

Wm. Papageorge - Glenn Brown Trial Testimony 10/31/91 P.M.

1 THE COURT: The court recognizes Mr. Kotoske.
2 I will report to you, and I had discussions with the
3 attorneys, we will not have court tomorrow. We'll have a
4 day off. And I think it's safe to report that we are
5 clearly ahead of schedule in this case and moving along
6 well. So I am comfortable in going ahead and shutting
7 down for tomorrow. I think you've all earned it, and plus
8 you've worn my sheriff out over the last couple of weeks.
9 But, now, as for today, we hope to finish with
10 Mr. Papageorge, and then we'll have one more witness. And
11 then we'll be done for the day. Is that my understanding,
12 counsel?

13 MR. KOTOSKE: Yes, sir.

14 THE COURT: Mr. Kotoske, you may continue.

15 Q. (By Mr. Kotoske) Monsanto action plan, p
16 November 17, 1969, Defendant's Exhibit No. 25, action
17 plan. You testified about the action plan, did you not,
18 Mr. Papageorge?

19 A. Yes, I did.

20 Q. And I commend you, it had a lot to do to stop
21 the open uses. And you were going to continue your
22 toxicology program, investigating adverse consequences of
23 the health effects. It's all on Exhibit D-25.

24 A. Yes.

25 Q. And, in fact, these were the IBT studies?

1 Q. Correct. That's when you started or
2 continued?

3 A. The IBT studies were part of that, yes, sir.

4 Q. All right. Now, there is one thing that's
5 missing from this action plan. What were you going to
6 tell the workers about the adverse health effects
7 attendant to exposure to PCB? I didn't see that in your
8 action plan.

9 A. Oh, p that would be covered under the line that
10 referred to communicating to customers.

11 Q. It's not part of this action plan, is it?

12 A. What isn't?

13 Q. Warning the customers, workers, the guys and
14 the gals that actually worked with capacitor oil making
15 capacitors.

16 A. That is done through the customer, sir.

17 Q. That's what you relied upon?

18 A. That's what all industrp y relies upon

19 Q. The workers are the ultimate user of these
20 PCBs in the manufacture of equipment, are they not? These
21 are the guys and the gals that actually put this equipment
22 together and get this oil on them?

23 A. Some of the workers, yes.

24 Q. There is nothing in your action plan for
25 those people?

1 MR. CARNEY: Objection. He's
2 mischaracterizing his testimony and argumentative.

3 THE COURT: Overruled. You may answer, sir.

4 A. There is no specific line item that uses the
5 word "worker" in it; that is correct, sir.

6 Q. (By Mr. Kotoske) Now, you testified that for
7 40 years you never heard of a problem with PCB, no
8 chloracne, no liver damage. Were you present when
9 Dr. Kelly testified?

10 A. I didn't testify the way you described it.

11 p Q. You were aware of workers that had chloracne?

12 A. I had understanding that if improperly used,
13 and misused is a better word, that those conditions were
14 observed in some cases.

15 Q. Did you hear Dr. Kelly's testimony?

16 A. I did.

17 Q. When he said, "I admitted there were" and he
18 listed the incidents there of workers that got chloracne
19 and other diseases?

20 A. I p recall, if I'm not mistaken, about three
21 cases that he personally investigated, yes.

22 Q. Did he share that information with you at any
23 time?

24 A. Certainly.

25 Q. When?

1 A. The earliest I recall was when I was plant
2 manager at the Anniston, Alabama plant, and then it was
3 repeated when I was assigned manager-environmental
4 control.

5 Q. Now, I want to know what Monsanto knew about
6 the adverse health consequences. You knew from your own
7 material safety data sheets that over-exposure to this
8 chemical can cause nausea, true?

9 A. True.

10 Q. You knew that over-exposure to this chemical
11 could cause your workers to vomit?

12 A. True.

13 Q. You knew that over-exposure to this chemical
14 could cause stomach pain? I can read it to you if you --

15 A. Yes. That's true.

16 Q. You knew that over-exposure to this chemical
17 could cause a condition known as chloracne; is that true?

18 A. True.

19 Q. You knew that over-exposure to this chemical
20 could cause liver damage?

21 A. True.

22 Q. By 1968 you also knew from the Yusho
23 incident, did you not, that over-exposure to this chemical
24 can cause heart disease?

25 A. That I did not know.

1 Q. You knew from the Yusho incident, did you
2 not, that over-exposure to this chemical could cause lung
3 disease?

4 A. That I did not know.

5 Q. Did Monsanto know --

6 MR. CARNEY: I'm going to object.

7 THE COURT: Sustained as to the form. I mean
8 you can clearly get into that. But you want want to pin
9 p down what you mean by that?

10 Q. (By Mr. Kotoske) Do you know if Monsanto
11 knew it?

12 A. Monsanto heard reports that there was a
13 suspicion that PCBs might be the reason for those last two
14 symptoms you mentioned.

15 Q. That would be lung damage. You knew that
16 over-exposure to this chemical could cause a general
17 weakness in the worker, did you not?

18 A. That was reported, yes, sir.

19 p Q. You knew that over-exposure to this chemical
20 could cause chest pains and irritation?

21 A. Yes.

22 Q. And you also knew if you read the literature
23 from Yusho, neuropathies, a nerve condition could develop?

24 A. That was in that early literature, yes, sir.

25 Q. All right. That's what you knew. Now, I

1 want to show you one of your own exhibits, 28. Do you
2 have 28 there? This is an actual memo about your action
3 plan.

4 A. I have Exhibit 28.

5 Q. Let's turn to the second page where it says
6 "The problem." This is your own document, is it not,
7 Monsanto's own document?

8 A. Yes, it is.

9 Q. Did you prepare it?

10 A. Yes, I did.

11 Q. All right. Let me read from it. "The
12 Problem. The presence of materials identified as PCBs in
13 marine environment was first noted by Professor Widmark
14 and Jensen," so forth, "in Stockholm, Sweden, in 1966.
15 Since then with increasing frequency other investigations
16 have identified PCBs in marine and animal life.
17 Increasing evidence has been noted that indicates PCBs is
18 ubiquitously," that means everywhere, "present in the
19 environment and is resulting in damage to the ecological
20 system. Monsanto is a major producer of PCBs, Aroclors
21 worldwide and has been mentioned in many of these
22 reports." That was the problem, as you perceived it, back
23 on April 7, 1970, when you wrote this letter?

24 A. It is.

25 Q. Now, the basic strategy of Monsanto -- And

1 this strategy was drafted by you?

2 A. Yes, sir.

3 Q. Let me read some of it.

4 MR. CARNEY: Your Honor, I think he's
5 mischaracterized the document. It says at the top it's
6 "The environmental problem," to make it clear.

7 THE COURT: All right. Go ahead, sir.

8 Q. (By Mr. Kotoske) "The basic strategy. With
9 the growing evidence of the presence of PCBs and the
10 apparent damage it can do to the world environment,
11 Monsanto must respond as a responsible member of the
12 business world generally concerned with the welfare of our
13 environment, yet not to take premature action which could
14 compromise its responsibilities to its customers, its
15 shareholders and its employees. Finding ourselves on the
16 defensive, lacking considerable information to help in
17 arriving at a sound business decision and with no real
18 influence regarding the time of any precipitous action by
19 the press, competitors, public or government agencies, we
20 are forced to commit our limited resources in several
21 directions." That was your strategy, true?

22 A. True.

23 Q. I'd like --

24 MR. CARNEY: Your Honor, he's read part of
25 the strategy. It goes on for another page.

1 THE COURT: I know. You can bring it out
2 when you get back up.

3 Q. (By Mr. Kotoske) In December 1971 you told
4 Westinghouse, according to your own Exhibit D-54, whatp
5 your position was. This is a Westinghouse document, is it
6 not?

7 A. It is.

8 Q. Have you read this document before?

9 A. Yes, I have.

10 Q. There is a section in this document that
11 talks about Monsanto's position. This was in 1971. Do
12 you see that? I'm on page 3.

