standard issue from an industrial hygiene point-of-view.

Q. Did Monsanto ever send out a warning or other kind of information bulletin, though, to its customers telling them that their employees shouldn't eat around, in areas where there are Aroclor vapors?

A. No. Because that wouldn't have been germane.

Q. Did Monsanto, in 1955 or any subsequent period of time, inform its customers that early literature work claimed that chlorinated biphenyls were quite toxic materials by ingestion or inhalation?

A. Everybody was, had that information available to them. Yes, I told many of the customers myself.

Q. My question is --

A. Yes, they were told.

Q. All right. And how were they are told?

A. Told by either one of us or by letters from Dr. Keller or letters from the production department.

Q. When --

A. It's on the labels.

Q. Do the labels say that early literature work claims that, claimed that chlorinated biphenyls were quite toxic materials by ingestion or inhalation; is that what the labels said?

A. No.

Q. Oh.

A. The label said, "Hazardous material," or "Chlorinated materials can be hazardous," and so forth. All it says is to prevent people from getting chlorinated compounds in their ingestive system. Our problem at Krummrich was to get them to quit eating in the damn departments.

MR. FEATHERSTONE: Jack.

A. Departments. Strike damn. In the departments, so we could -- Because some of the departments were genuinely hazardous to do that.

Q. (By Mr. Bradely) On looking here at Exhibit 438, the last sentence says, "In any case, where a workman claimed physical harm from any contaminated food, it would be extremely difficult on the basis of past literature

reports to counter such claims."

A. That's true.

Q. What do you mean by that?

A. If a worker claimed that you, that he got exposed to something operating in your plant, he comes to the doctor. The doctor does a physical exam on him and they do certain testing. If a worker of a transport company, or something like that, did it, I don't know who would take care of it. We did it if it was an accident. We handled all accidents connected with Aroclor, Monsanto did. I went many times myself.

Q. Did Monsanto inform any of its customers that in any case where a workman claimed physical harm from any food contaminated with Aroclor, that it would be extremely difficult on the basis of past literature reports to counter such claims?

THE WITNESS: Specifically?

MR. BRADLEY: Yes.

A. I don't know.

Q. (By Mr. Bradley) Are you familiar with a September, 1937 round table discussion that included Cecil Drinker?

A. I knew him before he died. He probably --

MR. FEATHERSTONE: Jack, he's asking whether you're familiar with a round table discussion involving Dr.

Drinker and some other people.

MR. BRADLEY: Lewis Schwartz, Emmett Kelly, Arthur Byer?

A. I have probably seen it, yes.

Q. Did you discuss with Dr. Kelly the work done by Dr. Drinker regarding chlorinated biphenyls as reported in the September, 1937, Volume 19, Number 7 issue of the Journal of Industrial Hygiene and Toxicology?

MR. FEATHERSTONE: Object to the form.

A. I was fourteen at the time.

MR. FEATHERSTONE: That's never mattered to any of the questioning in this room, Jack. Go ahead, answer.

MR. BRADLEY: Let me address that, Mr. Garrett. I didn't ask you how old you were or whether in 1937 you learned about this. My question was more narrow. My question was whether you ever discussed this with Emmett Kelly?

A. We discussed Phil Drinker's work and Drinker's work on this material, yes. He made some very bad mistakes.

Q. (By Mr. Bradley) I'm going to show --

MR. BRADLEY: Off the record.

(Whereupon, a discussion was held between Counsel, off the record.)

Q. (By Mr. Bradley) I'm going to show you know Plaintiff's Exhibit 979, and ask you to review that and actually, I'm going to have some relatively detailed questions about the round table discussion that's reported at the end of that exhibit, So why don't we take a ten minute break, or as long as you need to review that exhibit.

THE WITNESS: I can tell you right now, I don't know anything about it. As far as I'm concerned, whatever happened here, Kelly had to do with. I didn't. I don't even remember, recall this document. I'm sure it's in existence. It's a 1937 document. The problem is, from the time Dr. Drinker did this, there is an awful lot better analytical methods, awful lot of better ways of identifying conditions, awful lot better toxicological studies, tests. So whatever Phil Drinker did in 1937 or prior to that, I'm not sure is really germane.

MR. BRADLEY: Well, Mr. Garrett, would it be germane to you if, at a round table discussion, a GE employee talked about problems with the health of up to fifty of its employees who were working with chlorinated biphenyl?

A. Absolutely not.

MR. FEATHERSTONE: I object to the form. It's a clear misstatment of fact, Mr. Bradley. So if you're

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going to make statement like that, get into arguments, get your facts right.

MR. BRADLEY: I move to strike Mr. Featherstone's comments, other than his objection.

