

IN THE CIRCUIT COURT
EIGHTEENTH JUDICIAL CIRCUIT
DuPAGE COUNTY, ILLINOIS

EMPLOYERS INSURANCE OF WAUSAU,
A MUTUAL COMPANY, a mutual
insurance corporation,

Plaintiff,

vs.

MCGRAW-EDISON COMPANY, a
Delaware corporation, et al.,

Defendants.

No. 91-MR-0256

COPY

Discovery Deposition of
WILLIAM B. PAPAGEORGE, P.E.
Taken on behalf of the Plaintiff
on August 1, 1997.

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Reporter: Tricia Emde Huff, CSR #084-003532

Keefe Reporting Company
11 North 44th Street

1 IN THE CIRCUIT COURT 2 EIGHTEENTH JUDICIAL CIRCUIT 3 DUPAGE COUNTY, ILLINOIS 4 EMPLOYERS INSURANCE OF WAUSAU, 5 A MUTUAL COMPANY, a mutual 6 insurance corporation, 7 Plaintiff, 8 vs. No. 91-MR-0256 9 MCGRAW-EDISON COMPANY, a 10 Delaware corporation, et al., 11 Defendants. 12 13 14 APPEARANCES: 15 For Plaintiff: Zelle & Larson 16 By Brian Ripperger, Esq. 17 For Defendants: Jones, Day, Reavis & Pogue 18 By Louis W. Hensler, III, Esq. 19 Smith, Helms, Mulliss & Moore 20 By Rolly L. Chambers, Esq. 21 22 23 24	Page 2 1 poultry and cattle, there was a case involving the 2 presence of PCB's at mink ranches. 3 Q. The dioxin cases that you referred to, one of 4 them didn't happen to be Times Beach, did it? 5 A. Not Times Beach per se, no. 6 Q. Okay. Related at all to the Times Beach 7 litigation? 8 A. Related to at least one of the companies that 9 was alleged to be the source of the material that ended 10 up in Times Beach. 11 Q. Is that NEPA, Northeastern Pharmaceutical 12 Chemical Company? 13 A. Yes. 14 Q. How was Monsanto -- well, I shouldn't ask it 15 that way. Let me ask you first, were you testifying on 16 behalf of Monsanto in that matter? 17 A. No, sir. 18 Q. In what capacity did you give testimony in 19 that matter? 20 A. As an expert. 21 (Pagageorge Exhibit Number 1 22 marked for identification.) 23 Q. We've marked here as Pagageorge Exhibit 1 a 24 Curriculum Vitae. Sir, is this your Curriculum Vitae? Page 5
Page 3 1 IT IS STIPULATED AND AGREED by and between counsel 2 for Plaintiff and counsel for Defendants that the 3 deposition of WILLIAM B. PAPAGEORGE, P.E. may be taken 4 for discovery purposes pursuant to and in accordance 5 with the Illinois Code of Civil Procedure pertaining to 6 such depositions by and on behalf of the Plaintiff on 7 August 1, 1997 at the of St. Louis Marriot Hotel, St. 8 Louis, Missouri, before Tricia Emde Huff, a Certified 9 Shorthand Reporter and Notary Public, that the issuance 10 of notice is waived and that this deposition may be 11 taken with the same force and effect as if all 12 statutory requirements had been complied with. 13 IT IS FURTHER STIPULATED AND AGREED that the 14 signature of the deponent is not waived. 15 WILLIAM B. PAPAGEORGE, P.E., produced, sworn 16 and examined as a witness on behalf of the Plaintiff, 17 testified and deposed as follows: 18 CROSS-EXAMINATION 19 BY MR. RIPPERGER: 20 Q. Morning, Mr. Papageorge. 21 A. Good morning. 22 Q. We just met, my name is Brian Ripperger and I 23 represent one of the insurance companies in this 24 matter, that entity being Employers Insurance of Wausau	Page 6 1 A. It is. 2 Q. I note here that from '51 to '64, according 3 to your CV, you worked at a J.F. Queeny Plant. Can you 4 tell me what the nature of the business of J.F. Queeny 5 was. 6 A. J.F. Queeny Plant was one of Monsanto's 7 chemical producing plants. 8 Q. Where was that located? 9 A. In St. Louis. 10 Q. And then in '64 you went to the Krummrich 11 Plant? 12 A. Yes. 13 Q. And where is that located? 14 A. That's in Sauget, S-a-u-g-e-t, Illinois 15 across the river -- Mississippi River from St. Louis. 16 Q. Is that near East St. Louis? 17 A. Yes. 18 Q. And then I see you were plant manager at the 19 Anniston Plant. Where was that located? 20 A. Anniston, Alabama. 21 Q. And then you became Manager of Environmental 22 Control, Organic Division, in St. Louis in 1970, is 23 that what this indicates? 24 A. Yes.
Page 4 1 which is one of the parties that is involved in a 2 lawsuit between several insurance companies and 3 McGraw-Edison Company regarding several environmentally 4 contaminated sites around the country. 5 Sir, have you ever had your deposition taken 6 before? 7 A. Yes. 8 Q. I presumed as such. How many times have you 9 had your deposition taken? 10 A. I can only estimate it since I didn't keep 11 records. Since 1971 as best I can recall I've had 12 almost approaching 30, 36, three dozen of them. 13 Q. Are those mostly regarding PCB's? 14 A. Mostly, yes, sir. 15 Q. The issues regarding the environmental 16 contamination of PCB's? 17 A. Some of them. 18 Q. What others were there, if you recall? 19 A. What other cases? 20 Q. What other types of cases, yeah. 21 A. Oh, there were PCB cases relating to alleged 22 human health problems, I was involved with two cases 23 relating to dioxins present in the environment, there 24 were some cases relating to the presence of PCB in	Page 7 1 Q. What did you do as Manager of Environmental 2 Control in the Organic Division in St. Louis as of the 3 1970 time frame? 4 A. I was appointed to overview, oversee, 5 influence Monsanto's activities as it related to PCB's 6 that were being found in the environment. 7 Q. How was it that it came about that you 8 obtained that position? 9 A. Well, I can only share with you my 10 impressions, you'll have to ask the people that 11 selected me. 12 Q. Well, what's your understanding as to why you 13 were selected for that position? 14 A. I think the principal reason was one of the 15 fact that I had experience in the manufacture of PCB's 16 in the Anniston, Alabama plant and with that experience 17 in manufacturing I had some contact with some of the 18 customers, I had an idea of the uses to which the PCB's 19 were applied so I had that kind of background and I 20 suspect that that had something to do with my 21 selection. 22 Q. Just for the record, when we say PCB's we're 23 referring to polychlorinated biphenyls, right? 24 A. That's biphenyls, p-h-e-n-y-l.

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1 Q. Right. 2 A. I wanted to avoid the o-l. 3 Q. I understand perfectly. Thank you. Then 4 according to your Curriculum Vitae you became Manager 5 of Product Acceptability of the Monsanto Industrial 6 Chemical Company in the '73 time frame, does that sound 7 about right? 8 A. Yes, sir. 9 Q. Did you continue to have any role with 10 respect to the PCB issues when you obtained that job in 11 the '73 time frame? 12 A. I did. 13 Q. How did your job responsibilities change from 14 being manager of environmental control to manager of 15 product acceptability? 16 A. I -- in addition to being involved with the 17 PCB products I was given additional products to 18 monitor, to be involved with, and all of those products 19 were produced by the entity referred to as Monsanto 20 Industrial Chemicals. 21 Q. What products were those? 22 A. I can't remember all of them. 23 Q. Do you remember any of them? 24 A. Oh, yes. Chlorinated benzenes, rubber	1 you analyze for them, where might they be found, who 2 should know about it, this kind of background, and in 3 addition to the environment the product acceptability 4 function included my knowledge and recommendations 5 regarding the safe shipping of those materials, what 6 happens during an accident and so on, is there enough 7 information given to the receiver of that material 8 regarding his employees' exposures, should he use 9 respirators, should he use gloves and the like so it 10 had to do with the product acceptability in every 11 sense, is it the right quality, is it safe, can it be 12 handled safely, is it shipped properly, does it effect 13 the environment. In other words, is it acceptable to 14 society. 15 Q. And that would have included safe handling 16 issues with respect to employees or anybody that would 17 have been working with any of those chemicals? 18 A. Yes. 19 Q. You then became Manager of Product 20 Acceptability in the '77 time frame, according to your 21 CV, at Monsanto Chemical Intermediates Company, St. 22 Louis, does that sound about right? 23 A. Yes, sir. 24 Q. When you were manager of product
Page 9	Page 12
1 additives of all kind, materials that are referred to 2 as plasticizers, these are materials that are added to 3 plastics to make them flexible instead of being 4 brittle, wood treating chemicals like pentachlorophenol 5 and the like, sulfuric acid, chlorine, hydrochloric 6 acid, sulfur dioxide, phthalic anhydride, 7 a-n-h-y-d-r-i-d-e, maleic, m-a-l-e-i-c, anhydride. I'm 8 sure I've missed some, there were many. 9 Q. That's fine. When you were manager of 10 environmental control in the organic division in St. 11 Louis, what were your job responsibilities as it 12 related to the PCB issue? 13 A. I was selected to stay well informed about 14 any activity relating to PCB's and their relationship 15 to environmental presence and with that information I 16 was expected to share not only within Monsanto, just 17 sort of let the left hand know what the right is doing, 18 the different functions within Monsanto but also with 19 customers, with governmental agencies, universities, 20 groups of citizens interested such as the Isaac Walton 21 League and the Great Lakes Club, I forget the exact 22 name. There was a -- an organization along the Great 23 Lakes interested in environmental affairs and this was 24 intended to cover worldwide other producers of PCB's as	1 acceptability of Monsanto Industrial Chemicals Company, 2 where was that company located, or that entity, the 3 Monsanto Industrial Chemicals Company? 4 A. The headquarters was St. Louis. The 5 producing plants were quartered throughout the world, 6 the marketing people throughout the world and so on. 7 Q. Sure. Okay. How did that company differ 8 from the Monsanto Chemical Intermediates Company? 9 A. The difference in designation there reflects 10 a company reorganization so I don't know what the 11 reorganizers had in mind when they chose those names 12 but the chemicals in most of the chemicals that were 13 part of the industrial chemicals became the chemicals 14 intermediates group. 15 Q. Then you became Director of Environmental 16 Operations for Monsanto Chemical Intermediates in the 17 '77 to '82 time frame, does that sound about right? 18 A. Yes, sir. 19 Q. Okay. How did your job responsibilities 20 change from being manager of product acceptability to 21 director of environmental operations? 22 A. Well, in that director role I was given a 23 staff of environmental engineers, technicians that -- 24 as well as product acceptability personnel so I was
Page 10	Page 13
1 well as Monsanto. 2 Q. When you became involved with these other 3 various chemicals that you described for me that were 4 produced by the Monsanto Industrial Chemicals Company, 5 were you also involved with those chemicals with their 6 relationship with the environmental presence like 7 PCB's? 8 A. Only those that were discovered in the 9 environment and appeared to be causing some effect. 10 Q. Were any of those chemicals that you 11 described for me in the '73 to '77 time frame when you 12 were manager of product acceptability, to your 13 recollection were any of those discovered in the 14 environment with the environmental presence like PCB's? 15 A. No. 16 Q. What I'm wondering is what responsibilities 17 you had with these other chemicals that were produced 18 by the Monsanto Industrial Chemicals Company if there 19 was no issue about them being in the environment? 20 A. Well, at that time it was first of all 21 established whether any samples showed presence in the 22 environment; if not established, what information is 23 needed to assure that they don't get in the 24 environment. In other words, do they degrade, how do	1 responsible for the chemicals, their safe handling, 2 their quality, the proper shipping modes, barrels 3 versus tank cars and so on as well as the environmental 4 issues at the producing plant assigned to that part of 5 Monsanto in terms of how they were managing their 6 environmental issues. 7 Q. Would that have been at the various Monsanto 8 producing plants around the country? 9 A. Assigned to that part of Monsanto, chemical 10 intermediates group. 11 Q. You would have been responsible for working 12 with the various plants with respect to any 13 environmental issues that they might encounter? 14 A. Yes, sir. 15 Q. And then according to your Curriculum Vitae 16 you became Director of Environmental Operations for 17 Monsanto Industrial Chemicals Company from the '83 18 to '85 time frame, does that sound about right? 19 A. Yes, sir. 20 Q. What was the difference between the Monsanto 21 Chemical Intermediates Company and the Monsanto 22 Industrial Chemicals Company? Again, was it just some 23 type of reorganization? 24 A. It was a reorganization, yes, sir.