13 A. I found it.

14 Q. And you state, "Use of chlorinated diphenyls"
15 -- We all know tp hat "di" and "bi" are interchangeable, do
16 we not. You're a chemist?

17 A. They are.

18 Q. -- "should be restricted to closed electrical
19 systems." This is the position that you had taken at
20 Monsanto. "Restriction of the use of Aroclors, the
21 compounds which have a lower percent chlorination, less
22 than will be avoided."

23 MR. CARNEY: You're not reading that
24 accurately.

25 p MR. KOTOSKE: Would you like to read it,

1 counsel?

2 THE COURT: I don't have it in front of me.
3 So I'm at a disadvantage.

4 MR. KOTOSKE: It's Exhibit 54. It's their
5 own exhibit.

6 MS. RUTTER: You have it.

7 THE COURT: Hang on. Why don't you start
8 over, please? You're on page what?

9 MR. KOTOSKE: Three.

10 THE COURT: Go ahead. Start again.

11 Q. (By Mr. Kotoske) "Point 1. Use of
12 chlorinated diphenyls should be restricted to closed
13 electrical systems." Is that your position?

14 A. Yes.

15 Q. "Restrictions of use of Aroclors, the
16 compounds which have lower percent chlorination, less than
17 pentachlorodiphenyl will be avoided -- will avoid buildup
18 and persistence in the environment for minor amounts
19 released. Waste chlorinated diphenyls should be carefully
20 controlled and destroyed or recovered." Why? Why,
21 Mr. Papageorge?

22 A. To prevent them from getting into the
23 environment.

24 Q. Why did you want to prevent them from getting
25 into the environment?

1 A. Because, in the first place, they don't
2 belong there, and at that time it was unknown as to what
3 effect it might have on the environment.

4 Q. "No. 4. They feel that burial of chlorinated
5 diphenyl impregnate paper," et cetera "for failed or
6 retired capacitors from which removal of the liquid would
7 be difficult is a satisfactory procedure providing the
8 burial site is carefully chosen and perfectly dry." You
9 knew that was the dry --

10 THE COURT: "Preferably dry," I think it
11 says.

12 MR. KOTOSKE: Preferably dry.

13 Q. (By Mr. Kotoske) The fact of the matter is
14 you knew that was improper at the time?

15 A. I did not. That was the best approach
16 available to us at that time.

17 Q. They, meaning Monsanto, indicated that they
18 intended to stay in the business of supplying chlorinated
19 diphenyl Aroclors, but only to the electrical industry; is
20 that right?

21 A. That is correct.

22 p Q. Now, the other day you testified that you --
23 after you stopped selling in the open system in carbon
24 paper and so forth that you only had a few customers left.
25 That was the electrical industry?

1 A. That is correct.

2 Q. And they used 63 percent of all PCBs that you
3 manufactured; is that right?

4 A. That is close, yes, sir.

5 Q. Now, here's your last recommendation --p

6 MR. CARNEY: Well, I'm going to object as
7 characterizing this as Monsanto's last recommendation.
8 This is a Westinghouse document.

9 THE COURT: All right. With that amendment,
10 go ahead.

11 Q. (By Mr. Kotoske) It's clear on this document
12 they are reporting their position, and it's called
13 Monsanto's position.

14 A. They are reporting of their understanding of
15 Monsanto's position.

16 Q. Did you see anything here that's wrong?

17 A. Not yet.

18 Q. "No. 6. They strongly urge that the
19 electrical industry make a more vigorous effort to define
20 and justify the use of chlorinated diphenyls in their
21 apparatus to the government and other environmental
22 groups." What were you going to do, this combined effort?

23 A. A combined effort on whose part, sir?

24 Q. The electrical industry and Monsanto.

25 A. There is no reference here to Monsanto

1 participating in item No. 6.

2 Q. You did not participate at all in the
3 electrical industry's steadfast objection to the
4 regulations to implement the ban. Is that your position?

5 A. We participated in a supportive role, but
6 were in no position to describe to those agencies and
7 parties that were p involved with PCBs regarding why PCBs
8 were definitely needed in the electrical industry. That
9 was the electrical industry's responsibility.

10 Q. Now, when you spoke to Westinghouse in 1970,
11 did you tell them what you knew the dangerous consequences
12 of the exposure to PCB was to their workers? And I'm
13 talking about the people on the line.

14 A. Those items that you have listed.

15 Q. Yes or no.

16 p MR. CARNEY: Objection, Your Honor.

17 THE COURT: He can answer yes or no. Then he
18 can briefly explain.

19 A. Yes. Those items were covered in my
20 discussions with individuals from the electrical industry.

21 Q. (By Mr. Kotoske) At about the same time
22 Westinghouse prepares another memorandum you will see
23 identified as Defendant's Exhibit 55, the next exhibit in
24 that book.

25 p A. I see it.

1 Q. Now, Westinghouse is reporting on the meeting
2 with you, Mr. Papageorge, are they not?

3 A. Yes.

4 Q. Now, let's look down at this document in
5 evidence, it's dated December 28, 1971, to point 2 where
6 we finally get around to talking about the toxicity of
7 this chemical as it relates to workers, and here's what
8 you say. "The toxicity of PCBs in any absolute term
9 cannot be expressed, but there is some indication that
10 lower chlorinated biphenyls, 3 or less, appear to be more
11 toxic than higher chlorinated biphenyls." Is that what
12 you told them about the toxicity?

13 A. No. That's a misunderstanding.

14 Q. This document is wrong?

15 A. That sentence is wrong.

16 Q. Westinghouse didn't know what they were doing
17 when they were taking down your remarks?

18 A. Well, I don't know that I describe it as they
19 didn't know what they were doing. This is the way
20 non-medical people understood what was being explained to
21 them. And the author of this report thought that's what
22 was said.

23 Q. It continues. "Point 4. The only documented
24 case of ingestion in humans is one that occurred in Japan.
25 As a result of this ingestion, people broke out in a rash

1 type condition known as chloracne and suffered nausea.
2 Children born to the adult victims of the ingested
3 suffered brown pigmentation of the skin, which at last
4 report given by Munson has persisted through three years
5 of age. There is much controversy as to whether the
6 conditions brought on to Japan exposures were due to PCBs
7 or an impure (inaudible) chlorinated dibenzofuran.
8 Monsanto claims the PCB manufactured by the European
9 chemical companies contain about 15 to 20 parts per
10 million of the chlorinated dibenzofuran." I want to ask
11 you something. Did you ever test your PCBs at or about
12 this time?

13 A. Yes, we did.

14 Q. You found furans in them?

15 A. No, we didn't.

16 Q. It's your testimony there is no furans in
17 Monsanto's PCBs?

18 A. At this point in time, yes, that is my
19 testimony.

20 Q. Did you find out that there was furans in
21 your PCBs at a later point in time?

22 A. There -- Yes.

23 Q. When?

24 A. 1976.

25 Q. This memo goes on, "Monsanto claims -- I'm

1 reading now the next paragraph. "Monsanto claims the
2 product made in this country is essentially free from this
3 impurity." The statement was false at the time it was
p 4 made, and you later determined that your PCBs also
5 contained furans?

6 MR. CARNEY: Your Honor, I'm going to object
7 to the question. It's not false in 1971.

8 THE COURT: Sustained as to the form.

9 Q. (By Mr. Kotoske) After the Japanese
10 incident, Mr. Papageorge, when you have all this equipment
11 and all this expertise marshalled, why didn't you check to
12 see if your PCBs had furans in thep m?

13 A. We did, sir.

14 Q. That wasn't until 1976?

15 A. No. The work started in 1970 when we
16 returned from our visit with Dr. Vos in the Netherlands,
17 and that work continued on a high priority basis through
18 '70, and '71, '72, '73, '74, '75, and it wasn't until 1976
19 with continual changes in technology that it was spotted
20 at very low quantities. It took that long to find it
21 because it was presp ent in such a low quantity.