THE WITNESS: I don't know what went on in 1937, first. Second, in 1937, analytical methods available were zilch, so they're talking about what might be or should be or might occur, because they have no analytical methods to go down into the level we're talking about.

MR. FEATHERSTONE: All right. This whole thing started, Mr. Bradley, with you wanting to take ten minutes for Mr. Garrett to read this document. Is this something that you need to --

MR. BRADLEY: He says he didn't need to, no.

MR. FEATHERSTONE: He said he didn't need to because he doesn't know anything about the document. If you're going to ask him about the document, we're going to take the time for him to read it. What is it going to be, Mr. Bradley?

MR. BRADLEY: Mr. Featherstone, when you conduct your deposition, you can lay groundrules. Right now, I want you to make your objection or I want you to shut up. It's my deposition. I'll ask the question I want. If you want to instruct him not to answer, that's fine. What I want you to do is behave professionally and

not make those kinds of stupid comments. There is absolutely no need for it.

MR. FEATHERSTONE: Keep babbling, Ralph.

MR. BRADLEY: Let's puts it this way. I'm going to ask you questions about the round table discussion that is reported at the end of this document, just like I indicated to you I was going to do. Would you like an opportunity to review that before I ask you questions?

THE WITNESS: I know the basic premises here. They did a bunch of studies on aromatic hydrocarbons. Now mind you --

MR. FEATHERSTONE: There is no question, Jack. He asked you if you wanted to review it. You said no. Wait for the question. We'll never get done.

Q. (By Mr. Bradley) Would you turn to page 303 of that Exhibit?

THE WITNESS: 303?

MR. BRADLEY: Yes.

THE WITNESS: Yes.

Q. In the first column there, under Mr. F.R. Kamer..." First of all, it indicates he's with General Electric Company in York, Pennsylvania. Do you know Mr. Kamer?

A. No.

Q. Mr. Kamer indicates that, and I'm reading now

from the second full paragraph, "It is only one-and-a-half years ago that we had in the neighborhood of fifty to sixty men afflicted with various degrees of this acne about which you all know. Eight or ten of them were very severely afflicted - horrible specimens, as far as their skin condition was concerned. One man died, and the diagnosis may have attributed his death to exposure to Halowax vapors but we are not sure of that."

A. That's not anything to do with what you're talking about.

MR. FEATHERSTONE: Jack, he hasn't asked a question yet. He read something from an article.

Q. (By Mr. Bradley) In your work at Monsanto, were you aware of the conditions that Mr. Kamer reports here, in this round table discussion?

A. No.

Q. Okay. Looking now at page 304, on the bottom right hand side?

A. Wait a minute. You read something on 303.

MR. BRADLEY: Yes. Now I'm moving to 304, under Dr. Lewis Schwartz, Medical Director, Dermatosis Investigation, United States Public Health Service, New York, New York.

A. Yes.

Q. Have you heard of Dr. Schwartz?

A. I did. Schwartz wrote a book, a very good book, by the way. I knew of him.

Q. Towards the end there of the column, on page 304, and I'm going to read into the next page, it says, "If there are any cases of acne or of this dermatitis occurring in a plant where Halowax or the chlorinated naphthalene or chlorinated diphenyls are used, then that shows that there is sufficient concentration of these substances in the air to cause plugging of the follocles and to cause a skin condition. If there is sufficient concentration to do that, there may be sufficient concentration to cause systemic poisoning in the few people who are hypersensitive to the action of these hydrocarbons." Now, when you were a Monsanto employee, were you aware that in 1937, that was the opinion of Dr. Lewis Schwartz?

A. At the time, the most common word used in this document is "if," right?

MR. FEATHERSTONE: Jack, the question is, while you were an Monsanto employee, at any time were you aware of that opinion of the doctor?

A. Yes, I was aware of this document. I was also aware of the fact that Halowax and these other materials are highly - cause skin eruptions of great problems. Any time when one handles those materials, they handle them with great care. That is not chlorinated biphenyls,

period. We're talking about different things.

Q. (By Mr. Bradley) Was the Halowax a combination of chlorinated naphthalene and chlorinated biphenyl?

A. No. Chlorinated naphthalene.

Q. And there was no chlorinated biphenyl or diphenyl in the Halowax?

A. I never saw an analysis, but it never came from a process that had biphenyls in it.

Q. I'm reading now from page 283 of this Exhibit, in the first column, roughly two-thirds of the way down. "In the spring of 1936, the Halowax Corporation, a division of the Bakelite Corporation, called our attention to three fatal cases of jaundice in workmen working with chlorinated naphthalene and chlorinated diphenyls." Do you see that?