1 Q. So basically just a change in the name?
 2 A. And some change in the chemicals assigned to
 3 that piece of Monsanto.
 4 Q. Sure. Did your job responsibilities as
 5 director of environmental operations pretty much remain
 6 the same from the '83 to '85 time frame as it had been
 7 from the '77 to '82 time frame?
 8 A. Yes, sir.
 9 Q. When you became, then, Manager of
 10 Occupational Health at Monsanto Chemical Company, St.
 11 Louis in the '86 time frame, how did your job
 12 responsibilities change, if any?
 13 A. That reflects another Monsanto
 14 reorganization.
 15 Q. That being the Monsanto Chemical Company as
 16 opposed to the Industrial Chemicals Company?
 17 A. Well, the Monsanto Chemical Company name was
 18 resurrected to reflect the previous industrial
 19 chemicals, intermediate chemicals and one of the
 20 assignments I received under that organization was
 21 centered on industrial hygiene matters for not only
 22 some of the plants within Monsanto but all of the
 23 plants assigned to this new bigger chemical company
 24 group so instead of, say, being responsible for ten or

1 A. It had to do with this dioxin that I
 2 mentioned earlier.
 3 Q. Okay.
 4 A. And whether the plant manager should have
 5 known certain things and should have been told certain
 6 things.
 7 Q. Okay. What was the other time to your
 8 recollection that you testified as an expert?
 9 A. The other one had to do with PCB's being
 10 found in an area that consisted of several
 11 manufacturing sites with many owners and operators of
 12 these sites through the years and I was asked to
 13 comment on my opinion regarding the possible source of
 14 the PCB's in that stream water landfill system in that
 15 area.
 16 Q. What area was that, do you recall?
 17 A. It's up in -- well, it's Michigan, Willow Run
 18 area.
 19 (Papageorge Exhibit Number 2
 20 marked for identification.)
 21 Q. The court reporter has handed you what has
 22 been marked as Papageorge Exhibit 2 which, for the
 23 record, is a copy of the subpoena for deposition to
 24 Monsanto Company with the attached rider and I'll ask

1 12 plants I now found that I had a list of about 30 of
 2 them, so it was a different approach, a broader base
 3 but a narrower field.
 4 Q. Narrower field being occupational health as
 5 opposed to environment in general?
 6 A. Correct.
 7 Q. And by occupational health we basically mean
 8 just health of workers in the working environment?
 9 A. Yes, sir.
 10 Q. Then you retired on the 31st of December of
 11 1986, that sound about right?
 12 A. That is correct.
 13 Q. I see that you're a member of the American
 14 Chemicals Society as reflected on the second page of
 15 your Curriculum Vitae. How long have you been a member
 16 of the American Chemical Society?
 17 A. Over 50 years.
 18 Q. I see that you're also a member of the
 19 American Institute of Chemical Engineers. How long
 20 have you been a member of that professional
 21 organization?
 22 A. Fifty years.
 23 Q. I see that also according to your Curriculum
 24 Vitae that you're a registered professional engineer.

1 you, Mr. Papageorge, have you seen this before?
 2 A. No, sir.
 3 Q. At some point in time were you asked to pull
 4 together certain documents related to McGraw-Edison
 5 Company to your recollection?
 6 A. No, sir. I'm assuming recent time or --
 7 Q. Yes.
 8 A. No.
 9 Q. This subpoena, regardless of the fact that --
 10 I understand that you haven't seen it before but it
 11 calls for someone to -- it calls for Monsanto to
 12 designate one of more of its officers, directors or
 13 managing agents or other persons to testify on its
 14 behalf as to matters known or reasonably known to
 15 Monsanto with respect to various areas of inquiry that
 16 are identified in this document. Do you understand
 17 that you have been designated as the person most
 18 knowledgeable to testify regarding matters that are set
 19 forth in the subpoena that was served upon Monsanto?
 20 A. I understand that I am to participate in that
 21 activity. I do not know if I'm the only one. I don't
 22 know that.
 23 Q. Sure.
 24 MR. RIPPERGER: Just for the record,

1 How long have you been a registered professional
 2 engineer?
 3 A. As best I remember, since 1963 or '64.
 4 Q. You indicated that you testified as an expert
 5 at least at one point in time. Have you testified as
 6 an expert on several occasions?
 7 A. Three occasions.
 8 Q. Can you tell me what occasions those were.
 9 A. Well, in one case I was asked to testify
 10 regarding the feasibility of a system including a
 11 pumping arrangement and whether that system would
 12 perform as expected by the operators of the system.
 13 Q. Before we go on, when you say the system, was
 14 this some type of manufacturing system that you're
 15 talking about?
 16 A. Yes, sir.
 17 Q. Okay. What other times to your recollection?
 18 A. And another time I was asked to testify
 19 regarding the functions of a plant manager at a site
 20 and what was expected or what can be expected under a
 21 normal, well run situation, specifically with respect
 22 to communication from his team staff members and so on.
 23 Q. What was the nature of that lawsuit to your
 24 recollection?

1 Rolly, do you know who it was that put together the
 2 documents that were provided for us?
 3 MR. CHAMBERS: That was done by the
 4 Monsanto in-house staff from documents that had been
 5 collected and was coordinated by my partner, Girard
 6 Davids.
 7 MR. RIPPERGER: Okay. Can
 8 Mr. Papageorge testify as to the authenticity of the
 9 documents that were produced for us?
 10 MR. CHAMBERS: I would assume -- I would
 11 assume a number of them he'll be able to because he may
 12 have some firsthand familiarity with them.
 13 MR. RIPPERGER: Well, yeah, in going
 14 through some of the documents he does have some
 15 firsthand familiarity with them as he drafted some of
 16 them but I guess basically my question -- well, let's
 17 do it this way. Q. You do understand, Mr. Papageorge,
 18 that you were designated to testify on behalf of
 19 Monsanto with respect to at least some of the issues
 20 that are identified in the subpoena that was served
 21 upon Monsanto?
 22 A. I do.
 23 Q. Do you know whether Monsanto caused a search
 24 to be done for the documents that are requested in the

1 subpoena that was served upon Monsanto?
 2 A. I was informed so, yes.
 3 Q. Do you, to the best of your information,
 4 believe you're the person most knowledgeable at Monsanto
 5 as to the origin, purpose and custody of the documents
 6 that were produced by Monsanto to Wausau in this
 7 matter?
 8 A. I have no reason to believe otherwise, sir.
 9 Q. The documents that were produced here -- that
 10 were produced to the defendants, and I have a copy of
 11 them here. For the record they're BATES stamped MGE
 12 000001 through MGE 003105 that were produced by
 13 Monsanto. To your knowledge were these documents that
 14 were produced here for us today made in the ordinary
 15 course of business at Monsanto?
 16 A. Yes.
 17 MR. HENSLER: I'll object.
 18 Q. To your knowledge the documents that were
 19 produced for us that we've identified here, were they
 20 prepared within a short time of the acts, conditions or
 21 events that are described within the documents to your
 22 knowledge?
 23 A. Yes.
 24 MR. HENSLER: Objection. Lack of

1 A. Yes.
 2 Q. Can you tell me, was he at Monsanto in the
 3 '69 time frame?
 4 A. Yes.
 5 Q. What was his position?
 6 A. In 1969 Mr. Wheeler was the second person in
 7 authority in Monsanto's corporate medical department.
 8 I don't recall his Monsanto title. It's Manager of
 9 Occupational Health but I'm not certain. Something
 10 like that.
 11 Q. When you say Monsanto's medical department,
 12 what do you mean by that? How was that department
 13 comprised?
 14 A. It was headed by a doctor of medicine and had
 15 an industrial hygienist, had Mr. Wheeler reporting to
 16 it, it had other professionals as well as a medical
 17 librarian. It was an organization that was responsible
 18 for the corporations and health programs of all kinds.
 19 Q. Do you recall ever seeing a letter from
 20 Mr. Wheeler to various Monsanto entities regarding the
 21 issue of PCB's in the environment when it was first --
 22 when the issue first arose in the '69 time frame?
 23 A. I saw the letter you're referring to but it
 24 was in early 1970.

1 foundation.
 2 A. Yes.
 3 Q. And these documents that were produced for
 4 us, are they kept in the ordinary course of Monsanto's
 5 business?
 6 MR. HENSLER: Same objection.
 7 A. Yes.
 8 Q. And to your knowledge was Monsanto required
 9 to keep these documents that were produced for us here
 10 today?
 11 MR. HENSLER: Same objection.
 12 A. Required by whom, sir?
 13 Q. To your knowledge what is the records
 14 retention policy of Monsanto?
 15 A. It's a very elaborate policy and it addresses
 16 different documents with different approaches. Some
 17 will be discarded within a short period of time, some
 18 kept forever and times in between.
 19 Q. To your knowledge these documents that were
 20 produced here today, were they kept in the ordinary
 21 course of business as a policy of the records retention
 22 of Monsanto?
 23 A. Yes.
 24 MR. HENSLER: Objection. Lack of

1 (Papageorge Exhibit Number 3
 2 marked for identification.)
 3 Q. The court reporter has handed you what has
 4 been marked as Papageorge Exhibit 3. Do you recognize
 5 that, Mr. Papageorge?
 6 A. I do.
 7 Q. Is that the letter that Mr. Wheeler sent out
 8 in the '69 time frame?
 9 A. It is.
 10 Q. When you saw this letter -- if you'll notice
 11 the last page of this document, it says "Recipients of
 12 the Letter From Elmer P. Wheeler," you see that?
 13 A. I see that, yes.
 14 Q. When you saw this later in the '70 time frame
 15 were the recipients attached to it such as this letter
 16 is organized here?
 17 A. Yes, sir.
 18 Q. And who were those various recipients in
 19 the '69 time frame? Were those Monsanto customers?
 20 A. These are Monsanto customers of PCB type
 21 materials used in electrical equipment.
 22 Q. There's a reference there on the first
 23 paragraph of this letter on the first page, a reference
 24 to an article by a Dr. Robert Risebrough. Do you see

1 foundation.
 2 Q. Do you recall, sir, in the 1969 time frame of
 3 being informed of the issue of PCB's being present in
 4 the environment?
 5 A. Yes.
 6 Q. Can you tell me what you recall with respect
 7 to that issue?
 8 A. Well, the first information I personally had
 9 I received from my immediate supervisor when he visited
 10 the plant, as I remember, in the summer of 1969, about
 11 June or so, on one of his frequent visits and he
 12 informed me that there was an evolving situation in
 13 which PCB's were being found in environmental type
 14 samples as distinguished from industrial product
 15 samples and the like that were perceived to be a
 16 surprise, there didn't seem to be any connection
 17 between the presence in the sample and its industrial
 18 use. That was my first awareness.
 19 Q. Who was your supervisor at that time?
 20 A. Raymond Stratmeyer, S-t-r-a-t-m-e-y-e-r.
 21 Q. What plant was that at?
 22 A. The Anniston, Alabama plant.
 23 Q. Do you know an individual by the name of
 24 Elmer Wheeler?

1 that reference?
 2 A. I do.
 3 Q. Do you know what that is referring to?
 4 A. Yes.
 5 Q. What does that refer to?
 6 A. This refers to a study made at that time by
 7 Dr. Risebrough at the University of California Berkley
 8 regarding the decreasing population of pelicans off
 9 Southern California. He attributed that inability of
 10 the pelican to reproduce to the fact that the eggs of
 11 the pelican were effected by DDT and PCB's and that's
 12 what this article in the San Francisco Chronicle was
 13 describing.
 14 Q. Did you have occasion to see that study by
 15 Mr. Risebrough? I should say Dr. Risebrough?
 16 A. I saw a report to Dr. Risebrough had been
 17 published. I don't know if that was all of his study.
 18 Q. Sure.
 19 (Papageorge Exhibit Number 4
 20 marked for identification.)
 21 Q. I've handed you what the court reporter has
 22 marked as Papageorge Exhibit 4 which is a five-page
 23 article from Nature of December 14, 1968 entitled
 24 "Polychlorinated Biphenyls in the Global Ecosystem"

1 and I'll ask you if you've had a chance to review that?
 2 A. I have scanned it. I've seen it before.
 3 Q. Sure, that's what I was going to ask you.
 4 Have you seen this before?
 5 A. I have.
 6 Q. Is this the article by Dr. Risebrough that
 7 brought about the awareness of the PCB contamination
 8 issue?
 9 A. Well, this is certainly an article that
 10 covers that issue. I don't know if it brought about an
 11 awareness on the part of the newspaper. I don't know
 12 what the newspaper knew to result in the article it had
 13 published.
 14 Q. Sure. When you say an article that covers
 15 that issue, that issue being the potential
 16 contamination of the environment by PCB's?
 17 A. In that area for this -- for these birds.
 18 Q. Right. Do you know whether this was the
 19 first article that came out by Dr. Risebrough that
 20 brought an awareness to this issue.
 21 MR. HENSLER: Objection to the form of
 22 the question. Lacks foundation.
 23 A. I am under an impression that was the first
 24 article he published on that subject.