22 Q. When you found furans in your PCBs did you
23 announce, "Hey, world, we've got furans in our PCBs, too"?

24 A. I personally don't know if that was
25 announced.

1 Q. Now, in 1972 you testified that you went to
2 this federal task force on PCBs?

3 A. In '7 -- Yes, in 1972, yes. Did I testify to
4 that? I don't recall that. We did go.

5 p Q. Did you go?

6 A. Yes, sir.

7 Q. And there was a collection of the most
8 renowned scientists in the world, according to your
9 testimony, or were these a bunch of jerks that didn't know
10 anything about PCBs attending this task force meeting?

11 A. I'm confused, sir. There were certainly
12 scientists in the room, but there were also individuals
13 with other kinds of training and disciplines. They were
14p not all scientists.

15 Q. The focus of this meeting was to share an
16 understanding about the toxicity of PCB and its damage to
17 the environment?

18 A. In 1972?

19 Q. Yes. In May of 1972, according to your own
20 exhibit, 276. And you may want to turn to it because I'm
21 going to read from it. Have you got that one there? You
22 have it. That's it. There were several medical papers
23 and journal p articles about exposure to PCB submitted data,
24 were there not?

25 A. I am totally confused, sir. The conference

1 that I attended with the task force, the
2 inter-departmental task force in Washington in May of 1972
3 was a conference with the individuals that belonged to
4 that task force to share with them Monsanto's
5 biodegradation data and some analysis made of PCBs in
6 animal and tissue.

7 p Q. Did you bring those IBT studies with you?

8 A. Not at that time, no, sir.

9 Q. Now, I want you to turn to page 153 of that
10 publication where it talks about the toxicological effects
11 of exposure to PCB documented in the literature.

12 A. I have it.

13 Q. All right. Skip down to 11. Are you with
14 me?

15 A. I have it.

16 Q. Do you see 19, "Exposures from toxic
17 p exposure" -- Toxic exposure symptoms from this chemical"?
18 I'm going to start with No. 11. "It was known by May '72
19 that skin, liver and kidney lesions in rabbits following
20 dermal exposure." Do you see that?

21 A. I do.

22 Q. I'm going to continue reading. "Possible
23 immunosuppressive effects in rabbits, chemical
24 porphyrinogenic in many species."

25 MR. CARNEY: What number is that?

1 MR. KOTOSKE: 14 -- 13, 14.

2 MR. CARNEY: Wait a minute. What did you
3 just read?

4 MR. KOTOSKE: I just read "Chemical
5 porphyrinogenic effects in many species. Fourteen,
6 chlorogenic and hepatotoxic effects in man."

7 MR. CARNEY: I think that's chloracnogenic.

8 Q. (By Mr. Kotoske) "Fifteen, 'hyperglycedemic'
9 effects in man, human miscarriages, still birtþ hs."

10 MR. CARNEY: Your Honor, that had to do with
11 the Yusho incident with regard to the furans.

12 THE COURT: Why don't you finish that whole
13 line, and then --

14 Q. (By Mr. Kotoske) "Human miscarriage and
15 still birth."

16 MR. CARNEY: Your Honor, this is irrelevant.
17 It's beyond the scope of your rulings. He's getting into
18 the things that aren't possibly ailments that the
1p 9 plaintiffs have had.

20 THE COURT: I'll sustained. Let's move on.

21 Q. (By Mr. Kotoske) "Seventeen, PCB residues in
22 human adipose tissues, serum and milk. Eighteen,
23 hepatotoxic and chlorogenic and porphyrinogenic effects of
24 chlorinated dibenzofuran contaminants in several species"
25 and, finally, chlorogenic effects of chlorinated

1 naphthalene contaminant in man." Now, were you asleep
2 p during this conference when all this was stated?

3 MR. CARNEY: I'm going to object to that,
4 Your Honor. That's kind of --

5 THE COURT: Rephrase.

6 Q. (By Mr. Kotoske) Did you take these
7 materials home with you and read them or was this some
8 sort of a flip get-together that you went to?

9 MR. CARNEY: I'm going to object again, Your
10 Honor, the sarcasm that's obvious.

11 p THE COURT: Well, overruled. Let's get to
12 it. I think you know what he's asking.

13 A. Yes, sir. And I'm confused because there
14 was no conference that resulted in the document that we
15 are discussing. This document was prepared by the agency
16 over a many-month period and submitted to the government
17 printing office and was being printed in May -- in March,
18 April and May of 1972.

19 Q. I guess I should cut right to it. When did
20 you get your copy?

21 A. In about the third week of May of 1972.

22 Q. So when you got it, did you read it?

23 A. Certainly.

24 Q. Did you read about the adverse health
25 consequences from folks that were exposed to this stuff

1 like I just did?

2 A. I have read all of those that you have
3 recited for us.

4 Q. Thank p you. Now, in the third week of May
5 when you got your copy did you change the warning to show
6 all these adverse effects on these workers in these
7 capacitor and transformer plants?

8 A. No, sir, because what this document told us
9 was not new.

10 Q. It was not new. You knew it all along?

11 A. This came from old documents that were
12 available to everybody.

13 Q. I want to change the subjectp , move ahead to
14 1973. In 1973 the NEMA ANSI committee 107, you're the
15 chairman, you were supposed to draft some guidelines, safe
16 handling procedures for handling PCBs, right?

17 A. That was our job, yes, sir.

18 Q. And you knew all of this, all of these
19 adverse consequences and more when you started this work
20 in 1973?

21 A. Yes, sir.

22 Q. I want you to read to the jury on page --

23 p It's in Section 2, page 3, what your draft, purportedly
24 written by Mr. McClain of Westinghouse in Bloomington, had
25 to say about this subject.

1 THE COURT: What exhibit number is that?

2 MR. KOTOSKE: It's -- Pardon me, Your Honor.
3 It's Exhibit 277. I'm going to read from Section 2, page
4 3.

5 MR. CARNEY: What was the page number?

6 MR. KOTOSKE: Section 2, p page 3. This thing
7 doesn't have page numbers like (inaudible).

8 Q. (By Mr. Kotoske) Do you see over there on
9 the right-hand side?

10 MR. CARNEY: Could we hold up just a minute
11 until I can find --

12 THE COURT: Yeah.

13 MR. KOTOSKE: Before you start reading, this
14 is --

15 MR. CARNEY: Could you hold up just a minute?
16 I gave you a whole night to look at thp ese documents. I'd
17 like to have a couple seconds.

18 THE COURT: What page are you going to be
19 talking from?

20 MR. KOTOSKE: I'm not trying to (inaudible).
21 Section 2, page 3. This thing is not paginated like the
22 (inaudible).

23 THE COURT: Yeah, I know.

24 MR. KOTOSKE: It says at the top "Official
25 Standard Proposal."

1 THE COURT: p Got it. Under "Benefits"?

2 MR. KOTOSKE: No. "General safety
3 Precautions." I'll show you.

4 Q. (By Mr. Kotoske) You got it, too?

5 A. Yes, sir.

6 THE COURT: Okay. How many pages again is it
7 from the beginning?

8 MR. KOTOSKE: It's about that much.

9 THE COURT: Section 2.

10 MR. KOTOSKE: Right, page 3.

11 Q. (By Mr. Kotoske) See that? It's broken down
12 in sections. So go all the way to Section 2.

13 MR. CARNEY: What's the GBRA number?

14 MR. KOTOSKE: 364.

15 Q. (By Mr. Kotoske) Now, this is supposed to
16 represent the collective wisdom of the electrical industry
17 warning people that are building capacitors and
18 transformers getting this stuff on them every day about
19 what to watch out for.

20 MR. CARNEY: Did you identify this as an ANSI
21 study or a NEMA study?

22 THE COURT: I think he said both.

23 MR. CARNEY: Because this is not an ANSI
24 study. It's a NEMA study, as I understand it.

25 THE COURT: Is it NEMA, Mr. Kotoske? I think

1 you said both. You started out with ANSI, and you said
2 NEMA.