A. That's right. But the point is, it says chlorinated naphthalenes. We know that will occur. That's a common knowledge item in toxicology of aromatic structured compounds. To put chlorinated diphenyls in there is saying that might be because it was in the issue. We never saw that, nor did we ever have a case of a man in Monsanto in all the years we manufactured it, ever went to the hospital with any kind of problems connected with the chlorinated diphenyls.

MR. BRADLEY: I move to strike the answer

THE WITNESS: Go ahead and strike whatever you damn please. It's true.

MR. FEATHERSTONE: Jack.

Q. (By Mr. Bradley) Does that refresh your recollection on whether the Halowax was a combination of chlorinated naphthalenes and chlorinated diphenyls?

MR. FEATHERSTONE: Object to the form.

A. Halowax is a product of naphthalenes.

Q. (By Mr. Bradley) Do you know whether, in this study, Dr. Drinker studied the effects from exposure to chlorinated diphenyl?

A. I suspect he died before they became an extremely popular material. I don't know.

Q. Prior to 1955, are you aware of any other -- Well, let me ask it this way. Mr. Garrett, you tell me if I've asked this question before. I don't want to ask you the same question twice. Looking here, at Exhibit 438, where you say that - I'm reading the whole sentence. "While the Aroclors are not particularly hazardous from our own experience, this is a difficult problem to define because early literature claimed chlorinated biphenyls were quite toxic materials by ingestion or inhalation." What was the early literature that you were referring to?

MR. FEATHERSTONE: Objection. Commulative.

Q. (By Mr. Bradley) Just this one document?

A. No. There were others.

Q. (By Mr. Bradley) What others were there?

A. Well, Drinker's stuff got into books on toxicology and on hygiene and it was based, again, on the study with Halowax, only Halowax, which is the chlorinated naphthalenes.

Q. During the time of your employment with Monsanto, were you ever aware of a report by Jones and Alden in 1936 involving a man whose employment involved the distillation of chlorobiphenyl?

A. No. The distillation of chlorobiphenyl?

Q. Were you aware of any reports in the early '30s of up to twenty-three workers working in the manufacturing process of chlorobiphenyl developed chloracne?

A. I was aware of an incident where it occurred, yes.

Q. Were you aware of any reports in the 1930s that reported digestive disturbances, burning of the eyes and impotence in men working with chlorobiphenyls?

A. No.

Q. I'm going to show you Plaintiff's Exhibit 1373 and ask if you've seen that document before?

A. I've seen parts of it. I probably looked over parts of it.

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Q. Would you turn to page thirty-two? At the top, it says, "Early use of PCBs was for incorporation along with chlornapthalenes into synthetic waxes." 124 to 128.

A. Yes, I see that.

Q. 124 to 128 refers to references. It says, "These waxes contain ten to twenty percent PCBs," and gives references to 124 to 126.

A. Yes.

Q. "And were used to insulate electrical wire and cable."

A. Yes.

Q. Do you know whether that's referring to the Halowax cables?

A. That's Halowax. It's also the shipyard problems that you may ultimately find in here that occurred during World War II, were also Halowax, not PCBs.

Q. When you worked for Monsanto, were you aware of an animal experiment reported by Bennett, et al. in 1938 which found morphologic changes in the livers of two groups of rats exposed to 0.57 miligrams per cubic M concentration?

A. Meter.

Q. And also at 0.93 miligrams per cubic meter for eight hours a day?

MR. FEATHERSTONE: Object to the form.

MR. BRADLEY: What's wrong with the form?

MR. FEATHERSTONE: Just ask the question, Mr. Bradley. If we get in a debate, we'll be here all night.

THE WITNESS: What was the question?

Q. (By Mr. Bradley) The question is, when you worked for Monsanto, were you aware of an animal experiment reported by Bennett, et al. in 1938 which found morphologic changes in the livers of two groups of rats exposed to differing levels of chlorinated biphenyls?

MR. FEATHERSTONE: Object to the form.

THE WITNESS: Are you asking me if chlorinated biphenyls are hepatic/renal toxins?

MR. BRADLEY: No. What I'm asking you, when you work for Monsanto were you ever aware of a study by Bennett in 1938 --

A. No.

Q. (By Mr. Bradley) Okay. When you worked for Monsanto, did you ever become aware of a report by McCloughlin in 1963 which reported that PCBs might be embryotoxic, or have teratogenic effects?

MR. FEATHERSTONE: Object to the form.

A. Specifically, no. There have been an awful lot of studies. I'm saying, I don't remember those.

Q. (By Mr. Bradley) When you began your work

with Monsanto, were you aware of any research addressing possible damage to the liver from exposure to PCBs?