1 Q. Why are you under that impression?
 2 A. The timing particularly.
 3 Q. Right. Okay. Thank you. Do you know
 4 whether in the 1970 time frame when you became an --
 5 manager of environmental control whether Monsanto sent
 6 letters to its customers keeping them apprized of the
 7 PCB situation?
 8 MR. HENSLER: Objection to the form of
 9 the question.
 10 A. Yes, they did.
 11 MR. RIPPERGER: What's the objection as
 12 to the form?
 13 MR. HENSLER: It was just vague in terms
 14 of customers. I'm sure Monsanto had a lot of
 15 customers.
 16 MR. RIPPERGER: Q. Did Monsanto send
 17 letters to various -- its customers of dielectric
 18 fluids in the 1970 time frame with respect to keeping
 19 them apprized of the PCB contamination issues?
 20 A. Yes.
 21 MR. HENSLER: Same objection.
 22 Q. Did you have occasion when those letters were
 23 sent to Monsanto customers in the 1970 time frame to
 24 see those letters?

1 A. Yes.
 2 Q. Do you know who Donald Olson -- do you
 3 recognize that name, Donald Olson?
 4 A. I do.
 5 Q. What was his position in the 1970 time frame
 6 in Monsanto?
 7 A. At the time he was the marketing director for
 8 the business group within Monsanto that marketed fluids
 9 used in industry of which the dielectric fluids were an
 10 example.
 11 (Papageorge Exhibit Number 5
 12 marked for identification.)
 13 (Whereupon a break was taken.)
 14 MR. RIPPERGER: For the record, Rolly,
 15 do you know whether copies of these documents that were
 16 produced to us by Monsanto, whether they were also
 17 provided to McGraw?
 18 MR. CHAMBERS: I believe that -- I
 19 believe that they were, although I would have to go
 20 back and check the file to confirm that.
 21 MR. HENSLER: We received a box of
 22 documents from -- I think it was from --
 23 MR. CHAMBERS: Mr. Davids.
 24 MR. HENSLER: Right.

1 MR. RIPPERGER: Were they BATES stamped
 2 MGE 0001 and then sequential after that?
 3 MR. HENSLER: Yes.
 4 MR. RIPPERGER: Q. Mr. Papageorge, the
 5 court reporter has handed you what has been marked
 6 Papageorge Exhibit 4, a February 9, 1970 letter with
 7 various attachments.
 8 MR. CHAMBERS: Let me object to the
 9 form. I think it's Exhibit 5 instead of 4.
 10 MR. RIPPERGER: I'm sorry. Q. Is it 5?
 11 A. Yes, sir.
 12 Q. Let me start over. Mr. Papageorge, the court
 13 reporter has handed you what has been marked as
 14 Papageorge Exhibit 5 which is a February 9, 1970 letter
 15 with various attachments addressed to a "Dear Sir" and
 16 from a Ronald Olson. Have you seen this letter before?
 17 A. Yes, I have.
 18 Q. Okay. Is this an example of one of the
 19 letters that was sent to various Monsanto customers
 20 keeping them apprized of the potential problem of PCB
 21 environmental contamination in the 1970 time frame?
 22 A. Yes.
 23 Q. If you'll look on the last three pages of
 24 these documents -- of this document, and they are BATES

1 stamped in sequential order. My question is, does this
 2 indicate to you that McGraw-Edison as one of Monsanto's
 3 customers in the 1970 time frame would have received
 4 what we've marked as Exhibit 5?
 5 A. Yes, sir.
 6 MR. HENSLER: Objection to the form of
 7 the question.
 8 Q. Why does it indicate that to you?
 9 A. Well, I was familiar with the way we kept
 10 records.
 11 Q. Sure.
 12 A. And the letter with the attachments was
 13 intended for customers like McGraw-Edison and it all
 14 seems to fit, makes sense.
 15 Q. Okay.
 16 MR. RIPPERGER: Rolly, various of these
 17 letters have attachments like this with addressees on
 18 them and it appears like they may have been -- that
 19 they may have redacted the other customers that
 20 received the letter.
 21 MR. CHAMBERS: Yes, that is correct,
 22 that's correct.
 23 MR. RIPPERGER: That's what I was
 24 wondering. So at least to your understanding, Rolly,

1 as these were produced the various customers would have
 2 been listed on these pages and they were all redacted
 3 except McGraw-Edison?
 4 MR. CHAMBERS: That's correct.
 5 MR. RIPPERGER: And that was because of
 6 the confidentiality of the customers at Monsanto I take
 7 it?
 8 MR. CHAMBERS: That's correct.
 9 MR. RIPPERGER: What we've marked as
 10 Exhibit 3 has the recipients of the Elmer P. Wheeler
 11 letter and it has all the customers listed. Do you
 12 think that that was just inadvertent, that those
 13 weren't redacted like the others?
 14 MR. CHAMBERS: May well be.
 15 MR. RIPPERGER: And if, in fact, you'd
 16 like to have this document back and redact the other
 17 customers, I wouldn't have a problem with that.
 18 MR. CHAMBERS: Okay.
 19 MR. RIPPERGER: Q. The second page of
 20 what we've marked as Exhibit 5, the signature there, I
 21 know it's difficult to read but do you recognize that
 22 as Mr. Olson's signature?
 23 A. Yes, sir.
 24 (Papageorge Exhibit Number 6

Page 32

1 marked for identification.)

2 Q. I'm going to show you what the court reporter

3 has marked as Papageorge Exhibit 6 and ask you if that

4 letter is an additional example of letters that were

5 sent to various Monsanto customers to apprise them of

6 the potential environmental contamination problem with

7 respect to PCB's in the 1970 time frame?

8 A. It is.

9 Q. The last page of this exhibit says "Addresses

10 for second mailing not found on lists" and one of the

11 entities -- at least it appears others may have been

12 redacted but one of them there is McGraw-Edison,

13 Bluefield, West Virginia. Do you see that?

14 A. I do.

15 Q. Does this indicate to you that this letter,

16 the second letter, would have been forwarded to

17 McGraw-Edison in Bluefield, West Virginia?

18 A. Yes.

19 Q. Again, the second page of the letter itself

20 says Don Olson there. Do you recognize that as

21 Mr. Olson's signature?

22 A. I do.

23 (Papageorge Exhibit Number 7

24 marked for identification.)

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1 Q. Do you recall when the PCB potential

2 contamination situation arose in the 1970 time frame

3 whether Monsanto developed a new type of product that

4 had less PCB's in it?

5 A. When you said product, singular, you mean for

6 a specific replacement?

7 Q. Yes, for a replacement of Aroclor 1242. Do

8 you recall whether a product was developed --

9 A. Yes.

10 Q. -- to replace Aroclor 1242?

11 A. Yes.

12 Q. Was that MCS 1016?

13 A. Correct.

14 Q. Why was it that MCS 1016 was developed, to

15 your recollection?

16 A. It was developed to provide the fire

17 resistant and insulating properties of the original

18 1242 but not introduce into the environment the more

19 resistant types of PCB's in the event that fluid did

20 escape into the environment.

21 Q. I'm going to show you what the court reporter

22 has marked as Papageorge Exhibit 7, ask you to take a

23 look at that if you would, please. Have you seen

24 Exhibit 7 before?

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1 A. Yes, I have.

2 Q. What is Exhibit 7?

3 A. It's a copy of a letter with Monsanto

4 letterhead authored and signed by Mr. Paul Benignus.

5 Q. Do you recognize that as his signature?

6 A. Yes, I do.

7 Q. In reviewing this letter in the attachment,

8 does this indicate to you that this letter would have

9 been forwarded to McGraw-Edison Line Materials Company,

10 South Milwaukee, Wisconsin?

11 A. Yes.

12 Q. And in answering that you're looking at the

13 last page of this document?

14 A. I am.

15 Q. There's a reference on the second page of

16 this document, the last full paragraph, other than the

17 thank you for your assistance, just above that, that

18 last sentence there refers to a PCB pollution problem,

19 do you see that reference?

20 A. Yes.

21 Q. Do you know what that was referring to, the

22 PCB pollution problem in the August '70 time frame?

23 MR. HENSLER: Objection. Lacks

24 foundation.

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1 A. It refers to the discovery of PCB's in

2 environmental samples.

3 Q. Do you know an individual by the name of

4 Randall Graham?

5 A. I do.

6 Q. Was he at McGraw in the 1970 time frame?

7 A. I'm sorry?

8 Q. I'm sorry, was he at Monsanto in the 1970

9 time frame?

10 A. Yes, he was.

11 Q. What's his position at Monsanto in the 1970

12 time frame?

13 A. He was Monsanto's field representative

14 marketing fluids for use in electrical equipment.

15 (Papageorge Exhibit Number 8

16 marked for identification.)

17 Q. Do you recall in the 1970 time frame that

18 disposal of waste PCB oils became an issue?

19 A. I have trouble understanding the use of the

20 word issue.

21 Q. I understand. Let me rephrase it. Do you

22 recall in the 1970 time frame whether Monsanto began

23 disposing of waste PCB oils for its customers at the

24 Krummrich Plant?

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1 A. Yes.

2 Q. Can you tell me how that came about?

3 A. The Monsanto plant of course was very

4 interested in keeping PCB's from being improperly

5 disposed. The decision was made to obtain -- design

6 and obtain a unit that would destroy the PCB's

7 efficiently since none were known to exist at that time

8 to the industry. Many of its customers were frustrated

9 in terms of the proper way to dispose of liquid

10 containing PCB's so Monsanto took it on its own to have

11 designed and install an incinerator at its Krummrich

12 plant for purposes of destroying material not only that

13 Monsanto might have accumulated but also its customers.

14 Q. I'm going to show you what the court reporter

15 has marked as Papageorge Exhibit 8, ask you to take a

16 look at that and let me know when you've had a chance

17 to do so.

18 A. I have scanned the article, the exhibit.

19 Q. Exhibit 8 is a letter with attachments dated

20 September 25, 1970 from Randall Graham to "Dear

21 Mr." and it's blank and what I'm wondering -- well, let

22 me ask you this first, have you seen this letter

23 before?

24 A. Yes, sir.

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1 Q. To your understanding did this letter go out

2 to Monsanto's customers?

3 A. Yes.

4 Q. And does this letter describe within it the

5 incinerator that you just talked to me about that was

6 developed at the Krummrich plant?

7 A. I don't know if it describes it. It does

8 mention its presence.

9 Q. In reviewing this letter, specifically the

10 last page where it identifies McGraw-Edison, South

11 Milwaukee, Wisconsin, does that indicate to you that

12 this letter would have indeed went to McGraw-Edison in

13 South Milwaukee, Wisconsin?

14 A. It does.

15 Q. Can you tell me, Mr. Papageorge, what the

16 term Askarel refers to?

17 A. Askarel is a generic term used by the

18 electrical equipment manufacturers to describe a liquid

19 used in the equipment they manufacture that is fire

20 resistant.

21 Q. Would Askarel have been a generic term for

22 several of the compounds that were manufactured by

23 Monsanto that were sold by various customers?

24 A. When you say several of the compounds --

1 Q. Well, let me ask you this. Is Askarel a
2 generic term for Aroclor?
3 A. Yes.
4 Q. And Aroclors were items that Monsanto
5 manufactured and sold to its various customers?
6 A. Yes.
7 Q. Was Askarel a generic term for Pyranol?
8 A. Yes.
9 Q. What was Pyranol?
10 A. Pyranol was a mixture of ingredients, one of
11 the ingredients being PCB's.
12 Q. What was Pyranol used for? Was that a
13 hydraulic fluid?
14 A. No.
15 Q. No?
16 A. That's a GE trademark for a mixture used in
17 transformers.
18 Q. And Aroclors, they were also designed for use
19 in transformers?
20 A. They could be without any other ingredients
21 present.
22 Q. How about Inerteen, am I pronouncing that
23 right?
24 A. That is correct.