3 Q. (By Mr. Kotoske) Look, NEMA is an
4 organization of the National Electrical Manufacturers
5 Association. Under NEMA there was a committee formed.
6 It's called 107 for short. This committee's task was
7 designed to prepare this document to alert the world how
8 to deal with these PCBs and so forth.

9 THE COURT: Do you agree with that?

10 Q. (By Mr. Kotoske) He was the chairman of that
11 committee?

12 A. I believe there's a misunderstanding.

13 Q. What is it?

14 A. NEMA is the group that represents the
15 electrical manufacturers association. They came up with
16 the idea of the need for such a standard. They proposed
17 to the American National Standards Institute, which is an
18 entirely separate organization --

19 Q. I agree.

20 A. -- that such a group should be formed and
21 should consist of people representing not only the
22 manufacturers of the equipment, but the users and the
23 regulators and anybody interested in the subject of PCBs
24 and the environment. So the documents that you just
25 suggested was put out as a proposal with NEMA's heading.

1 The final document was the standard under the American
2 National Standards Institute.

3 Q. Everybody understand that? You were chairman
4 of that committee?

5 A. I was.

6 Q. 1p 07?

7 A. C-107 of the American National Standards
8 Institute.

9 Q. Now, this proposal is going to bring together
10 the best knowledge then available to Monsanto and the
11 electrical industry about the dangerous consequences from
12 exposure. Tell us (inaudible).

13 MR. CARNEY: Just a second. Could you give
14 him a second to answer the question?

15 THE COURT: Is that the question?

16 p MR. KOTOSKE: No.

17 MR. CARNEY: Objection, Your Honor. He's
18 making (inaudible).

19 THE COURT: I understand. Let him answer
20 that question, if that's a question. Do you agree with
21 that proposition he just stated?

22 A. He mentioned only the electrical industry and
23 Monsanto as bringing together the best knowledge regarding
24 this subject. There were others involved, including the
2p 5 manufacturers of the equipment as well as Monsanto.

1 Q. (By Mr. Kotoske) All right. I'm talking --

2 A. The government people.

3 Q. What is our --

4 A. The government people and so on. I'm sorry.

5 Q. Go ahead and add your list because from now
6 on I don't want to be interrupted. We want to know
7 everybody that was bringing their knowledge.

8 A. b The best source, of course, is the listing on
9 the two pages of the American National Standards Institute
10 document, which starts at the bottom of the page entitled
11 "Forward" and continues to the following page.

12 Q. Now, read the proposed standards that was
13 suggested by this document. Read it to the jury.

14 A. I'm sorry. Proposed standard suggested by a
15 document?

16 THE COURT: You want to (inaudiblep) the page
17 you're talking about?

18 Q. (By Mr. Kotoske) The page is Section 2, page
19 3 of the proposed standard, your Exhibit No. 277.

20 MR. CARNEY: Your Honor, he's mixing -- I
21 don't know if it's intentional or not, but he is mixing
22 the two different committees. He's talking about the
23 standards versus NEMA.

24 THE COURT: There is a difference, but let's
25 get to the question.

1 MR. KOTOSKE: I've been trying to do that.

2 THE COURT: I understand.

3 Q. (By Mr. Kotoske) Now, I want you to read to
4 the jury what is on page -- Section 2, page 3 entitled
5 "General Safety Precautions."

6 A. Of the NEMA proposal?

7 Q. (By Mr. Kotoske) Sure.

8 A. All right. Under "General Safety
9 Precautions. Although it is generally accepted that
10 exposure to capacitor grade askarel is not hazardous
11 provided simple precautions are taken, exposure should
12 still be avoided. No. 1: Vapors, the odor of askarel is
13 noticeable well below the maximum air concentrations
14 considered safe up to 1.0 milligram per cubic meter of air
15 has been determined to be the maximum safe level of
16 exposure during an eight-hour workday (paragraph G,
17 reference 8). The procedures for performing the necessary
18 analysis are contained in Section 5. A tentative
19 procedure for the determination of airborne
20 polychlorinated biphenyls.) Breathing vapor or fumes from
21 heated askarels should be avoided. Provisions should be
22 made for adequate ventilation and regulation of
23 manufacturing operations to avoid open exposure to
24 askarel, (especially at 55 degrees centigrade or higher.)
25 The gases produced when askarel is decomposed by very high

1 temperatures, (such as that of an electric arc,) in the
2 presence of air or organic insulating materials contain a
3 high percentage of hydrogen chloride and small percentages
4 of carbon dioxide, carbon monoxide and oxygen. Minute
5 concentrations of this combination of gases are very
6 unpleasant and irritating, thus giving ample warning of
7 their presence. If exposure to high concentrations of
8 askarel p is necessary under emergency conditions an
9 approved gas mask or self-contained, breathing apparatus
10 should be worn. Such exposure should be under the
11 surveillance of other personnel capable of rescue in case
12 of an accident. If the odor of askarel is detected by the
13 person wearing protective equipment, he should immediately
14 go into fresh air. All gas masks, respirators and
15 replacement parts should have 'butyl' lines of approval
16 p and be maintained on a regular schedule in accordance with
17 the manufacturer's recommendation."

18 Q. Let's stop right there. Where do you warn
19 about nausea, vomiting, stomach pain, chloracne, liver
20 damage, dizziness, lung damage, heart damage, neurological
21 damage and chest pain in that warning?

22 A. It does not appear in that warning.

23 Q. Now, pick up Exhibit 286, but keep your
24 finger on what you jþ ust read and turn to 286. Can you do
25 that gymnastics because if you can't, I can shorten this

1 up.

2 THE COURT: The Exhibit 286?

3 MR. KOTOSKE: Yes.

4 Q. (By Mr. Kotoske) I want to for the record
5 say that that Exhibit 286 is the American standard posed
6 by ANSI C-107, dated 1974, which was the final version of
7 what you just read; isn't that right?

8 A. That is correct.

9 Q. The section you just read is the same as the
10 final version. I don't want you to have to read the final
11 version, but if you want to, go ahead.

12 A. As best as I recall, it is the same version.

13 Q. Now, we have just gone through the final
14 version of 1974, and nowhere have you warned anyone about
15 these dangerous adverse consequences that are listed on
16 this board and which I have just read into the record; is
17 that true?

18 A. That's right.

19 Q. Now, I want to get to the warnings in this
20 case because this is what this case is all about. You see
21 all these brochures and technical guides? I'm going to
22 ask you a lot of questions about them in real short order.
23 So are you able to move through Exhibits 134 to 146 and
24 257? I'm going to have you read from some of them.

25 THE COURT: Which volume?

1 MR. KOTOSKE: Any time you're ready.

2 A. I have two volumes entitled "Brochures."

3 Q. (By Mr. Kotoske) All right. Let's just talk
4 about brochures. Now, those brochures are designed for
5 your salesmen, right?

6 A. Well, --

7 Q. Going out selling PCBs?

8 A. They are designed for the customer.

9 Q. What do you mean? You send them out in the
10 mail and say, "Hey, Joe, heard about our new Aroclors?"

11 A. That's one way to send it out. The other way
12 is through salesmen.

13 Q. Now, you don't expect the worker that's
14 working on the capacitor line to say to your salesman,
15 "Hey, Paul Benignus, you got now brochures on Aroclors? I
16 want to do some light reading"?

17 A. Certainly not. Mr. Benignus calls on the
18 management of the plant.

19 Q. He calls on the management. You don't expect
20 the worker to go in and say, "Say, Sally, I want to look
21 at your brochure. I want to do some light reading
22 tonight"?