A. Specifically, no.

Q. Let me ask it this way. Did you ever learn of any research indicating that PCBs may cause damage to the liver?

A. You're talking about an aromatic chlorinated compound. If you could get it into the system, it will cause problems, okay? They are surely hepatic/renal toxins, and we know that. Everybody knows that.

Q. Well, when did you first learn that?

A. Probably the first time I went over to the Krummrich plant. Mr. Wheeler or Dr. Kelly probably told me.

Q. What documents did Monsanto give to its customers indicating that chlorinated aromatic hydrocarbons may cause damage to the liver?

A. It's sort of like there ain't a warning on it, but whiskey will do the same thing. The point I'm trying to make is, what are you talking about? Are you talking about lots of it? The guy spooning it into his mouth? The problem is, how much are you talking about. Toxicity represents a problem of concentrations. Certain areas -- All, - I repeat, all - chlorinated hydrocarbons under certain conditions in the system are hepatic/renal toxins

and would probably cause some difficulty in the liver, and some of the liver function studies will indicate that.

Q. And what did -- How did Monsanto give that information to its customers?

A. Everybody knew it. Everybody knew it. Everybody was told. it was in our documents.

Q. It was in your documents?

A. Certainly.

Q. What documents was it in?

A. We had an Aroclor bulletin that we put it in that said the material should not be inhaled and should not be thus and so, and the basis for that was the fact that it was, in fact, chlorinated hydrocarbon, and all chlorinated hydrocarbon, if you can get them in the form of a gas or in the form of something you can inhale - now, we couldn't do it by ingestion because we tested that. The rats would just kick it out. I wouldn't absorb, in other words.

MR. FEATHERSTONE: Jack, the question is one of passing along communications or warnings.

A. We passed it on to our customers and our plants knew it, too.

Q. (By Mr. Bradley) Did the Aroclor bulletins say that exposure to these chlorinated aromatic hydrocarbons could cause damage to the liver?

A. Exactly.

Q. Okay.

A. It says it could cause damage to the liver, hepatic/renal toxins. It's in the literature.

Q. Do you know of any research relating PCBs to causing malignant melanomas?

A. No. I know there was some. I don't think the literature was specific in that case. I don't think it caused -- I don't think it demonstrated that. I don't think it ever demonstrated that. We never saw them, any operation in which any of our people were involved, or any customer reported them to us.

Q. Do you know of any studies or research indicating PCBs may cause brain tumors?

A. No. That's carrying it a little far.

Q. Do you know whether the United States Environmental Protection Agency classifies PCBs as a potential human carcinogen?

A. I don't know. If they do, it doesn't make a hell a lot of difference to me. That's the craziest list that ever existed.

Q. You disagree with the EPA?

A. I absolutely do, and with their premise and with their standards. So does everybody else that has any knowledge in the field.

MR. FEATHERSTONE: Jack, just answer the

question. Do you know? Either you know or you don't know. Let's not debate it. Let's get through it.

Q. (By Mr. Bradley) Do PCBs get absorbed through the skin?

MR. FEATHERSTONE: Objection. Cummulative.

A. Not that we could determine. You're talking about a whole host of compounds.

MR. FEATHERSTONE: Do you have anything more? Do PCB gets absorbed through the skin was the question.

MR. BRADLEY: He answered. I'm satisfied. He said no.

MR. FEATHERSTONE: Okay.

Q. (By Mr. Bradley) Were precautions in handling chlorinated compounds issued in 1944, do you know?

MR. FEATHERSTONE: Objection. Absence of foundation.

A. I don't know. I don't know.

Q. (By Mr. Bradley) Do you know whether pathologic changes in animals exposed to commercial chlorinated diphenyl were reported in the 1940s?

A. No, I do not. I was fighting the war at the time.

Q. Were you aware -- Well, let when ask it this way. Do you know whether the toxicity of the vapors of Aroclor 1242 and 1254 were documented as early as 1956?

A. No, I don't know one way or the other.

Q. Do you know whether -- Do you know what polychlorinated dibenzylfurans are?

A. Yes.

Q. What are they?

A. They're a material that's similar to but not the same as dioxin and other chlorinated organic compounds in the structure, in the ring structrual materials.

Q. Are they considered to be quite toxic?

A. Yes.

Q. Do you know whether polychlorinated dibenzylfurans have ever been shown to be present in PCBs manufactured by Monsanto?

A. No, I don't know.

Q. Do you know whether anyone has studied the percentage of Americans that have PCBs in their adipose tissue?

THE WITNESS: PCB, or chlorinated hydrocarbons?

MR. FEATHERSTONE: Do you know if anyone has studied the percentage of Americans --

A. Yes, they have studied it.

Q. (By Mr. Bradley) What have the studies shown?

MR. FEATHERSTONE: Object to the question. Hearsay, among other things.