1 Q. Can you tell me what Inerteen was?
2 A. Inerteen was a Westinghouse trademark used
3 for several mixtures of ingredients, one of which was
4 PCB's for use in electrical equipment.
5 Q. So Inerteen was Westinghouse, Pyranol was GE
6 and Aroclor was Monsanto?
7 A. Correct.
8 Q. And those various fluids were generically
9 known as Askarel fluids?
10 A. Yes.
11 Q. Do you know an individual by the name of
12 James G. Bryant?
13 A. Yes.
14 Q. Was he at Monsanto in the '70 time frame?
15 A. Yes.
16 Q. Can you tell me what his position was?
17 A. He was the technical person on the marketing
18 staff located in St. Louis that was involved with the
19 marketing of fluids used in electrical equipment.
20 (Papageorge Exhibit Number 9
21 marked for identification.)
22 Q. The court reporter has marked Papageorge
23 Exhibit 9. Can you take a moment, please, to look at
24 that exhibit and let me know when you've had a chance

1 to do so.
2 A. I have read it.
3 Q. Have you seen this letter before?
4 A. Yes, I have.
5 Q. Do you recognize that as Mr. Bryant's
6 signature on this letter?
7 A. Yes.
8 Q. Does this letter which is dated September 15,
9 1970 with one attachment, does the attachment indicate
10 to you that this letter was forwarded to McGraw-Edison,
11 Milwaukee, Wisconsin when it was prepared in the 1970
12 time frame?
13 A. It was -- it does.
14 Q. I think I already asked you this but is that
15 Mr. Bryant's signature there?
16 A. Yes.
17 Q. There's a reference there on the second
18 paragraph. It says "Therefore, control of waste and
19 spills is imperative." Do you see that reference?
20 A. I do.
21 Q. Do you recall that being a concern of
22 Monsanto in the 1970 time frame --
23 A. Yes.
24 Q. -- waste and spills of PCB contaminated oils?

1 A. Very much so, yes.
2 Q. Why was that a concern of Monsanto in the
3 1970 time frame?
4 A. It was part of our intention to keep PCB's
5 out of the environment.
6 Q. And do you recall that concern being
7 communicated to Monsanto's customers?
8 A. Yes.
9 Q. Can you tell me what Santovac 1 and Santovac
10 2 vacuum pump fluids were?
11 A. They were PCB's used in pump systems to help
12 the pumps operate in a way that they could create
13 vacuums.
14 Q. Do you recall at some point in time whether
15 Monsanto decided to cease selling Santovac 1 and
16 Santovac 2?
17 A. Yes.
18 Q. Do you recall approximately when that was?
19 A. '71. It's been decades so --
20 Q. Sure, I understand. Do you know an
21 individual by the name of Howard Bergen?
22 A. Yes.
23 Q. Was he at Monsanto in the '71 time frame?
24 A. Yes, sir.

1 Q. Can you tell me what his position was?
2 A. He was the director of the business group
3 that marketed the PCB products for use as fluids in
4 industrial equipment.
5 (Papageorge Exhibit Number 10
6 marked for identification.)
7 Q. I'm going to hand you what the court reporter
8 has marked as Papageorge Exhibit 10 which is a December
9 31, 1971 letter to a "Dear Sir" from Mr. Howard Bergen
10 with attachments. Have you seen this before,
11 Mr. Papageorge?
12 A. Yes, I have.
13 MR. HENSLER: Did you have another copy
14 of that one?
15 MR. RIPPERGER: Sorry.
16 MR. HENSLER: That's okay.
17 MR. RIPPERGER: Q. Do you recognize
18 that as Mr. Bergen's signature on the second page of
19 this document?
20 A. I do.
21 Q. Does this letter at all refresh your
22 recollection as to when Santovac 1 and Santovac 2 were
23 no longer being sold by Monsanto?
24 A. Yes, it does, um-hum.

1 Q. Does that -- does the indication of this
2 letter -- December 31, '71, does that sound about
3 right?
4 A. Yes, sir.
5 Q. This letter with attachments in the last page
6 specifically referring to McGraw-Edison, South
7 Milwaukee, Wisconsin, does that indicate to you that
8 this letter would have, in deed, been forwarded to
9 Monsanto's customers including McGraw-Edison?
10 A. Yes.
11 Q. There's a reference in the third paragraph of
12 the first page of the letter. It says there "Because
13 of Monsanto's concern over this problem we have
14 discontinued sales of PCB's where the usage was in
15 so-called open systems." Did I read that right?
16 A. Yes.
17 Q. Can you tell me what that reference is, open
18 systems?
19 A. That was a term used within Monsanto to
20 describe uses where PCB's were not in sealed equipment,
21 and examples of those, for example, as an ingredient in
22 paint used for highway striping, the yellow and white
23 paint, or the PCB's used in sealants and caulking
24 around buildings such as this one or PCB's that were

1 used in floor tile. That type of application was
 2 perceived to be almost immediate entry into the
 3 environment and was discontinued in 1970.
 4 Q. Monsanto then limited its sales to PCB's that
 5 were used in closed systems?
 6 A. Yes.
 7 Q. Was that mainly transformers and electrical
 8 equipment?
 9 A. Well, certainly that's a big user of PCB
 10 fluids in systems.
 11 Q. Any others that you can recall?
 12 A. Yes, there were the hydraulic uses, hydraulic
 13 fluids and there were the heat transfer applications.
 14 These were perceived initially to be closed systems
 15 designed to be closed.
 16 Q. Is what we've marked as Exhibit 10, this
 17 letter from Mr. Bergen to Monsanto customers an example
 18 of letters that were sent to Monsanto customers in
 19 the '70, '71 time frame to keep them apprised of the
 20 PCB situation?
 21 A. Yes, sir.
 22 Q. Do you recall at some point in time whether
 23 Monsanto required the purchasers of PCB materials to
 24 enter into a hold harmless agreement with Monsanto?

1 A. I do.
 2 Q. Can you tell me what you recall with respect
 3 to that, how that came about?
 4 A. Oh, I don't know what you mean by how it came
 5 about.
 6 Q. How was it decided that Monsanto would
 7 require its customers to enter into a hold harmless
 8 agreement?
 9 A. I was not personally privy to the decision
 10 making process but I was informed in December, the
 11 Christmas season of '71, I recall, that the decision
 12 had been made to prepare a document in which the
 13 customers who insisted on receiving PCB type fluids for
 14 electrical applications had to sign and agree to the
 15 terms of that document and as I recall that program
 16 became effective in 1972.
 17 Q. Do you recall whether a letter was prepared
 18 and sent out to Monsanto's customers with respect to
 19 signing a nonwaiver agreement if they purchase
 20 materials containing PCB's?
 21 A. Yes.
 22 (Papageorge Exhibit Number 11
 23 marked for identification.)
 24 Q. I've handed you what the court reporter has

1 marked as Exhibit 11 which is a one-page letter from
 2 Mr. Howard Bergen with no addressee attaching a
 3 two-page letter from Howard Bergen, again with no
 4 addressee and then attaching a nonwaiver agreement and
 5 the last page entitled "Letter to responsible
 6 customers," one of which identified there is
 7 McGraw-Edison, South Milwaukee, Wisconsin. Have you
 8 seen this before?
 9 A. Well, I've seen the documents in the exhibit,
 10 yes.
 11 Q. Do you know whether -- well, let me ask you
 12 this, is this -- were these letters forwarded to
 13 various Monsanto customers informing them that they
 14 would have to enter into the nonwaiver agreement?
 15 A. I'm rather confused, sir. The sheet that is
 16 stamped MGE 2943 --
 17 Q. Yes.
 18 A. -- is not related to the rest of the exhibit.
 19 Q. Okay. Let's do it this way, let's take off
 20 the first page of the exhibit and make MGE 002943,
 21 we'll make that Exhibit 11.
 22 MR. CHAMBERS: Would you like us to hand
 23 back the remaining pages?
 24 MR. RIPPERGER: No, I think I'll

1 probably mark the remaining pages as 12.
 2 (Papageorge Exhibit Number 12
 3 marked for identification.)
 4 Q. Exhibit 11 which is now the one-page letter
 5 from Mr. Bergen, have you seen this before?
 6 A. I have.
 7 Q. Is this an example of a letter that was sent
 8 out to various McGraw customers regarding the PCB
 9 contamination issue?
 10 MR. CHAMBERS: Let me object to the
 11 form. I think you said McGraw customers rather than
 12 Monsanto customers.
 13 MR. RIPPERGER: I'm sorry.
 14 MR. CHAMBERS: That's okay.
 15 MR. RIPPERGER: Q. Is this an example
 16 of a letter that was sent by Monsanto to its customers
 17 in -- as an example of notifying its customers about
 18 the PCB situation?
 19 A. Yes.
 20 Q. Is that Mr. Bergen's signature on that page
 21 there?
 22 A. Yes, sir.
 23 Q. Let's turn to Exhibit 12, please, which now
 24 is a two-page letter from Mr. Bergen, again to no

1 addressee, with an attached nonwaiver agreement and the
 2 last page being a letter to responsible customers
 3 indicating McGraw-Edison, South Milwaukee, Wisconsin.
 4 Have you seen this before?
 5 A. Yes, I have.
 6 Q. Do you believe that these documents belong
 7 together?
 8 A. Yes.
 9 Q. Okay.
 10 MR. CHAMBERS: By these documents you're
 11 just referring to the one BATES stamped 002944 through
 12 002948?
 13 MR. RIPPERGER: Correct.
 14 MR. CHAMBERS: Okay.
 15 MR. RIPPERGER: Q. Have you seen this
 16 letter from Mr. Bergen before?
 17 A. Yes, sir.
 18 Q. Do you have an understanding that this letter
 19 was in deed sent to various Monsanto customers who were
 20 purchasing PCB fluids in the 1971, '72 time frame?
 21 A. Yes.
 22 Q. And do you recognize that as Mr. Bergen's
 23 signature on this letter?
 24 A. Yes, I do.

1 Q. Based upon these documents would it be your
 2 understanding that this letter would have indeed been
 3 forwarded to McGraw-Edison, South Milwaukee, Wisconsin?
 4 A. Yes.
 5 Q. Do you know whether McGraw-Edison entered
 6 into this nonwaiver agreement that's attached to this
 7 letter?
 8 A. They did.
 9 Q. Do you know an individual by the name of --
 10 can't read it. Let's do it this way, mark that as
 11 Exhibit 13.
 12 (Papageorge Exhibit Number 13
 13 marked for identification.)
 14 Q. I've handed you what the court reporter has
 15 marked as Exhibit 13. Do you recognize this document?
 16 A. I do.
 17 Q. Is this the nonwaiver agreement executed by
 18 McGraw-Edison and Monsanto?
 19 A. Did you say non-waiving?
 20 Q. Nonwaiver agreement.
 21 A. Oh. Yes.
 22 Q. The signature there of the Monsanto Company,
 23 do you see that signature there?
 24 A. I do.

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1 Q. Can you tell me who that is?

2 A. That's C.P. Cunningham.

3 Q. What would have Mr. Cunningham -- well, I

4 shouldn't presume. Is Mr. Cunningham a man?

5 A. Yes, sir.

6 Q. What was his position in the January '72 time

7 frame?

8 A. At that time he was -- I believe he had the

9 title of vice-president of the chemical intermediate

10 company, one of those units that we described earlier.

11 Q. Sure. Do you recognize that as his signature

12 there?

13 A. Yes, I do.

14 Q. Do you know an individual by the name of W.W.

15 Renberg?

16 A. I do not.

17 Q. Do you recall at some point in time that

18 Monsanto -- never mind, let me ask it this way. Do you

19 recall at some point in time that Monsanto stopped

20 using polychlorinated compounds and it was Pydraul that

21 it was using?