23 A. That could happen.

24 Q. You didn't expect it to happen, did you?

25 A. I expected it to happen on occasion, yes.

1 Q. I mean you would expect Albert Fritch to
2 comep -- the heater man in this case, he's drenched in the
3 PCBs, to walk up to the front office and say, "Say, Sally,
4 I'd like to check out some brochures on Aroclor. Do some
5 light reading tonight. Try kind of catch up." Do you
6 expect that?

7 A. Well, sir, I can only share with you my
8 personal experience with Monsanto employees. Brochures of
9 this type from our suppliers were placed in the control
10 rooms available to the p workers. During the light duty
11 shifts they could sit down and read and browse through
12 them. I don't know what happens at each and every other
13 plant, but it is possible. It can happen.

14 Q. But not likely?

15 A. I have no measure for that. I don't know.

16 Q. Not reasonable to expect?

17 A. I have no measure of that, when you say not
18 likely, not reasonable.

19 Q. When these Westp inghouse workers out in
20 Bloomington got off of work did you honestly think that
21 they would go and check this stuff out and read it? Did
22 you really think that --

23 A. No, I wouldn't expect that, but during the
24 shift it's possible.

25 Q. All right. Now, these guides for the safe

1 handling of Aroclors, that's the other part of these
2 exhibits, did you expect that the people that working on
3p the capacitor lines soldering these capacitors full of
4 Inerteen to go in and say, "Say, Sally, I'd like to check
5 out the Aroclor Monsanto Guide for the safe handling and
6 (inaudible) of PCBs. Got to do some light reading
7 tonight"?

8 A. No, but I expected that they had Westinghouse
9 documents that they had access to and were encouraged to
10 read.

11 Q. Do you think that these employees would go in
12 to the front office and say, "Say, Sally, I'd like to check
13 out the correspondence file between the medical
14 departments of Monsanto and Westinghouse up in Pittsburgh,
15 Pennsylvania, to see if there's anything going on with
16 PCBs? I want to kind of keep up to date"?

17 A. Certainly not, no, but I would expect them to
18 bring up the subject if they had a question about it to
19 the plant nurse, the plant doctor, the plant industrial
20 hygienist, whoever he felt could give him a reasonable
21 answer.

22 Q. So you think Al Fritch would say to
23 Paul Benignus from Monsanto, "Say, Paul, I'm going to buy
24 about 2 million pounds of PCBs. Let me see some print
25 brochures."

1 A. Well, if Mr. Fritch was perceived to be a
2 potential customer for 2 million pounds, that would be
3 given to him.

4 Q. Is that your answer?

p 5 A. Yes, sir. That happens every day.

6 Q. You've got a heater man working in a
7 Westinghouse plant putting capacitors in buying 2 million
8 pounds of PCBs every day?

9 A. You didn't say he's going to remain a heater
10 man. He might start a factory somewhere. I don't know
11 that.

12 Q. Oh. Let's turn to 134. What's the date on
13 134?

14 A. 134 is --

15 Q. Cp an you give us a date on that document? I
16 can help you out. Can you find a date?

17 A. I have here dated June 18, 1945.

18 Q. Thank you. I couldn't find it. Where did
19 you find it?

20 A. This is a the last page of that exhibit.
21 It's a stamped date which indicates date of receipt of the
22 document.

23 Q. What's the date on 135?

24 A. I see a "1966" as best I can read it.

25 p Q. What's the date on the next brochure, 136?

1 (Ms. Olliges replaced Ms. Carter.)

2 A. I'm having difficulty finding it.

3 Q. I am, too. If you can't find it, just tell
4 me.

5 A. I can't find it.

6 Q. How about on 140?

7 A. I'm having difficulty finding a date. I
8 can't find it.

9 Q. Now, by the way, let's say some employee out
10 at the plant, Bloomington plant, picked up 140, said, "I
11 think I'd like to look at this and get up to date." What
12 would he find in that document about the adverse
13 consequences from exposure to PCBs?

14 A. On page 19 of that document, he will see a
15 section entitled "Dermatology and Toxicology".

16 Q. Read it to the jury, please.

17 A. "Skin patch tests with a polyvinylchloride
18 free film plasticized with 11.5 percent by weight of
19 Aroclor 1254 (about 25 percent based on the weight of the
20 vinyl resin) and a similar amount of dioctyl phthalate
21 show that this film was not a primary irritant or a
22 sensitizer.

23 Also, skin patch tests on Aroclor 1254 alone
24 applied to gauze and placed in contact with the skin
25 showed no primary irritancy or sensitization. Other skin

1 patch tests using canvas coated with Aroclor 5460 and an
2 oil-modified alkyd resin, in such a manner that the
3 Aroclor concentration in the paint film on the fabric was
4 about 17 percent by weight of paint solids and the
5 finished coated fabric contained approximately seven
6 percent by weight of Aroclor 5460 showed that this painted
7 fabric did not produce primary irritancy or sensitization
8 of the skin.

9 If Aroclors are spilled on the skin, the skin
10 should be washed in the usual manner with soap solutions.
11 If accidental burns occur from contact with hot Aroclors,
12 the burn should be treated the same as any ordinary burn.
13 Aroclor adhering to the burn area need not be removed
14 immediately unless treatment of the burn demands it, in
15 which case use soap and water or repeated washing with
16 vegetable oil. At ordinary temperatures, Aroclors haven't
17 presented industrial toxicological problems. If Aroclors
18 are used at elevated temperatures, such as 200 degrees or
19 300 degrees centigrade, in open systems, methods must be
20 designed to exhaust any vapors arising from these open
21 systems. This applies especially to lower chlorinated
22 Aroclors where experimental work on animals indicates that
23 the maximum safe concentration of vapors in workrooms is
24 in a range of 0.5 to 1.0 milligrams per cubic meter of
25 air. In the case of the more highly chlorinated Aroclors,

1 such as Aroclor 1268, the allowable limit is about ten
2 milligrams per cubic meter of air, and, accordingly,
3 Aroclors of this type are believed to be of a much lower
4 order of toxicity. Where Aroclor vapors may be
5 encountered in the workrooms, local exhaust ventilation
6 together with general workroom exhaust is recommended."

7 Q. So by chance, if one of the Plaintiffs p in
8 this case picked that brochure up, took it home, read it,
9 that's what he'd be advised of?

10 A. I'm sorry.

11 Q. That's what he'd be advised of by Monsanto?

12 A. By this wording, yes.

13 Q. By your own brochure?

14 A. Yes.

15 Q. And he would not have been told anything
16 about nausea, vomiting, stomach pain, liver damage,
17 chloracne, headaches, lung damage, heart damage, pains in
18 the chest or neuropathies; would he?

19 A. All that occurs over these numbers that are
20 in this paragraph.

21 Q. Pardon me?

22 A. Those kinds of symptoms would show up when
23 the 0.5 and one milligram per cubic meter level is
24 exceeded.

25 Q. And he'd have to extrapolate in his mind to

1 know that, and where would he go to find all that
2 informationp out?

3 A. Well, sir, if he works in an atmosphere that
4 meets these concentration levels, you never have to
5 experience those.

6 Q. Mr. Papageorge, let me cut right to it. Are
7 those symptoms that I just listed, those disease patterns,
8 mentioned in what you just read?

9 A. Obviously no. I just read that.

10 Q. Well, that leaves us with the labels.
11 They're Exhibits 147 to 187. Do you knp ow the dates of
12 these documents?

13 A. I don't have the label book.

14 Q. Well, they'll get it for you.

15 A. Thank you.

16 Q. Do you have those labels?

17 A. I have 147.

18 Q. What's the date on that?

19 A. There is no date, but from the information on
20 it --

21 Q. The question is, Mr. Papageorge, what is the
22 date? You can't find a date; canp you?

23 A. There is no date printed on this document,
24 no.

25 Q. As a matter of fact, there's no dates on any

1 of these labels in that book; is there?