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A. All chlorinated hydrocarbons ultimately, if you get them into the system, will seek the adipose pool. They will absorb into the oil materials of some of the tissue. Now, if you're messing with compounds in enough animals of different kinds and - different species, enough time, enough facilities and enough people, you can probably prove that any chlorinated hydrocarbon causes problems connected with it's collection in the adipose tissue of beasts of any kind.

Q. Do you know whether ninety-nine percent of all Americans reportedly have over five hundred parts per billion PCBs in their adiposes tissue?

MR. FEATHERSTONE: Object to the form.

A. With all the --

MR. FEATHERSTONE: Do you know that?

A. No, I didn't know that.

Q. (By Mr. Bradley) Do you know whether PCBs have been found in human mother's milk?

THE WITNESS: Human what?

MR. BRADLEY: Mother's milk?

A. No, I don't know it.

Q. (By Mr. Bradley) Do you know whether PCBs pass through the mother's placenta to the fetus in human beings?

A. No, I don't know that and I wouldn't believe

it if somebody told me.

Q. Are you familiar with the term biomagnification?

A. Yes.

Q. What is it?

A. It means the material magnifies in the system by - in a specific tissue in a specific system as the material magnifies in concentration.

Q. Do you know whether biomagnification occurs in animals that -- Excuse me. Do you know whether biomagnification occurs in the human food change, relative to PCBs?

A. No. I've seen a lot of data, none of which does any good, as far as I'm concerned, or shows anything.

Q. Do you know whether changes in liver chemistry have been observed in PCB exposed humans?

THE WITNESS: Change in what?

MR. BRADLEY: Liver chemistry.

A. No.

Q. (By Mr. Bradley) Do you know whether PCBs can work synergistically with other compounds by impairing the immune system?

A. No.

Q. All right.

A. And I don't believe it anyway.

MR. FEATHERSTONE: Jack, just answer yes or no. We're not going to debate this here. We'll debate it later.

Q. (By Mr. Bradley) Do you know whether statistically significant high rates of skin cancer among people exposed to PCBs have been reported?

A. No.

Q. Do you know whether, in 1947, the literature reported that repeated exposure to PCB vapor may produce internal bodily injury which may be disabling or could be fatal?

THE WITNESS: That's a stupid question.

MR. FEATHERSTONE: Jack.

A. But the answer is, I don't know. The question don't make any sense.

MR. FEATHERSTONE: Then the answer is, "I don't know," or "No." Don't argue.

MR. BRADLEY: Would you read back the question?

(Whereupon, the reporter propounded the previous question.)

A. No.

Q. (By Mr. Bradley) Do you know whether a skin disease called chloracne could be an indication of a more serious systemic injury if exposure to PCBs was allowed to continue?

A. There never was any chloracne indicated with PCBs in our operations, ever.

Q. Okay. Were you ever informed in the 1970s that Westinghouse employees indicated that there is sufficient evidence that PCBs can be dilatorious to the health of animal and human life and that the risk of ignoring the evidence that does exist was inappropriate for Westinghouse?

MR. FEATHERSTONE: Well, the question is, have you ever heard that Westinghouse employees had made that statement.

A. No.

MR. FEATHERSTONE: All right.

Q. (By Mr. Bradley) Were you told in the 1970s that Westinghouse employees believe there is now so much PCB in drums in the ground, in the river and ocean beds that unless steps are taken to reduce the source of PCB contamination, the burden in the environment will have no chance of decreasing?

MR. FEATHERSTONE: Were you ever told that, that Westinghouse employees --

A. No.

MR. FEATHERSTONE: All right.

A. I never communicated with Westinghouse employees.

Q. (By Mr. Bradley) Do you know what a furan is?
A. Yes.
Q. What is a furan?
A. A furan is a ring compound, organic ring compound.
Q. Are furans one of the most extreme toxicities of any compound since the beginning of chemistry?
A. No.
Q. Would one once of furans be enough to poison ten thousand people?
MR. FEATHERSTONE: Objection. No showing of foundation.
A. I have no idea.
Q. (By Mr. Bradley) I take it, if I was able to show a transcript that Monsanto's medical director, Dr. Emmett Kelly, stated that furans have one of the most extreme toxicities of any compound since the beginning of chemistry, that you would disagree with that?
MR. FEATHERSTONE: Object to the form of the question.
A. How did Kelly get to that? My answer is, if you're talking about furans, you've got to be talking about a whole host of furans.
MR. FEATHERSTONE: No. The question is, if he can do something like what he said, you would disagree with

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it?

A. Yes.

Q. (By Mr. Bradley) Were you part of the group that determined that Monsanto customers would have to enter into indemnification agreements with Monsanto for Monsanto to continue selling PCBs?