22 A. Yes.

23 Q. Do you recall approximately when that was?

24 A. 1972.

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1 Q. Do you know an individual by the name of

2 Jerry Davidson?

3 A. Yes.

4 Q. Was he at Monsanto in the '72 time frame?

5 A. Yes, sir.

6 Q. What was his position?

7 A. He was the technical member of the Monsanto

8 marketing team located in St. Louis who was assigned to

9 the group that marketed the hydraulic fluids which were

10 sold under the trademark Pydraul, P-y-d-r-a-u-l.

11 (Papageorge Exhibit Number 14

12 marked for identification.)

13 Q. The court reporter has handed you what she's

14 marked as Exhibit 14 which is a one-page letter from

15 Mr. Bergen with attachments. Have you seen this

16 before?

17 A. Yes, I have.

18 Q. The last page there, "Pydraul mailing list,"

19 do you see that reference?

20 A. I do.

21 Q. Does this -- the reference in this mailing

22 list, does that reference the letter that's attached

23 regarding the reformulation of Pydraul?

24 A. Yes.

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1 Q. I see an individual there up on top, Pydraul

2 mailing list, W. B. Papageorge. That would have been

3 you?

4 A. Yes.

5 Q. Do you recognize -- do you recall receiving

6 this letter from Mr. Bergen in the January 31, 1972

7 time frame?

8 A. Yes, sir.

9 Q. The third page of the document which appears

10 to be a mailing list has Director of Purchases, Elgin,

11 Illinois -- McGraw-Edison Company, Elgin, Illinois and

12 Director of Purchases, Bersted Manufacturing Division,

13 McGraw-Edison Company, Tupelo, Mississippi. Do you see

14 those references?

15 A. I do.

16 Q. Does that indicate to you that this letter

17 was forwarded to McGraw-Edison at those two locations?

18 A. Yes.

19 Q. Do you recall preparing letters to Monsanto's

20 customers keeping them advised of the developments

21 relating to the PCB environmental situation?

22 A. Yes.

23 (Papageorge Exhibit Number 15

24 marked for identification.)

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1 Q. The court reporter has handed you what we've

2 marked as Papageorge Exhibit 15 which is a two-page

3 letter from Mr. Papageorge to "Dear Sir" with an

4 attached mailing list and I'll ask you, Mr. Papageorge,

5 do you recognize this document?

6 A. I do.

7 Q. And that's your signature there on the second

8 page?

9 A. It is.

10 Q. Do you recall preparing this letter in the

11 April, 1972 time frame advising companies -- keeping

12 them advised of the developments relating to the

13 polychlorinated biphenyl environmental situation?

14 A. I do.

15 Q. Do you recall why it was that you prepared

16 this letter in the '72 time frame?

17 A. This is to share with customers of PCB

18 products the high interest that the regulatory agency

19 had in getting information regarding the recipients of

20 the material and the quantities and the dates and it's

21 been -- it was Monsanto's policy not to divulge that

22 type of information but we believed at the time that

23 the day would come when we could no longer withhold it

24 and we wanted our customers to understand that that's

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1 the position that we found ourselves in.

2 Q. The last sentence of this letter -- excuse

3 me, the last paragraph says "If PCB's are still present

4 at your locations you are urged to thoroughly review

5 your procedures and inspect your facilities." You see

6 that reference?

7 A. I do.

8 Q. Why was it that you were urging your

9 customers to review their procedures and inspect their

10 facilities with respect to PCB's?

11 A. Well, this is a further indication of our

12 desire to inform the customer of the need to keep it

13 away from the environment.

14 Q. This attached mailing list, one being

15 McGraw-Edison, South Milwaukee, Wisconsin, does that

16 indicate to you that this letter was forwarded to

17 McGraw-Edison?

18 A. It does.

19 Q. You know an individual by the name of Cumming

20 Paton?

21 A. Yes, sir.

22 Q. Did I pronounce that right?

23 A. Paton but --

24 Q. Okay. Can you tell me what Mr. Paton's

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1 position at Monsanto was in the '73 time frame?

2 A. '73. I forget his exact title but he was a

3 manager of -- as best I recall he was a manager of the

4 product that was still marketed that contained PCB's.

5 (Papageorge Exhibit Number 16

6 marked for identification.)

7 Q. I've handed you what the court reporter

8 marked as Papageorge Exhibit 16 which is a two-page

9 letter from a Cumming Paton to "Dear Sir" with

10 attachments and what appears to be an attached mailing

11 list and ask you, Mr. Papageorge, have you seen this

12 before?

13 A. I have.

14 Q. Do you recall this letter being sent to

15 McGraw's customers in the August, '73 time frame?

16 MR. CHAMBERS: Let me object.

17 MR. RIPPERGER: I'm sorry. Let me

18 restate it, I apologize.

19 MR. CHAMBERS: That's okay.

20 MR. RIPPERGER: Q. Do you recall

21 whether this letter was sent to Monsanto's customers in

22 the August, '73 time frame?

23 A. I do.

24 Q. And it was?

1 A. Yes.
 2 Q. This attached mailing list here, does that
 3 indicate to you that this letter would have been sent
 4 to McGraw-Edison Company in Elgin, Illinois and
 5 McGraw-Edison Company in Tupelo, Mississippi and
 6 McGraw-Edison Company in South Milwaukee, Wisconsin?
 7 A. Yes.
 8 Q. This letter has an attached federal register
 9 regarding PCB's. Do you recall seeing this federal
 10 register in the '73 time frame?
 11 A. I do.
 12 Q. Do you recall that it was, in deed, forwarded
 13 to Monsanto's customers?
 14 A. Yes.
 15 Q. Why was it that Monsanto would have forwarded
 16 this to its customers in the '73 time frame?
 17 A. Well, this was part of our attempt to fully
 18 communicate any information that was perceived to be of
 19 significance and might effect a customer out there so
 20 we shared it with all of them not knowing exactly what
 21 type of business they might be in.
 22 Q. Do you recall whether Monsanto's corporate
 23 medical department put out information on the toxicity
 24 of Aroclor 1016 after it was developed?

1 mailing list, the letter being dated October 4, 1976 to
 2 a "Dear Sir" from R.G. Potter. Mr. Papageorge, have
 3 you seen this before?
 4 A. Yes, I have.
 5 Q. Did you see this when it was sent out in the
 6 '76 time frame?
 7 A. No.
 8 Q. When was it that you first had occasion to
 9 see this, to your recollection?
 10 A. Oh, it must have been within six months of
 11 the date it was sent out.
 12 Q. Okay. Do you recall that in deed this letter
 13 was sent out to various Monsanto customers in the '76
 14 time frame?
 15 A. Yes.
 16 Q. Based upon what appears to be a portion of a
 17 mailing list attached to this letter, does that
 18 indicate to you that this letter would have been
 19 forwarded to McGraw-Edison in Greenwood, South Carolina
 20 and McGraw-Edison in Canonsburg, Pennsylvania?
 21 A. Yes.
 22 Q. Do you recognize Mr. -- from what you can
 23 read of it, do you recognize that as Mr. Potter's
 24 signature on the first page of this documents?

1 A. Yes.
 2 (Papageorge Exhibit Number 17
 3 marked for identification.)
 4 Q. The court reporter has handed you what's been
 5 marked as Papageorge 17. I'd like you to take a moment
 6 and look at that. And let me know when you've had a
 7 chance to do so, please.
 8 A. I have scanned the document.
 9 Q. Have you seen this before?
 10 A. Yes, I have.
 11 Q. Do you know whether this was prepared by
 12 Monsanto's corporate medical department?
 13 A. It was.
 14 Q. Do you know approximately when this was
 15 prepared by Monsanto's corporate medical department?
 16 A. The date is on the very bottom, 11-4-75.
 17 Q. Based upon that do you believe that this
 18 document was generated by the Monsanto corporate
 19 medical department in or around the November, '75 time
 20 frame?
 21 A. Yes.
 22 Q. Was this document distributed to Monsanto's
 23 customers?
 24 A. Monsanto's customers of this Aroclor 1016?

1 A. I do.
 2 MR. RIPPERGER: Let's take a break, is
 3 that all right?
 4 MR. CHAMBERS: Oh, yeah.
 5 (Whereupon a lunch break was taken.)
 6 MR. RIPPERGER: Q. Good afternoon,
 7 Mr. Papageorge.
 8 A. Good afternoon.
 9 Q. Did you ever have occasion to visit South
 10 Milwaukee -- excuse me -- McGraw-Edison's facility in
 11 South Milwaukee?
 12 A. Yes.
 13 Q. Can you tell me on how many occasions you had
 14 an opportunity to visit that facility?
 15 A. Just once.
 16 Q. Do you recall approximately when that was?
 17 A. The summer of 1970.
 18 Q. Can you tell me how it was that you came
 19 about visiting that facility.
 20 A. We instituted a program where -- at the
 21 request of Mr. Don Olson. I arranged to visit the
 22 manufacturing plant -- or some of the manufacturing
 23 plants of customers who used PCB containing fluids in
 24 the manufacture of electrical equipment and

1 Q. Right.
 2 A. Yes.
 3 Q. Do you know -- do you recall at some point in
 4 time that Monsanto ceased manufacturing all PCB
 5 products?
 6 A. Yes.
 7 Q. You recall approximately when that was?
 8 A. July, 1977.
 9 Q. Do you know an individual by the name of R.G.
 10 Potter?
 11 A. Yes.
 12 Q. What was his position at Monsanto in that
 13 time frame, the one that you just referred to there
 14 when they ceased manufacturing PCB's, or PCB containing
 15 products I should say?
 16 A. Yes, he was the top Monsanto individual in
 17 that part of Monsanto that was marketing the PCB
 18 products. I have forgotten his exact title. It might
 19 have been vice-president or a high level position.
 20 (Papageorge Exhibit Number 18
 21 marked for identification.)
 22 Q. I've handed you what the court reporter has
 23 marked as Exhibit 18 which is a one-page letter with
 24 the attached -- what appears to be a portion of a

1 McGraw-Edison was one of the customers who invited me
 2 to visit their South Milwaukee plant.
 3 Q. What did you do when you visited the plant?
 4 A. We had a meeting with the top manager at the
 5 site and his staff at which I would review the status
 6 of the PCB environmental issue. We would then be
 7 escorted through the plant and where appropriate I
 8 would make some comments or they would ask questions
 9 that they thought I might be able to help them with so
 10 it was an exchange, really, of my perception of the PCB
 11 issue and their understanding of that issue and how it
 12 might apply to the -- to their activities.
 13 Q. Did you ever have occasion to visit the
 14 McGraw-Edison plant in Canonsburg, Pennsylvania?
 15 A. No.
 16 Q. Did you have occasion to visit any other
 17 McGraw facilities other than the South Milwaukee
 18 facility?
 19 A. No.
 20 Q. Do you recall when you visited the South
 21 Milwaukee facility, was there any type of report
 22 prepared by Monsanto?
 23 A. Yes, as I remember there was a call report
 24 made by Randall Graham who was my escort on this tour

1 and there was -- because of that -- what I call a call
2 report is really the salesman report to the managers of
3 his visit and what he saw and accomplished. As a
4 result of that call report there were follow-up
5 memoranda and communications with McGraw-Edison people
6 but at the moment I don't recall the specifics.
7 MR. RIPPERGER: Can we take just a
8 couple minute break? I apologize but there's a
9 document here I'm missing.

10 (Whereupon a break was taken.)
11 (Papageorge Exhibit Number 19
12 marked for identification.)

13 Q. The court reporter's handed you a one-page
14 document, it's a call report dated July 20, 1970. Is
15 that the call report that you're referring to?

16 A. This is it.

17 Q. You have an amazing memory. There's a
18 reference to W.B. Papageorge, that would have been you
19 in this time frame?

20 A. Yes, sir.

21 Q. There's a reference there in the middle of
22 the page, "W. Papageorge commitments," do you see that?

23 A. I do.

24 Q. Were those items that you were to undertake

1 their scrap material prior to taking it to Krummrich
2 for incineration?

3 A. I do not.

4 Q. Do you know whether Monsanto personnel ever
5 visited the McGraw-Edison South Milwaukee facility
6 after you had occasion to visit in this 1970 time
7 frame?