2 A. Not that I recall. You're correct.

3 Q. Why didn't you date them, those warnings, so
4 we know when they were issued?

5 A. Well, sir, there is a catalog number at the
6 bottom that serves Monsanto's purpose.

7 Q. So Monsanto could go to this catalog and find
8 out when these were published?

9 A. That is my understanding.

10 Q. Where is that catalog?

11 A. I do not know.

12 Q. Do you think Monsanto might know where that
13 catalog is?

14 MR. CARNEY: I'm going to object. I think it
15 calls for speculation.

16 THE COURT: Sustained.

17 Q. But if p we had the catalog, we could know
18 specifically the date each one of these warnings was
19 issued?

20 A. That is my understanding.

21 Q. Thank you. But we don't? You don't see it
22 here; do you?

23 A. I haven't seen it, no, sir.

24 Q. Now, what's the product identified in 162?

25 A. I can tell you --

1 Q. I'm going to ask you ones where there's no
2 p product identified. But what do you say it is?

3 A. 162 refers to Aroclor.

4 Q. Which one?

5 A. No specific one.

6 Q. We don't know which one?

7 A. That is correct.

8 Q. Turn to 165. What product are we talking
9 about there?

10 A. This, again, was used on Aroclor products.

11 Q. You don't know which Aroclors?

12 A. That's true.

13 p MR. CARNEY: Your Honor, the reason we
14 included these is Dr. Kelly is going to identify some of
15 them. The witness doesn't know. I'll stipulate if it
16 doesn't have it on there, this witness wouldn't know.

17 THE COURT: Okay.

18 Q. What's 166?

19 A. This is a poor reproduction, so the product
20 Aroclor number has been -- is difficult to read.

21 Q. You can't read it; can you?

22 p A. I can't read it on this copy.

23 Q. Turn to 168.

24 A. Again, the Aroclor number is --

25 Q. You can't read it?

1 A. Is not reproduced clearly.

2 Q. 171, what product does that refer to?

3 A. This goes on all Aroclors that were sold for
4 electrical use.

5 Q. Does it relate to any particular Aroclor?

6 A. No. It's placed p on all the Aroclor -- This
7 is a second label that's placed on those containers.

8 Q. 173?

9 MR. CARNEY: This is one that Dr. Kelly will
10 identify. Okay. Maybe Mr. Papageorge can, too.

11 A. Oh, this is the environmental paragraph.

12 Q. All right.

13 A. That was introduced in May of 1970.

14 Q. 179?

15 A. This is a label that was put on tank cars of
16 PCp Bs starting in 1972.

17 Q. 180.

18 MR. CARNEY: Which one?

19 THE COURT: 180. One-eight-O.

20 A. 180 is a copy of a little pamphlet that
21 described the fact that the drums of PCBs were going to be
22 shipped in instead of being black were going to be yellow
23 with seven language labels.

24 Q. Now, I want you to turn to 151 and read that
25 label warning. Just turn to 151, and I'm go~~g~~ ing to ask you

1 some foundation questions, and then I'll get right to it.
2 Now, you didn't expect most workers to come in contact
3 with railroad tank cars; did you?

4 A. That is correct.

5 Q. All right. So let's turn to the label that
6 was on the drum which is a warning you would expect an
7 employee to read, and I want to ask you, how did you put
8 the label on the drum? Did you glue it on the p drum?

9 A. Yes, sir.

10 Q. Now, read to the jury what the warning is in
11 151.

12 A. "Caution - Contains chlorinated hydrocarbons.
13 Avoid prolonged breathing of vapors or mists. avoid
14 contact with eyes or prolonged contact with skin. If skin
15 contact occurs, remove by washing with soap and water.
16 Following eye contact, flush with water. If clothing
17 becomes soaked with fluid, launder before wearing g again."

18 Q. Nothing in there about vapors? There must be
19 something in there about vapors.

20 A. The first sentence was, "Avoid prolonged
21 breathing of vapors or mists."

22 Q. All right. That's what you told the worker.
23 If a worker happened to see that label and read that
24 information, that's the warning they were given?

25 A. Yes, sir.

1 Q. And you thoughtp that warning worked good
2 because it was kind of -- What did you say? Short?
3 Punchy?

4 A. Well, I don't know that I used the "punchy"
5 word. It was short, easily understood, and easy to
6 follow.

7 Q. But it misses one important factor. It
8 doesn't tell the employee what will happen to him if he
9 breathes the vapors or has skin contact; does it? It
10 doesn't tell him he will get nausea, he will vomit, hep
11 will get chloracne, liver damage, headaches, lung damage,
12 weakness, chest pains and nerve conditions; does it?

13 A. No, sir, but if all of those --

14 Q. That's all I asked.

15 MR. CARNEY: Just a minute.

16 MR. KOTOSKE: He can explain when Mr. Carney
17 wants to talk to him, but I'm doing the examination now.

18 THE COURT: No. I'm going to let him give a
19 very brief explap nation. He's answered it, and you can
20 give a very brief explanation.

21 A. Listing all of those symptoms you described
22 does not tell the worker how to avoid getting the
23 symptoms. These words prevent the employee from ever
24 getting to the point where he gets any of those symptoms.

25 Q. Now, in the workplace, as you knew it in 1967

1 in the Bloomington plant from the Paul Benignus memo dated
2 Sp eptember of 1967, you knew those workers down there
3 worked under sloppy conditions, had drenched clothes and
4 couldn't help but be exposed to this unmercifully for long
5 periods of time. Did you know that?

6 A. I knew the word "sloppy" was used. I had no
7 way of relating that word to the employee exposure. I
8 also was aware of the shoes that were damaged, but I had
9 no way of relating the damaged shoe to skin exposure
10 thp rough the person's foot. So that just gave me an idea
11 that perhaps a discussion on what to do was important, and
12 that's why we held that meeting.

13 Q. You don't mention -- I'm going to say it one
14 more time. We've got your explanation in the record. You
15 don't mention nausea, vomiting, stomach pain, chloracne,
16 liver damage, headaches, lung damage, weakness, chest pain
17 and neuropathy in your warning; do you?

18 A. p In which warning?

19 Q. The warning you just read.

20 A. The label warning?

21 Q. Yes.

22 A. We do not mention those things you just
23 listed.

24 Q. If you had mentioned that kind of
25 information, do you think any worker at the Bloomington

1 plant would have used that chemical?

2 MR. CARNEY: I'm going to object, Your Honor.

3 THE p COURT: Sustained as to the form.

4 Q. If you had put the warning of the diseases
5 that you can contract from not avoiding this chemical, do
6 you think any worker in his right mind would have used
7 that chemical?

8 MR. CARNEY: Same objection, Your Honor.

9 THE COURT: Sustained.

10 Q. But you didn't warn about those conditions
11 that I've listed as adverse consequences?

12 A. Ip 've said that repeatedly, sir.

13 Q. The answer is no?

14 A. They are not on the labels.

15 Q. I think you told us that you liked your
16 warnings to have some action words. Is that what you said
17 this morning?

18 A. Yes. I believe in that, yes, sir.

19 Q. Action words. Do you think liver damage is
20 an action word?

21 A. No. That's a result of some improper action.

22 p Q. You think chloracne is kind of an action
23 word?

24 A. There again, it describes a problem created
25 by the wrong actions.

1 Q. How about lung damage? Do you think that's
2 an action word?

3 A. Again, that is a result of poor handling,
4 mishandling.

5 Q. Now, I want to end this examination. I want
6 you to take Defendant's Exhibit 121 if you can find it.

7 p A. Is that a label, sir, or is it a brochure
8 or --

9 Q. That's an exhibit, Defendant's Exhibit 121.

10 MR. CARNEY: Can you describe it so I can
11 find which book it's in?

12 THE COURT: I show Wood letter to Willis.
13 Does that make sense?

14 MR. KOTOSKE: That's exactly what it is.
15 Dated November 20, 1979, at Westinghouse.

16 THE COURT: Has it been -- Justp so I can find
17 it, has it been referred to before?

18 MS. RUTTER: It's in the Letters - Volume I
19 file.

20 MR. CARNEY: I've got it. I've got a copy
21 Mr. Papageorge, rather than going through the notebooks.
22 It might be easier..