A. Heavens, no.

Q. Did Monsanto require its customers to enter into an indemnification agreement before Monsanto would continue selling them PCBs?

MR. FEATHERSTONE: Object to the form of the question.

A. I do not now.

Q. (By Mr. Bradley) Do you know whether Monsanto entered into any indemnification agreements with any of its customers regarding products manufactured by Monsanto that contained PCBs?

A. No.

Q. Were you aware of a 1966 study from Sweden where a Swedish scientist found PCBs on the hair of his family and of himself?

MR. FEATHERSTONE: Object to the form of the question.

Q. (By Mr. Bradley) Are you familiar with a Swedish researcher named Jensen?

A. Yes.
Q. Are you familiar with any of the work that he published in the 1960s?
A. Yes.
Q. Did any of his work that was published have to do with PCBs?
A. Yes.
Q. Did Dr. Jensen --
A. Jensen.
Q. Jensen. Did Dr. Jensen report that he was finding PCBs in the hair of his family?
A. Dr. Jensen reported a lot of things, some of which were not scientifically proven.
MR. FEATHERSTONE: Did he report that?
A. I don't know.
Q. (By Mr. Bradley) Did Dr. Jensen report finding PCBs throughout the environment?
MR. FEATHERSTONE: Object to the form.
A. In Sweden, I suppose. I don't know.
Q. (By Mr. Bradley) Did Dr. Jensen report finding PCBs anywhere?
A. Yes.
Q. Where did he report finding PCBs?
A. In sea life.
Q. Seal life?

A. Sea life. In certain see critters.

Q. And was Dr. Jensen's report published in 1966 or thereabouts?

A. Some of his reports. He wrote a number of papers.

Q. Well, the one having to do with finding PCBs in sea life. Was that around the mid '60s?

MR. FEATHERSTONE: Object to the form of the question.

A. Probably, yes. I don't know exactly. I don't know. It was somewhere in that period of time.

Q. (By Mr. Bradley) Was the report written by Dr. Jensen regarding the location, finding of PCBs in sea life, published around the middle of 1960?

A. I don't know. It probably was.

Q. Do you know whether you reviewed Dr. Jensen's report in the year that it was published?

A. I doubt it but I might have. My boss went over there and talked to Jensen quite often.

Q. Do you know whether, after your boss went and spoke with Professor Jensen, Monsanto set a goal of increasing its PCB sales?

A. No. If they did that, nobody that I know of knew it for that reason.

MR. BRADLEY: Excuse me.

(Whereupon, a five minute recess was taken.)

Q. (By Mr. Bradley) I'm going to show you Plaintiff's Exhibit 1473 and ask you to review that document.

MR. BRADLEY: I don't have a copy.

THE WITNESS: Yes?

Q. (By Mr. Bradley) Have you seen that document before?

A. Yes.

Q. What is the document?

A. It's a manufacturing operation standard practice process setup for Aroclor.

Q. Was that something that was developed by Monsanto's medical department?

A. No.

Q. Who developed it?

A. Manufacturing.

Q. And is that a fair and accurate copy of the document it purports to be?

A. As far as I can see, yes.

Q. Is that the sort of document you maintained in your files at Monsanto?

A. I doubt it but I might have. It wasn't sent to us, I don't think. I can't see it.

Q. Was it the kind of document you'd expect

manufacturing to maintain in its files?

THE WITNESS: Their files?

MR. BRADLEY: Yes.

A. If manufacturing detects problems in either plant, in our plant at Queeny or Krummrich, any changes in the quality of product, any changes in the volume, any changes in the conversion rates, those things would all be there and what was recommended to cure them.

Q. Do the Aroclors manufactured by Monsanto biodegrade?

A. Some.

Q. Which ones biodegrade and which ones don't?

MR. FEATHERSTONE: Object to the absence of personal knowledge.

A. The lesser ones do, some.

Q. (By Mr. Bradley) The lesser chlorinated Aroclors?

A. Some.

Q. Some of the lesser chlorinated. Do you know which ones of the lesser chlorinated Aroclors biodegrade?

A. No. We did some work on checking what happened in streams with them.

Q. Do you know whether 1221 biodegrades?

A. Probably.

Q. What's the next less chlorinated Aroclor?

A. 34 I believe, but I'm not sure. 1232.
Q. And does it biodegrade?
A. In part.
Q. And what's the next least chlorinated Aroclor?
THE WITNESS: The most chlorinated?
MR. BRADLEY: The next least chlorinated.
A. 1221, and there's a 12 -- Used to be a 1210 or 1214, or something like that. The lower two numbers mean percent, the percent if chlorination.
Q. (By Mr. Bradley) Did 1242 biodegrade?
A. In part.
MR. FEATHERSTONE: Object to the absence of foundation.
Q. (By Mr. Bradley) And how do you know that 1242 biodegrades in part?
MR. FEATHERSTONE: Same objections.
A. We tracked it in a flowing stream.
Q. (By Mr. Bradley) And what work did you do to track it?
A. Tested it.
Q. What year did you test it?
A. I haven't the foggiest.
Q. Was it in the 1970s?
A. Probably in the '70s.
Q. As part of your tracking, did you take

samples?