8 A. Yes, they did.

9 Q. Can you tell me who had occasion to visit

10 South Milwaukee to the best of your recollection?

11 A. Mr. Randall Graham as best I recall.

12 Q. Was that -- did Mr. Graham conduct that
13 second visit some time after you had visited in 1970?

14 A. Yes.

15 Q. Do you know whether Mr. Graham prepared some
16 type of report when he conducted that visit at South
17 Milwaukee?

18 A. Seems to me I recall a call report following
19 that visit, yes.

20 Q. Any other type of report that you recall?

21 A. By Mr. Graham?

22 Q. Any type of report regarding a site
23 inspection at South Milwaukee -- not site inspection
24 but a site visit at South Milwaukee?

1 after this visit to the South Milwaukee plant?

2 A. That's what Mr. Graham thought should happen,
3 yes.

4 Q. Mr. Graham being the person who prepared this
5 call report?

6 A. Yes.

7 Q. He's indicated there in the upper right where
8 it says salesman, Randall Graham?

9 A. Correct.

10 Q. Did you, in deed, undertake to perform these
11 five tasks that are set forth here to the best of your
12 recollection?

13 A. Best of my recollection some of that I did
14 personally, some of it I assigned to others to do.

15 Q. The third item there, "letter on plant clean
16 up," do you know whether that was done?

17 A. I know I had a two or three-page document
18 that covered that subject and as best I recall that was
19 shared with McGraw-Edison, but I don't recall whether
20 it was a direct mailing or whether it was sent to
21 Mr. Graham to deliver.

22 Q. What was that document? You say a two or
23 three-page document.

24 A. It was a two or three-page recommended

1 A. I don't recall any.

2 (Papageorge Exhibit Number 20
3 marked for identification.)

4 Q. Exhibit 20 the court reporter has handed you
5 and it's a multi-page document beginning with BATES
6 stamp MGE 000373 through 000404 entitled "Monsanto
7 Industrial Chemicals Company Visit At South
8 Milwaukee" -- excuse me -- "McGraw-Edison Company,
9 South Milwaukee, Wisconsin, August, 1972." Have you
10 had a chance to just page through this, Mr. Papageorge?

11 A. As I scan this document I'm reminded of the
12 time it was made available.

13 Q. Do you recall this document being prepared by
14 Monsanto in or around the August, 1972 time frame?

15 A. Yes, sir.

16 Q. Do you know who prepared it?

17 A. I am having a hard time recalling that.

18 Q. At any rate, is it your understanding that
19 someone at Monsanto prepared this regarding a visit to
20 South Milwaukee?

21 A. Yes, sir.

22 Q. I'd like to point your attention to what has
23 been BATES stamped Page Number 397.

24 A. I have it.

1 procedures for cleaning up a plant or preventing it
2 from getting dirty. I forget all the detail, where to
3 go with waste, what kind of facilities to look for.

4 Q. There's a reference on the bottom of this
5 call report that we've marked as Exhibit 19 that
6 there's an estimate of 72,000 pounds per year of scrap
7 material returned to W.G.K. for incineration. Do you
8 see that reference?

9 A. I do.

10 Q. Is W.G.K. -- is that the Krummrich facility
11 in Sauget?

12 A. Yes.

13 Q. And that's the facility that that's referring
14 to?

15 A. Yes.

16 Q. Do you have a recollection that McGraw-Edison
17 was generating 72,000 pounds of scrap per year in that
18 time frame when you visited the site in that time
19 frame.

20 MR. HENSLER: Objection. Lacks
21 foundation.

22 A. I don't recall the exact number but I recall
23 that it was a respectable amount of material.

24 Q. Do you know what McGraw-Edison was doing with

1 Q. There's a reference there to various
2 Aroclors, do you see that reference?

3 A. I do.

4 Q. The first reference there is Aroclor 1254 and
5 it says major use period 1930 to 1952. To the best of
6 your understanding does that reflect the years that
7 Aroclor 1254 was produced by Monsanto?

8 A. I interpret the period 1930, 1952
9 representing the period of time during which that
10 particular Aroclor 1254 was used in capacitors.

11 Q. Right. Okay. Do you know -- well -- and
12 then the second reference there, Aroclor 1242, '52 to
13 '71. Again, does that represent that that's the years
14 that Aroclor 1242 was used in capacitors?

15 A. Yes.

16 Q. Do you know whether Monsanto -- well, strike
17 that. And then beginning Aroclor 1016, October, '71,
18 do you see that reference?

19 A. Yes.

20 Q. Does that purport with your memory as to when
21 Aroclor 1016 began to be used?

22 A. Yes.

23 Q. I'm sorry if I already asked you this but I
24 can't remember the answer because it was in the very

Page 68 1 beginning of the deposition. When you worked at the 2 J.F. Queeny plant, what was the nature of the business 3 at that plant? 4 A. Oh, they made over a hundred different 5 chemicals. I don't know how else to describe it, 6 it's -- 7 Q. Did they make anything containing PCB's? 8 A. They mixed various ingredients, one of them 9 being PCB's in the formulation of products that were 10 shipped out of that plant. They were a blending 11 station. 12 Q. Was Aroclor 1242 ever shipped out of that 13 plant? 14 A. Not as Aroclor 1242. 15 Q. Did you have occasion to see containers of 16 Aroclor 1242 when you worked at the J.F. Queeny plant? 17 A. Yes. 18 Q. Did the containers of Aroclor 1242 that you 19 had occasion to observe when you worked at the J.F. 20 Queeny plant, did they have some type of warning label 21 on them to the best of your recollection? 22 A. Yes. 23 Q. Do you know what it said? 24 A. It referred to prolonged breathing of vapors	Page 71 1 Q. And the wording is similar to what you see 2 here on these warnings? 3 A. Yes. 4 Q. And, again, you had occasion to observe these 5 types of warnings on containers of Aroclor 1254 the 6 entire time that you worked at the J.F. Queeny plant? 7 A. Yes. 8 Q. And you worked at the J.F. Queeny plant from 9 '51 to '64? 10 A. Correct. 11 Q. When you worked there after the Krummrich 12 facility up until you became manager of environmental 13 control, do you recall seeing containers of Aroclor 14 1242 and 1254? 15 A. Yes, sir. 16 Q. And, again, during that time frame did they 17 contain warning labels similar to what we've marked as 18 Exhibits 21 and 22? 19 A. Yes. 20 Q. Do you know whether -- when you worked at the 21 J.F. Queeny plant whether there was in existence a 22 manual regarding the proper handling of Aroclors and 23 their mixtures? 24 A. I recall information regarding the proper
Page 69 1 and to prolonged exposure to skin and also caution to 2 avoid both of those situations. 3 (Papageorge Exhibit Number 21 4 marked for identification.) 5 Q. The court reporter has handed you what was 6 marked as Papageorge Exhibit 21. Is this the warning 7 label that you recall seeing on containers of Aroclor 8 1242 when you worked at the J.F. Queeny plant? 9 A. Well, this is the wording. 10 Q. This is the wording of the warning? 11 A. As best I recall, yes, sir. 12 Q. As best you recall was this wording on the 13 warnings on containers of Aroclor 1242 the entire time 14 that you worked at the J.F. Queeny plant? 15 A. Yes, sir. 16 Q. Did you ever have occasion to see containers 17 of Aroclor 1254? 18 A. At that point in time? 19 Q. Yes. 20 A. At the Queeny plant experience? 21 Q. Yes. 22 A. Yes. 23 Q. Did you ever have occasions to see containers 24 of Aroclor, either 1242 or 1254 prior to the time that	Page 72 1 handling; I don't recall the specific manual, however. 2 (Papageorge Exhibit Number 23 3 marked for identification.) 4 Q. Before I ask you about Exhibit 23 I'd like to 5 back up. Aroclor 1242 and 1254, were they known as -- 6 generically as Askarel? 7 A. When used in electrical equipment they were 8 referred to as Askarels. 9 Q. And would that have been true in the '50's 10 and '60's? 11 A. Yes. 12 Q. Exhibit 23, have you seen this before? 13 A. Yes, I have. 14 Q. When did you have occasion to see this? 15 A. When I was at the J.F. Queeny plant. As best 16 I remember this was the 1963, '64 period, the electric 17 distribution system in the plant reported to me. That 18 system had included in it equipment that contained PCB 19 type materials. This exhibit was available to the 20 managers of that operation so they could teach their 21 electrical mechanics and so on on how to respect these 22 kind of materials and how to handle them. 23 Q. Do you know whether this manual was provided 24 to any of Monsanto's customers?
Page 70 1 you became employed with Monsanto in the 1951 time 2 frame? 3 A. No. 4 Q. You did have, however, occasion to see 5 containers of Aroclor 1254 when you worked at the J.F. 6 Queeny plant? 7 A. Yes. 8 Q. Did those containers have warnings on them 9 also? 10 A. Yes. 11 Q. Was the warning similar to the one that we've 12 marked here as Exhibit 21, the warning on Aroclor 1242? 13 A. Yes. 14 (Papageorge Exhibit Number 22 15 marked for identification.) 16 Q. The court reporter has handed you what we've 17 marked as Exhibit 22, Papageorge Exhibit 22. Is this 18 the warning label -- there's two pages, actually, a 19 label and then another warning "Caution, contains 20 chlorinated hydrocarbons." Do you recall seeing 21 warning labels such as what's reflected in this exhibit 22 on containers of Aroclor 1254 when you worked at the 23 J.F. Queeny plant? 24 A. I recall the wording.	Page 73 1 A. Oh, yes, that was the intent. 2 Q. The intent was to provide this manual to 3 customers? 4 A. Yes, sir. 5 Q. So if McGraw-Edison had been a customer of 6 Monsanto in the 1963 time frame or so they would have 7 received a copy of this manual? 8 A. Yes. 9 MR. HENSLER: I'll object to the form of 10 the question. 11 A. The reason I hesitate, this manual was 12 periodically revised. 13 Q. Right. 14 A. At the moment I don't recall if by '63 a 15 revision of this particular 1960 version was available. 16 Q. Okay. 17 A. But they would have received, as a matter of 18 business, the latest version of this bulletin. 19 Q. Can you please turn to Page 98 of the manual 20 which is BATES stamped MGE 002567 and, for the record, 21 the entire document is BATES stamped MGE 002463 through 22 2576. With respect to Chapter 12 here which comprises 23 of Pages 98, 99 and 100, can you tell me what the 24 purpose of this section of the manual was?

1 A. Is to share with the users of the Aroclor
2 products the proper way they should be handled to avoid
3 possible harm to skin or the chest from inhalation and
4 so on.
5 Q. And that's what's reflected here in this
6 chapter?
7 A. Yes.
8 Q. Can you tell me what Pydraul is, or was I
9 should say in the '60's?
10 A. Did you say Pydraul?
11 Q. Pydraul.
12 A. That is a trademark that Monsanto used on its
13 fluids used in industrial hydraulic systems.
14 Q. Do you recall when you became manager of
15 environmental control in the 1970 time frame whether
16 containers of Aroclor contained warning labels?
17 A. Yes.
18 Q. Do you recall a warning label being generated
19 in that time frame that referred to the potential
20 impact of PCB's on the environment?
21 A. Yes.
22 Q. Did you have any role in preparing that
23 warning label?
24 A. Yes, I did.

1 for use in electrical equipment.
2 Q. Would that have included Aroclor?
3 A. Yes, sir.
4 Q. Do you know whether this memo from Mr. Kelly
5 was distributed to Monsanto's customers?
6 A. Yes.
7 Q. It was?
8 A. It was.
9 Q. Do you know what a material safety data sheet
10 is?
11 A. Yes, sir.
12 Q. Can you tell me what your understanding is
13 of -- I'll call it an MSDS, is that okay?
14 A. Yes, sir, very good.
15 Q. Can you tell me what your understanding of an
16 MSDS is?
17 A. This is a form used by the Occupational
18 Safety and Health Agency on which data regarding the
19 material being described is included relating to its
20 physical appearance, its potential safety problems if
21 misused, and by the safety problems I include not only
22 health effects but also danger of explosion and fire,
23 that type of information.
24 Q. When you were manager of environmental

1 (Papageorge Exhibit Number 24
2 marked for identification.)
3 Q. Okay. The court reporter has handed you what
4 we've marked as Papageorge Exhibit 24. Do you recognize
5 that exhibit?
6 A. I do.
7 Q. Is that the warning label that was developed
8 in the 1970 time frame?
9 A. Yes.
10 Q. Can you tell me why it was that you included
11 a notification of possible environmental contaminant
12 problems on Aroclor warning labels in the 1970 time
13 frame.
14 A. We thought it would be prudent to advise the
15 user of the material of the need to keep it from
16 getting into the environment and we felt that this was
17 one good way to make certain that the user of the
18 material would read it on the label, at least be
19 reminded if he hadn't seen a previous notification.
20 Q. Do you know an individual by the name of R.
21 Emmett Kelly?
22 A. Yes.
23 Q. Was he at Monsanto in the '71 time frame?
24 A. Yes.