23 Q. Have you ever seen this before?

24 A. I have seen it in preparation for this case.

25 Q. And you've already identified Mr. Wood, but

1 at this point in the record do it again.

2 A. David Wood is a Monsanto employee who in 1979
3 was the marketing manager for heat transfer and process
4 chemicals.

5 Q. And he's writing to Westinghouse up in
6 Pennsylvania; is that right?

7 A. In this exhibit, yes, sir.

8 Q. And he attaches a document called "A History
9 of Monsanto Production and Sales of Chlorinated
10 Biphenyls." Doesn't he?

11 A. Well, that's the title of the first section
12 of the document. It's not the title of the full document.

13 Q. You know what the title of the full document
14 is?

15 A. Yes. It's on the cover page, "Submission to
16 the Subcommittee on Oversight Investigation" and so on.

17 Q. United States Government?

18 A. It's the United States House of
19 Representatives.

20 p Q. All right. I happen to call that the
21 government, but you may call it the House of
22 Representatives. Now, he has a section in here called
23 "The Reason for Monsanto Phase-Out"; doesn't it?

24 A. Can you help me find it, sir?

25 Q. Section one, page seven. Let me page through

1 that for you, and I'll get it real quick. It's 1/7. Do
2 you have it?

3 A. I have it.

4 p Q. And this accurately states the reason for the
5 phase-out of PCBs by Monsanto? I'd like to read it.

6 MR. CARNEY: Well, let me object, Your Honor.
7 I think this document is dated November 20, 1979, about
8 two or three years after this witness was transferred to a
9 different title.

10 MR. KOTOSKE: It's in evidence.

11 THE COURT: Well, I'm going to -- I think --
12 Is that your objection?p

13 MR. CARNEY: Well, I assume he's going to ask
14 this witness a question.

15 THE COURT: Sure. If he knows about it, I
16 guess. I'm going to allow him to proceed. Overruled.
17 You may proceed. If you don't know about it, you can say
18 it.

19 A. All right.

20 Q. "Reasons for Monsanto Phase-Out. Scientific
21 knowledge about the presence of PCBs in the environment
22 and about its p possible significance began to evolve in the
23 '60's. The evolutionary process, which is still
24 incomplete, began with two events, one in Japan and the
25 other in Sweden. In about -- In 1968 about 1,000 people

1 in Japan became ill from eating rice oil heavily
2 contaminated with Japanese-produced PCBs as a result of an
3 industrial accident which has come to be known as the
4 Yusho incident. The level of PCB contamination in rice
5 oil was two to 3,000 parts per million, extremely high
6 concentrations. Conclusions about that incident have been
7 clouded by unknown impact of impurities in Japanese PCBs;
8 however, the incident sounded a cautionary signal." Have
9 I read that right?

10 A. You did.

11 Q. With that cautionary signal in Monsanto's
12 mind, did it ever change its warning label to include the
13 adverse symptoms that I have read during the course of
14 this trial?

15 A. Well, this cautionary symbol, sir, signaled
16 that chemicals could get into the food supply. That was
17 the signal perceived. The question then had to be
18 answered what harm and under what conditions would result
19 from such an incident.

20 Q. Continue. I'm on page 1/9. "Although a
21 variety of effects of PCBs have been postulated in
22 research of widely-varying quality --

23 THE COURT: Hang on. He's on one nine, 1/9.
24 Are you with us?

25 MR. CARNEY: About two pages later.

1 THE COURT: Yeah. In the middle of a
2 paragraph. Proceed.

3 Q. "Although a variety of effects of PCBs have
4 been postulated from research of widely varying
5 quality" -- As a footnote, Doctor, I assume that means
6 IBT?

7 A. No, sirp .

8 MR. CARNEY: I'm going to object to his
9 speculation.

10 THE COURT: Sustained.

11 Q. "There is no evidence of environmental levels
12 of PCBs being a major human health hazard." Now, Monsanto
13 wrote this document in 1979; didn't they?

14 A. Yes, sir.

15 Q. If PCBs weren't a major environmental
16 problem, would you please explain to me and the jury why
17 the government p banned their production?

18 A. Well, they were determined to cause harm to
19 certain species of wildlife, and this is one of the
20 principal reasons that the Environmental Protection
21 Agency, whose duty it is to concern themselves with the
22 environment as distinguished from, let's say, food, which
23 belongs to the Food and Drug Administration, they saw PCBs
24 as something that was causing a harm and could be
25 discontinued without p any in their eyes serious disruptions

1 to society.

2 Q. Continue. "However, it became apparent that
3 the public perceived risks associated with the continued
4 PCB dielectric use and preferred to forego its undoubted
5 functional benefits. Therefore, in October of 1976, we
6 advised dielectric customers that it was our intent,
7 consistent with their progress to substitute products, to
8 terminate chlorinated biphenyl production and sale by
9 October of '77." Is that what you read?

10 A. Yes.

11 Q. Now turn to page two five, 2/5. There's
12 something here about health effects that I'd like to read.
13 And this document is in 1977 -- '79.

14 A. The one we're reading?

15 Q. Yes.

16 A. Yes, sir.

17 Q. Top paragraph. And it's talking about
18 studies reporting on toxic consequences from exposure.
19 "These studies show that repeated and prolonged skin
20 contact with the higher chlorinated biphenyls produce a
21 skin irritation and that harmful amounts could be absorbed
22 under such conditions. They also demonstrated that there
23 was a safe level of exposure for each material and they
24 could be handled safely if earlier precautions to avoid
25 excessive skin contact was observed." That's what

1 Mp onsanto was still telling Congress in 1979?

2 A. That is correct, sir.

3 Q. Despite the fact, Mr. Papageorge, of what you
4 knew about the dangerous consequence from exposure to this
5 stuff?

6 A. But that doesn't make this statement
7 incorrect, sir.

8 Q. It doesn't?

9 A. No.

10 Q. Thank you. That's it.

11 THE COURT: Take a break. Members, do not
12 p discuss the case among yourselves.

13 (Brief recess.)

14 THE COURT: Mr. Carney, you may proceed.

15 RE CROSS-EXAMINATION

16 QUESTIONS BY MR. CARNEY

17 Q. Mr. Papageorge, has chloracne ever been found
18 on PCB workers in a capacitor plant in the United States?

19 A. Not that I ever heard of.

20 Q. Now, Mr. Kotoske, when he was pointing and
21 pounding on thi p s chalkboard, made this list, and on some
22 of these at least, and I'll just mention two of them that
23 I know are true, heart disease and peripheral neuropathy,
24 the literature on that that has any indication of that was
25 in Yusho?

1 A. That's the only place I've ever seen it.

2 Q. And it was determined later in the literature
3 in the mid '70's that it was a thousand times more furans
4 that were p found in those Japanese PCBs than found even in
5 the European PCBs that were the cause of the Yusho
6 problems?

7 A. That is true.

8 Q. And I think some other of those problems were
9 the weakness and the lung damage. Those were in Yusho,
10 not in the literature with regard to PCBs. They didn't
11 have this thousand times more furans that Japanese PCBs
12 had?

13 A. That is correct.

14 Q. p Now, Exhibit 276 -- And, Judge, I've got the
15 fancy -- this is the official authenticated copy from the
16 government. Mr. Kotoske referred to this Exhibit 276 and
17 he --

18 MS. RUTTER: It's in Volume II, Judge.

19 THE COURT: Thank you.

20 Q. And he referred on page 153 to a listing of
21 some biological and toxicological effects in the PCBs, and
22 there were 19 on the list.

23 A. Yes.

24p Q. Most of these were effects on various kinds
25 of animals, like minks, Japanese quail, rabbits, and other

1 than the Yusho incident most of these were animal effects;
2 correct?