A. Yes. Many of them.

Q. And what did you do with the samples?

A. Tested them.

Q. To determine whether they biodegraded?

A. Tested the isomeric spread, how many 1244 were there, how many 1221 were there, and these represented specific chlorinated isomers of polychlorinated biphenyl.

Q. On the 1221, 1242, 1260, what does the "12" represent?

A. It was our term used many years ago and was carried through as the Aroclor material. All of them were 12s. That was biphenyl chlorinated. Any of the other chlorinated structures would have had, would have been a different number.

Q. And the second number after the 12 is the percentage of chlorine?

A. Roughly, the percentage of total chlorinated material in the material.

Q. Did Monsanto ever manufacture chlorinated biphenyl that had the number 1016?

A. Not to my knowledge.

Q. Did Monsanto ever manufacture a product containing PCBs that had the number 1016?

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

just don't know.

Q. Do you know whether Monsanto ever warned its customers that they should inform equipment users of transformers and capacitors of the potential environmental contamination problems with PCBs?

A. We dealt directly with the manufacturers of the products that used them and they were given the whole story we had.

Q. Did Monsanto ever recommend, though, to General Electric that General Electric notify the people buying transformers and capacitors from General Electric of the potential environmental contamination problems associated with PCBs?

A. I do not know.

Q. Did Monsanto ever inform Westinghouse that Westinghouse should notify the purchasers of its transformers and capacitors of the potential environmental contamination problems associated with PCBs?

A. I don't think there is any doubt they did because the people dealt with us. We dealt with GE, Westinghouse and industrial hygiene people and medical people.

Q. So Monsanto told Westinghouse to tell those folks that buy Westinghouse --

A. We told them the whole story.

Q. Let me finish my question. I don't want to argue with you. I want you to answer my question, though. Monsanto told Westinghouse to tell purchasers of Westinghouse transformers and capacitors that contained PCBs about the potential environmental contamination problems with PCBs?

A. I don't think that any -- I dealt with GE and some of those people, myself. They knew all we knew.

Q. Well, my question, though, is whether --

A. And your specific question is part of that answer. They knew all we knew, and they knew it when we knew it and when we found it out.

Q. Well, did Monsanto tell Westinghouse to tell what it knew to the people who were buying Westinghouse products?

A. I told people --

MR. FEATHERSTONE: Jack, his question is, did Monsanto tell Westinghouse to tell the Westinghouse customers.

A. I don't know.

MR. FEATHERSTONE: All right.

MR. BRADLEY: I have nothing further.

CROSS-EXAMINATION

QUESTIONS BY MR. FEATHERSTONE:

Q. Jack, when did you retire from Monsanto?

A. God. You know, it's funny about memory. It had to have been five years ago, four years ago.

Q. Okay. And you've used the term "rotating bidding" in your testimony with regard to the Krummrich plant?

A. Yes.

Q. What does that mean?

A. Every union employee in the plant was allowed to bid on any other job in the plant that existed in any of the plants for which bidding was practiced, which meant that any Monsanto employee in the Krummrich plant, in the hourly class, could bid into the PCB department if they had sufficient seniority, okay? Now, the PCB department was such a good department to work in that the people that worked there were so old, that it very rarely occurred because you'd become a sixty year old man who could work until he was sixty-five by Monsanto standards.

Q. Let me ask you this question. What, if anything, did the practice of rotating bidding have to do with the memorandum that you sent to the Aroclor department regarding lunches, storage of lunches in the Aroclor department?

MR. BRADLEY: Before you answer, I object to the form of the question because it is my memory that I moved to strike an answer that I claimed was not

responsive, where he talked about rotating bidding. So I object to the form of the question to the extent the Court grants my motion to strike his answer.

MR. FEATHERSTONE: Okay.

Q. (By Mr. Featherstone) What, if anything -- Now that you defined rotating bidding in response to my question, what, if anything, did that practice have to do with your memorandum which Mr. Bradley showed you regarding storage of lunches in that Aroclor department at Krummrich?

A. Any worker in the plant could work in the Aroclor department any time they held biddings.

MR. FEATHERSTONE: Held?