1 control in the 1971 time frame, did you have occasion
2 to see an MSDS for Aroclor 1242?
3 A. Yes, sir.
4 Q. How would it have been that you would have
5 had occasion to see that document?
6 A. I was one of the authors.
7 Q. That's a pretty good reason.
8 (Papageorge Exhibit Number 26
9 marked for identification.)
10 Q. I've handed you what the court reporter has
11 marked as Papageorge Exhibit 26 which is a material
12 safety data sheet dated May, 1971 in the upper
13 right-hand corner, an indication of an expiration --
14 I'm sorry, were you going to say something?
15 A. The date you're reading, sir, has to do with
16 the OSHA form adoption of May, '71.
17 Q. Okay.
18 A. The other date is when that approval expires.
19 Q. Right.
20 A. The date of this particular Monsanto data is
21 on the bottom of the second page.
22 Q. 1-24-72?
23 A. Correct.
24 Q. Okay. Thank you for pointing that out. Is

1 Q. What was his position there?
2 A. He was the corporate medical director.
3 Q. Do you recall ever seeing a memo drafted --
4 well, strike that.
5 (Papageorge Exhibit Number 25
6 marked for identification.)
7 Q. The court reporter has handed you what's been
8 marked as Papageorge Exhibit 25. Have you seen this
9 before?
10 A. Yes, sir.
11 Q. Do you recall seeing it in or around the 1971
12 time frame?
13 A. Yes, sir.
14 Q. Was this something that was distributed by
15 Mr. Kelly?
16 A. Yes.
17 Q. Do you recognize that as his signature there?
18 A. I do.
19 Q. There's a reference here to Askarel, the
20 toxicity and safe handling of Askarel, do you see that?
21 A. I do.
22 Q. What would have Askarel been in the 1971 time
23 frame?
24 A. It would have been a fluid containing PCB's

1 this the material safety data sheet that you had
2 participation in authoring in the 1972 time frame?
3 A. Yes, sir.
4 Q. Did you actually author this?
5 A. Well, I was one of the contributors.
6 Q. Right.
7 A. There's a series of three letter initials
8 across the bottom of the left-hand corner of the second
9 page.
10 Q. Okay.
11 A. My initials are the last set, W.B.P.
12 Q. Great. Thank you. There's a reference in
13 the top there -- it's difficult to read but the second
14 line, I believe it says "Effect of overexposure" right
15 above the word skin irritation?
16 A. Oh the second page?
17 Q. Yes, I'm sorry.
18 A. Yes.
19 Q. Is that "Effect of overexposure"?
20 A. Yes, sir.
21 Q. There's a reference there to skin irritation
22 in the form of chloracne?
23 A. Yes.
24 Q. Can you tell me what that refers to?

1 A. This is an acne condition similar to teenage
2 acne but it's generated by exposure to some chemicals
3 that contain chlorine, that's where the word chlor
4 comes from, so it's a chlorine activated acne from
5 overexposure.
6 Q. That is a condition that could have been
7 caused by overexposure of Aroclor in the 1972 time
8 frame?
9 A. Yes, sir.
10 Q. And that's what was being conveyed here?
11 A. Yes.
12 Q. The next reference is to systemic
13 intoxication. Do you see that reference after
14 chloracne?
15 A. Yes, sir.
16 Q. What does that mean, systemic intoxication?
17 MR. HENSLER: Objection. I think it
18 says systematic.
19 Q. I'm sorry. Systematic intoxication. What
20 does that mean?
21 A. I'll give you my understanding. It could
22 lead to internal damage and primarily centers on the
23 liver but it does effect other parts of the body
24 internally.

1 Q. Is that from inhalation?
2 A. Well, either inhalation or ingestion or
3 through the skin.
4 Q. Sure. And that's what was being conveyed
5 here?
6 A. Yes, that's the intent.
7 Q. Do you know whether these material safety --
8 this material safety data sheet and others like it were
9 provided to Monsanto's customers?
10 A. Yes.
11 Q. They were?
12 A. Yes.
13 Q. When you were at Monsanto as the manager of
14 product acceptability in the mid-seventies, do you
15 recall there being a guide entitled "Transformer
16 Askarel Inspection and Maintenance Guide"?
17 A. Yes, sir.
18 (Papageorge Exhibit Number 27
19 marked for identification.)
20 Q. The court reporter has handed you what's
21 marked as Exhibit 27, and I know it's lengthy but I'd
22 just like you to take a look at it briefly and let me
23 know if you've had a chance to see this before, if you
24 have had an opportunity to see this document before.

1 A. Yes, I have.
2 Q. It's dated in the front right page up there,
3 it says "Revised, March 1975," do you see that
4 reference?
5 A. I do.
6 Q. Do you know whether this guide was available
7 when you were at Monsanto Industrial Chemical in or
8 around the 1975 time frame?
9 A. Yes.
10 Q. It was?
11 A. Yes.
12 Q. Do you know whether there were any earlier
13 editions of this guide?
14 A. Yes, there were.
15 Q. When you began at the Krummrich plant in the
16 mid-sixties, was this guide -- a prior version of this
17 guide available?
18 A. Yes, sir.
19 MR. HENSLER: I'm going to object to the
20 vagueness of the term available.
21 Q. Well, when you were -- when you began at the
22 Krummrich plant in the '64 time frame, was this Askarel
23 Inspection Maintenance Guide that we marked as Exhibit
24 27, did it exist at the Krummrich plant?

1 A. Not the one marked as Exhibit 27.
2 Q. I'm sorry, a prior version of that one.
3 A. Yes.
4 Q. It would have been a copy of it at the
5 Krummrich plant?
6 A. Yes.
7 Q. Do you know whether this manual or any
8 manuals that preceded it were distributed to Monsanto
9 customers?
10 A. Definitely, yes.
11 Q. When you were at the J.F. Queeny plant, do
12 you know whether there was a prior version of this
13 manual at that plant?
14 A. Definitely, yes.
15 Q. And, again, was the prior version of this
16 manual, would that have been distributed to Monsanto's
17 customers?
18 A. Yes.
19 Q. I'd like to back up just a moment to Exhibit
20 24 which is the Aroclor warning label that you
21 testified briefly about. I believe you indicated that
22 this warning label was created in or around the 1970
23 time frame?
24 A. Yes, sir.

1 Q. And was this warning label on containers of
2 Aroclor that were sold to Monsanto's customers?
3 A. Yes.
4 Q. Do you know whether the shipping invoices in
5 this time frame contained any warning labels?
6 A. As best I remember in the latter part of 1970
7 that environmental paragraph appeared on shipping
8 documents.
9 Q. When you say the latter part of that warning
10 label, are you referring to the portion of the warning
11 label that refers to environmental contamination?
12 A. I thought I used the word latter -- the
13 latter part of 1970.
14 Q. Okay.
15 A. This paragraph was introduced in about May
16 of '70, incorporated on the label per se. It was an
17 addition stick-on label and was incorporated in the
18 whole label in the -- as shown here September 30, 1970.
19 Q. Okay.
20 A. And the paragraph that includes this kind of
21 information --
22 Q. Environmental information.
23 A. -- was eventually printed on the shipping
24 documents the latter part of that year. I don't know

1 if it was November or October, some time in the latter
2 part of '70.
3 Q. When you say "this paragraph" you're
4 referring to the paragraph that refers to environmental
5 contamination?
6 A. Correct.
7 (Papageorge Exhibit Number 28
8 marked for identification.)
9 Q. The court reporter has handed you what we've
10 marked as Exhibit 28. It is a one-page document, says
11 date shipped 9-18-72, BATES stamped MGE 00415. My
12 question, Mr. Papageorge, do you recognize this form?
13 A. Yes, sir.
14 Q. Okay. Can you tell me what this is?
15 A. We used to call it a bill of lading. I don't
16 know what the official designation for it is. It's to
17 provide information during a shipment.
18 Q. Is it also known as an invoice, did you ever
19 refer to it as that?
20 A. No, the invoice at Monsanto actually has the
21 word invoice on it and --
22 Q. This was known as a bill of lading?
23 A. To the best of my recollection. The invoice
24 also shows dollars, cost.

1 Q. Did the bills of lading -- well, when a bill
2 of lading was generated in the 1972 time frame, was
3 that bill of lading forwarded on to the customer?
4 A. Eventually it arrived, yes. They got copies.
5 Q. Did the bills of lading have the warning
6 label that we see here in the middle of this bill of
7 lading?
8 A. Yes. Starting, as I mentioned earlier, as
9 best I recall, late seventies it was added.
10 Q. When you say late seventies, you mean late
11 1970?
12 A. Correct.
13 Q. There's a signature on this bill of lading
14 down in the bottom right there. It looks like an EE --
15 I can't quite make it out but it looks like Meyer. Do
16 you see that?
17 A. Yes.
18 Q. Do you recognize that?
19 A. I do not.
20 Q. Was there a person at Monsanto in the '72
21 time frame named Meyer to the best of your
22 recollection?
23 A. Well, I know of a Don Meyer but the initials
24 mislead me here.

1 Q. Sure.
2 A. I don't know.
3 Q. Is this document on the bill of lading form
4 that was used in Monsanto in the 1972 time frame?
5 A. Yes.
6 Q. Do you know whether the warning that's
7 indicated here, was that a label of some type that you
8 recall in the '72 time frame or was that typed onto the
9 bill of lading to the best of your recollection?
10 A. Best of my recollection this was stamped.
11 (Papageorge Exhibit Number 29
12 marked for identification.)
13 Q. Do you know a person by the name of A. Jones
14 that worked at Monsanto in the '72, '73 time frame?
15 A. I do not.
16 Q. I'm going to show you what the court reporter
17 has marked as Exhibit 29. Is this document another
18 example of a bill of lading that would have been used
19 by Monsanto in the '72 time frame?
20 A. It appears to be, yes, sir.
21 Q. You see that there's a warning in the middle
22 there --
23 A. Yes.
24 Q. -- regarding polychlorinated biphenyls?

1 A. I see that.
2 Q. Okay. You see that the warning on Exhibit
3 29, the wording is -- the typing is different than that
4 of 28?
5 A. Yes.
6 Q. Do you have any recollection as to how it
7 came about that different labels were used?
8 A. Different warning labels. The stamp I had
9 mentioned earlier is represented by what we see on
10 Exhibit 29.
11 Q. Okay.
12 A. The same wording that we see on Exhibit 28
13 appears to have been typed on that particular bill of
14 lading.
15 Q. At any rate, Exhibit 29 is the stamp that you
16 were referring to earlier?
17 A. That is correct.
18 Q. Okay. And that was put on all bills of
19 lading that were sent out with respect to products that
20 had polychlorinated biphenyls at least as of starting
21 in the late 1970's?
22 A. To the best of my recollection, yes.
23 Q. There's a reference on Exhibit 29 to
24 McGraw-Edison Power Systems Division in Greenwood, South

1 Carolina. Do you see that reference in the middle of
2 the page there?
3 A. I do, yes.
4 Q. Do you have any recollection of there being a
5 McGraw-Edison facility in Greenwood, South Carolina?
6 A. I do, I've heard of them.
7 Q. There's a reference -- oh, I see. I'm just
8 trying to distinguish what the difference is between
9 the two entities that are identified on Exhibit 28 and
10 29. If you'll turn back to 28, I guess the top entity
11 identified, it says "sold to," do you see that?
12 A. I do.
13 Q. Okay. Does that indicate to you that that's
14 the entity that the materials that are reflected in
15 this bill of lading were sold to?
16 A. Sold to, yes.
17 Q. And then the "shipped to" would have been the
18 facility where the products were actually shipped to?
19 A. Correct.
20 Q. Got it. So in this Exhibit 29 the materials
21 that are reflected in this bill of lading would have
22 been sold to McGraw-Edison, South Milwaukee but shipped
23 to McGraw-Edison in Greenwood, South Carolina?
24 A. Correct.