3 A. That is true.

4 Q. Okay. And the conclusion, after the task
5 force reviewed all of the literature on Yusho, the animal
6 literature, I think there was 150 articles that we talked
7 about earlier, scientific articles the government
8 reviewed, they concluded at page three, did they not, --

9 A. Yes, they did.

10 Q. -- that quote "There currently are no
11 toxicological or ecological data available to indicate
12 that the levels of PCBs currently known to be in the
13 environment constitute a threat to human health." Isn't
14 that what they said?

15 A. Yes, sir.

16 Q. Now, Mr. Kotoske asked you again I think for
17 the second time about the labels and what was on the
18 labels and what wasn't on the labels. I think the jury
19 has heard that enough. They don't want to hear that
20 anymore. But didn't you put in the brochures and in the
21 technical bulletins that PCBs could cause chloracne,
22 stomach irritation, liver damage? Wasn't that in the
23 brochures, in the technical bulletins that were sent to
24 Westinghouse?

25 A. Yes.

1 Q. And, in fact, just for an example, the one
2 that Mr. Kotoske referred to that he didn't have you read,
3 Exhibit 134 in the label book, at the beginning of the
4 label book. I think it's the first exhibit. I'm sorry.
5 It's the brochure book.

6 A. Oh!

7 Q. It's Exhibit 134, the first brochure, which
8 had the date --

9 MR. KOTOSKE: June 18th, 1945 according to
10 his testimony.

11 Q. Yes. I think that's right. Doesn't that
12 one, that brochure that went to Westinghouse, indicate
13 that experimental work -- look at page 11 -- experimental
14 work on animals shows that prolonged exposure to Aroclor
15 vapors evolved at high temperatures or by repeated oral
16 ingestion will lead to systemic toxic effects?

17 A. It does.

18 Q. Repeated bodily contact with liquid Aroclors
19 may lead to an acneform skin eruption?

20 A. It does.

21 Q. Suitable draft ventilation to control the
22 vapors evolve at the elevated temperatures as well as
23 protection by suitable garments from extensive bodily
24 contact with liquid Aroclors should prevent any untoward
25 effect?

1 A. Yes.

2 Q. And the other brochures had similar language
3 about the fact that too much exposure to PCBs would cause
4 chloracne and liver effects?

5 A. Yes.

6 Q. Mr. Kotoske asked you if you really expected
7 the workers, like the Plaintiffs, would read these
8 brochures and technical bulletins, and I think you said
9 that maybe they would, but probably not, or something
10 along that line.

11 A. I believe that's what I said, yes.

12 Q. But you did expect the Westinghouse
13 supervisors and the industrial hygiene department at
14 Westinghouse to read the brochures and technical bulletins
15 about PCBs that you sent to Westinghouse?

16 A. Well, that's who they were intended for, yes.

17 Q. And didn't you expect that those supervisors
18 would pass those warnings along to the workers?

19 A. Along with other information they may have.

20 Q. Did you believe when you were selling PCBs to
21 Westinghouse, when Monsanto was selling PCBs to the
22 Bloomington plant at Westinghouse, that Westinghouse was a
23 responsible company?

24 A. Oh, certainly, they --

25 MR. KOTOSKE: Objection. That's for the jury

1 to decide.

2 MR. CARNEY: Your honor, he opened the door
3 about what our state of mind would be.

4 THE COURT: Overruled. You may answer.

p 5 A. We perceived Westinghouse, and I'm going to
6 use the word, as a world class company with a lot of
7 resources, twice as big as Monsanto, and they had experts
8 and technologists and scientists that understood these
9 kinds of things.

10 Q. And didn't you expect at that time when you
11 were selling PCBs to Westinghouse, including the
12 Bloomington plant, that they would take the information
13 that you supplied to the industrial hygiene department and
14 the medical department of Westinghouse and pass it along
15 to its workers?

16 A. That was the expectation, yes.

17 MR. CARNEY: No further questions.

18 THE COURT: Redirect?

19 FURTHER REDIRECT EXAMINATION

20 QUESTIONS BY MR. KOTOSKE:

21 Q. I have one. Mr. Papageorge, you've got those
22 bulletins and brochures and all that stuff there?

p 23 A. Do I have them here?

24 Q. Have you got Exhibits 134 through 146? I'm
25 not going to ask you to go through them.

1 A. I believe they are all here somewhere, sir.

2 Q. All right. I challenge you, Mr. Papageorge,
3 and all your lawyers, you find one statement in any of
4 these brochures, in any of these technical bulletins,
5 anything in these exhibits, that warns anybody of livp er
6 damage, liver damage in those words, and I'll sit down,
7 and I'll give you through the rest of the trial.

8 MR. CARNEY: Well, your Honor --

9 MR. KOTOSKE: That's all I've got.

10 THE COURT: Wait a minute. That's got to be
11 a question or --

12 Q. Can you find it? I'll give you to the rest
13 of the trial. You look at Exhibits 134 to 146, that's
14 what these technical bulletins p are, and you find in there
15 where you warn of liver damage in those words and tell me.
16 Take all the time you want. That's all I've got.

17 MR. CARNEY: Let me just follow up because I
18 think I can help Mr. Kotoske out.

19 THE COURT: Do you -- It depends on -- You
20 know --

21 MR. CARNEY: Are you finished?

22 THE COURT: Is that a question?

23 MR. KOTOSKE: You bet.

24p THE COURT: You want him to go through now?

25 MR. KOTOSKE: No. He can take all the time

1 he wants, to the end of the trial.

2 THE COURT: Okay.

3 FURTHER RECROSS EXAMINATION

4 QUESTIONS BY MR. CARNEY:

5 Q. I'm not going to ask him to go through it.
6 Let me just -- Because I think we went through a couple of
7 these things earlier, and I'll just map ybe jog Mr.
8 Kotoske's memory. Do you recall we discussed the Treon
9 reports, Dr. Treon's reports?

10 MR. KOTOSKE: I don't care about animals. I
11 want to know about human beings.

12 THE COURT: Humans?

13 MR. KOTOSKE: Human beings are on trial in
14 this case.

15 Q. Well, unfortunately Mr. Kotoske -- Did you
16 test PCBs and do human studies where you had them breathe
17 PCBs evp ery day like Treon did animals to see if it would
18 cause human liver damage?

19 A. You don't test human beings. That's just not
20 a civilized thing to do.

21 Q. That's not something you do in a civilized --
22 We certainly didn't condone it when it was done in
23 Germany, and we wouldn't do it in this country?

24 A. That is correct.

25 Q. And Monsanto wouldn't partake of having human

'9
p 1 Q beings breathe PCBs to see if it caused liver damage
2 intentionally?

3 A. We would have no part of such a study.

4 Q. Monsanto did conduct or have Dr. Treon
5 conduct inhalation tests where they breathed -- had
6 animals breathe PCBs daily for weeks at a time?

7 A. Yes.

8 Q. To determine what the safe levels would be in
9 the workplace?

10 A. Yes.

11 Q. And thp ose Treon studies, they were sent to
12 Westinghouse; weren't they?

13 A. Yes.

14 Q. And those studies showed that there was some
15 liver damage in some of the PCBs that were tested,
16 particularly the higher chlorinated PCBs?

17 MR. KOTOSKE: The liver damage wasn't in the
18 PCBs. It was in the animals.

19 Q. I'm sorry. It showed that the animals that
20 were breathing PCBs for months, some of tp hem showed liver
21 damage?

22 A. Yes.

23 Q. And those were PCB tests?

24 A. Yes.

25 Q. And those tests were furnished to

1 Westinghouse?

2 A. Yes.

3 MR. CARNEY: No further questions.

4 THE COURT: Anything else?

5 MR. KOTOSKE: No. He's got to the rest of
6 the trial.

7 THE COURT: Okay.

8p MR. CARNEY: Well, I guarantee you Monsanto
9 didn't do any human tests, and there's not been any
10 evidence that a human has had liver damage.

11 THE COURT: I don't think we're going to be
12 coming back.

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