A. Held them. People retired, people died, people got other jobs. So they bid openings. They held biddings. People bid for the jobs. If they had sufficient seniorty, they got the job.

Q. (By Mr. Bradley) Now, you also talked about clothing policy - that is, giving laundry, clothing to the workers. You also mentioned a union contract. What, if anything, did the union contract at the Krummrich plant have to do with laundered clothing at --

MR. BRADLEY: Object to the form of the question.

A. They wanted everybody to get clothing in the plant, and it ultimately occurred. First, we wanted only

certain -- We said it was required in only certain plants.

Q. (By Mr. Featherstone) All right. You say at first, it was required in certain departments. Was that before the union contract?

MR. BRADLEY: Object to the form of the question.

A. That was the union contract. We stipulated who had clothing and the union made them give it to everybody that covered our stipulations.

Q. (By Mr. Featherstone) All right. Now, before the union contract, did Monsanto have a policy of requiring laundered clothing for workers in the Aroclor department at the Krummrich plant?

A. Yes.

MR. FEATHERSTONE: No further questions. Thank you.

MR. BRADLEY: Nothing. Thank you.

STLCOPCB4026038

Jack T. Garrett

JACK T. GARRETT

Subscribed and sworn to before me this 10 day of May, A.D., 1993.

Notary Public

Notary Public within and for the State of Missouri.

MY COMMISSION EXPIRES THE 15th DAY OF January, A.D., 1995.

Josephine S. Niblock

JOSEPHINE S. NIBLOCK
NOTARY PUBLIC STATE OF MISSOURI
ST. LOUIS COUNTY
MY COMMISSION EXP. JAN. 15,1995

STLCOPCB4026039

STATE OF MISSOURI)
) SS
COUNTY OF ST. LOUIS)

I, John T. Concannon, a Notary Public within and for the State of Missouri, duly commissioned, qualified and authorized to administer oaths and to take and certify to depositions, do hereby certify that pursuant to Notice in the civil cause now pending and undetermined in the District Court of the United States, within and for the District of Nevada, entitled NEVADA POWER COMPANY Plaintiff, -vs- MONSANTO COMPANY, et al., Defendants, to be used in the trial of said cause in said Court, I was attended at the law offices of Messrs. Husch & Eppenberger, 100 N. Broadway, Suite 1300, in the City of St. Louis, State of Missouri, by Ralph A. Bradley, attorney for the Plaintiff; by Bruce A. Featherstone, attorney for the Defendant, Monsanto Company; by Laurie Pasch, attornty for the Defendant, Westinghouse; and by J. COLEMAN WEBER, the witness, in said office on March 16, 1993.

The said witness, JACK GARRETT, being of sound mind and being by me first carefully examined and duly cautioned and sworn to testify the truth, the whole truth and nothing but the truth in the case aforesaid, thereupon testified as is shown in the foregoing transcript, said testimony being by me reported in shorthand and caused to be transcribed into typewriting, and that the foregoing pages correctly

set out the testimony of the aforementioned witness, JACK GARRETT, together with the questions propounded by counsel and the remarks and objections of counsel thereto, and is in all respects a full, true and complete transcript of the questions propounded to and the answers given by said witness; and that said testimony, so transcribed, was subscribed to by the witness on the _____ day of _____, A. D., 1993.

I FURTHER CERTIFY that I am not of counsel nor attorney for any of the parties to said suit, nor related, nor interested in any of the parties or their attorneys.

WITNESS MY HAND and Notarial Seal, given this _____ day of _____, A. D., 1993, at St. Louis, Missouri.

MY COMMISSION EXPIRES SEPTEMBER 12, 1994

_____
JOHN T. CONCANNON,
Notary Public, within and
for the State of Missouri

April 14, 1993

Bruce A. Featherstone, Esq.
Kirkland & Ellis
1999 Broadway - Ste. 4000
Denver, Colorado 80202

Re: Nevada Power Company -v-
Monsanto Company, et al.

Dear Mr. Featherstone:

This letter, incorporated as the last page of Mr. Garrett's deposition, taken on March 16, 1993, will serve as notice to you that his testimony is now ready for reading and signing of same. You will recall you indicated a preference for him reading his deposition, rather than waiving signature.

Enclosed please find the original signature page of Mr. Garrett's deposition, along with an eratta sheet. Please have Mr. Weber read and sign his deposition and return the original signature page to me. I will then return the signature page to the original transcript, and notify Mr. Bradley of any corrections the witness may have made.

Thank you for your cooperation in this regard.

Sincerely,

JOHN T. CONCANNON
Shorthand Reporter

Concannon & Jaeger
General Court Reporters
705 Olive Street - Ste. 604
St. Louis, Missouri 63101

JTC:md

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