1 Q. Do you have any understanding as to why a
2 product that would have been sold to McGraw-Edison in
3 South Milwaukee would have been shipped to
4 McGraw-Edison in Greenwood, South Carolina?
5 A. I have an understanding.
6 Q. What is your understanding?
7 A. The entity shown as a "sold to" is the one
8 that placed the order and directed the shipment to
9 arrive at another destination. Later the invoicing
10 will go to the "sold to" party.
11 (Papageorge Exhibit Number 30
12 marked for identification.)
13 Q. The court reporter's handed you what's been
14 marked as Papageorge Exhibit 30. Can you tell me what
15 this document is?
16 A. This is a copy of an invoice for material
17 delivered to McGraw-Edison in Greenwood, South Carolina.
18 Q. What's the difference between what we marked
19 as 30 being an invoice and what we marked as 28 and 29,
20 the bills of lading? What different purpose did they
21 serve?
22 A. Well, one accompanies a shipment and
23 designates the tank car number, the weight of the
24 material.

1 Q. That being the bill of lading?
2 A. Yes.
3 Q. Okay.
4 A. Where as Exhibit 30 not only shows the amount
5 of material, the weight of the material but also shows
6 the cost of that material and it's intended for the
7 customer to pay the bill so to speak.
8 Q. The bill of lading that we marked as Exhibits
9 28 and 29, did the bill of lading actually go with the
10 shipment of the product?
11 A. A copy goes with the shipment and a copy goes
12 also to the "sold to" and "shipped to".
13 Q. Okay. And the bill then -- after the
14 shipment then the invoice would be sent to the person
15 who placed the order?
16 A. Correct.
17 Q. Did the invoices that were sent by McGraw to
18 its customers contain a warning, an environmental PCB
19 warning similar to what we see on Exhibit 30?
20 MR. CHAMBERS: Let me object to the
21 form. I think you referred to McGraw again instead of
22 Monsanto.
23 MR. RIPPERGER: I did, I'm sorry.
24 MR. CHAMBERS: That's okay.

1 MR. RIPPERGER: Q. Did the invoices
2 that were sent to Monsanto's customers contain the
3 warning regarding PCB's as is reflected in Exhibit 30?
4 A. Well, that is a copy of an invoice that went
5 to the customer --
6 Q. Right.
7 A. -- and the statement is typed on there.
8 Q. Right. Do you have a recollection that the
9 statement or the warning was put on invoices as well as
10 bills of lading?
11 A. Yes.
12 (Papageorge Exhibit Number 31
13 marked for identification.)
14 Q. Before I ask you about Exhibit 31, just
15 turning back to Exhibit 30, is that invoice -- is that
16 the invoice form that was used by Monsanto in or around
17 the 1973 time frame?
18 A. Yes.
19 Q. Exhibit 31, is that an example of an invoice
20 form that would have been used by Monsanto in and
21 around the 1976 time frame?
22 A. Yes.
23 Q. Does this invoice reflect a shipment of PCB
24 containing materials to McGraw-Edison?

1 this memorandum?
2 A. I do.
3 Q. Is that the same visit that you recall
4 someone from McGraw --
5 A. Yes, that's the one I thought took place in
6 1972.
7 Q. But you believe in reviewing this that it
8 took place in '74?
9 A. Yes.
10 Q. And there's an indication there in the first
11 sentence of a James Butner, Manager of Engineering of
12 Sangamo Electric in Pickens, South Carolina, do you see
13 that reference?
14 A. I see that.
15 Q. Does that at all refresh your recollection as
16 to where the McGraw representative was from in that
17 visit?
18 A. No, I don't know that it refreshes my
19 recollection. I just don't remember so --
20 Q. Okay. But at any rate you do recall
21 receiving a copy of this memo in or around the '74 time
22 frame?
23 A. Yes, sir.
24 Q. And this is on Monsanto interoffice

1 A. Yes.
2 Q. And, again, the invoice contains the same
3 warning that was on the previous invoice that we looked
4 at?
5 A. Correct.
6 Q. Do you know an individual by the name of
7 James Bryant?
8 A. Yes.
9 Q. Was he at Monsanto in the 1970 time frame?
10 A. Yes, sir.
11 Q. Do you have an understanding of what Askarel
12 1488-P is or was, I should say, in the 1970 time frame?
13 A. I don't remember specifically the chemical.
14 I do remember it was one of the materials that Monsanto
15 was testing as an alternative to PCB's. That's all I
16 recall at the moment.
17 MR. RIPPERGER: Let's take a five minute
18 break.
19 (Whereupon a break was taken.)
20 MR. RIPPERGER: Back on the record. Q.
21 Do you recall, Mr. Papageorge, whether anybody from the
22 McGraw-Edison facility came to visit people in your
23 offices in Monsanto in St. Louis?
24 A. Yes, I do.

1 memorandum stationery?
2 A. Yes.
3 Q. This document apparently appears to be
4 drafted by an Elliott Shimley. Was there a Mr. Shimley
5 at Monsanto in the '74 time frame?
6 A. Yes.
7 Q. What was his position?
8 A. I associate Mr. Shimley with the marketing
9 function but I just don't remember anymore about that
10 assignment. He was a marketing representative.
11 Q. Okay. I believe you indicated earlier that
12 at some point in time -- well, before I ask you that,
13 let me ask you this. Did you ever have occasion to
14 contact anybody or have any conversations with anyone
15 at McGraw's Canonsburg, Pennsylvania facility?
16 A. No.
17 Q. I believe you indicated earlier that Aroclor
18 1016 was developed by Monsanto to replace Aroclor 1242?
19 A. Yes.
20 Q. And you believe that that was done in or
21 around the 1971 time frame?
22 A. Yes.
23 Q. Customers that purchased Aroclor 1016, were
24 those customers previously using Aroclor 1242?

1 Q. Do you recall that such a visit happened?
2 A. Yes.
3 Q. Can you recall who it was from McGraw that
4 visited St. Louis?
5 A. No, I don't remember names.
6 Q. Do you recall the person that visited your
7 plant -- did you say that you recalled that they were
8 from the South Milwaukee plant? Do you recall which
9 plant they were from?
10 A. That's my best recollection, yes, sir.
11 Q. Do you recall approximately when that was?
12 A. 1972.
13 (Papageorge Exhibit Number 32
14 marked for identification.)
15 Q. Court reporter's handed you what she's marked
16 as Papageorge Exhibit 32. Can you take a look at that,
17 please, and let me know when you've had a chance just
18 to briefly look it over. Have you seen Exhibit 32
19 before?
20 A. Yes, I have.
21 Q. Do you recall receiving it in or around the
22 1974 time frame?
23 A. Yes.
24 Q. Do you recall this visit that's described in

1 A. Yes.
2 (Papageorge Exhibit Number 33
3 marked for identification.)
4 Q. The court reporter has handed you what we've
5 marked as Papageorge Exhibit 33. I'd like you to take
6 a moment to review that. Let me know when you've had a
7 chance to do so. While you're doing that, for the
8 record Exhibit 33 is a one-page letter to McGraw-Edison
9 customers from a R.H. Draeger.
10 A. I have read the exhibit.
11 Q. Okay. There's a reference there in the
12 second paragraph to a Monsanto Chemical Company
13 developing what they've characterized as MCS 1016, do
14 you see that reference?
15 A. I do.
16 Q. To your understanding would that be referring
17 to the Aroclor 1016?
18 A. It does.
19 Q. There's a reference in the first paragraph,
20 the second sentence refers to a "PCB compound commonly
21 called Askarel or by various trade names," do you see
22 that reference?
23 A. I do.
24 Q. The PCB compound commonly called Askarel,

1 would that have included Aroclor 1016?
 2 A. Yes, sir.
 3 Q. And would that have included Aroclor 1242
 4 before Aroclor 1016?
 5 A. That is correct.
 6 Q. And would that have included Aroclor 1254
 7 prior to the development of Aroclor 1242?
 8 MR. HENSLER: I'm going to object to the
 9 form of the question. I'm not sure whether you're
 10 asking him whether the word Askarel as used in this
 11 letter includes all of those are whether you're asking
 12 a general question about the generic term Askarel.
 13 MR. RIPPERGER: Okay. Q. When Aroclor
 14 1254 was being manufactured by Monsanto, was it
 15 commonly called Askarel?
 16 A. Yes.
 17 Q. And when 1242 was being manufactured was it
 18 commonly called Askarel?
 19 A. Yes.
 20 Q. And, again, when Monsanto was manufacturing
 21 Aroclor 1016, that was also commonly called Askarel?
 22 A. Yes.
 23 Q. Can you tell me what Mr. Bergen's
 24 responsibilities were in and around the 1972 time frame

1 wondering, did Monsanto then get out of the dielectric
 2 fluids market?
 3 A. Yes.
 4 Q. Let's go off the record.
 5 (Whereupon an off-the-record
 6 discussion was held.)
 7 (Papageorge Exhibit Number 35
 8 marked for identification.)
 9 Q. When you began your employment at the J.F.
 10 Queeny plant, do you know whether there was a manual of
 11 some sort regarding the safe handling and use of
 12 Aroclor 1248?
 13 A. Did I know at that time?
 14 Q. Yes.
 15 A. I was not aware until about 1963 --
 16 Q. Right. And you --
 17 A. -- about such a manual.
 18 Q. Right. And you told me that in relation to
 19 our review of Exhibit 23, which is the manual dated
 20 January, 1960?
 21 A. Correct.
 22 Q. I'm going to show you what the court reporter
 23 has marked as Exhibit Number 35 and ask you to take a
 24 look at that and let me know when you've had a chance

1 at Monsanto?
 2 A. He was the director of the business group
 3 responsible for the marketing of the fluids used in
 4 industrial systems.
 5 Q. I'm going to back up, briefly, to Exhibit 13
 6 which is the two-page nonwaiver agreement signed by --
 7 I believe you said that was Mr. Cunningham?
 8 A. Correct.
 9 (Papageorge Exhibit Number 34
 10 marked for identification.)
 11 Q. For the record Exhibit 13 is BATES stamped
 12 000267 through 268 and what we've marked as Exhibit 34
 13 is a one-page letter from a Mr. Renberg to a Mr. Bergen
 14 of Monsanto dated January 12, 1972, the same date as
 15 Exhibit 13, and, for the record, Exhibit 34 is BATES
 16 stamped 000269 which is sequentially the next number
 17 after the nonwaiver letter that we marked as Exhibit
 18 13. My question is, do you believe, based upon your
 19 knowledge of what was conducted in the 1972 time frame,
 20 that what we've marked as Exhibit 34 would have been
 21 the cover letter forwarding the nonwaiver agreement to
 22 Monsanto?
 23 A. That's my understanding, yes, sir.
 24 Q. And the addressee of the letter that we've

1 to do so. For the record, it's a multi-page document
 2 BATES stamped MGE 002577 through 2589 entitled
 3 "Aroclor, a Nonflammable Hydraulic Fluid for
 4 Die-casting Systems, Monsanto's Technical Bulletin
 5 Number P-137, March 28, 1949".
 6 A. I have scanned through the document.
 7 Q. Have you seen this before?
 8 A. I have, yes, sir.
 9 Q. Do you recall on what occasion how it was
 10 that you had a chance to see this?
 11 A. As best I recall I saw this particular
 12 bulletin some time between 1965 and 1970.
 13 Q. Okay. Did you have an understanding as to
 14 what the purpose of this bulletin was?
 15 A. Yes.
 16 Q. What was your understanding?
 17 A. This was to promote the use of the Aroclor
 18 1248 product for use in hydraulic -- as a hydraulic
 19 fluid in hydraulic systems, this particular one being
 20 die-casting systems.
 21 Q. So Aroclor 1248 would have been a hydraulic
 22 fluid of some sort?
 23 A. This was a proposed use for that material,
 24 yes.

1 marked as Exhibit 34 being Mr. Bergen, is that who
 2 would have received the nonwaiver agreement in the '72
 3 time frame?
 4 A. Yes, sir.
 5 Q. And is that his address in the '72 time
 6 frame?
 7 A. Yes, sir.
 8 Q. Thank you. And I believe you indicated
 9 earlier that at some point in time it was your
 10 understanding that Monsanto ceased manufacturing of
 11 products containing PCB's?
 12 A. I did.
 13 Q. And, I'm sorry, I know you told me when that
 14 was but I can't recall what you indicated.
 15 A. July, 1977.
 16 Q. Do you have any understanding as to why
 17 Monsanto quit making products that contained PCB's?
 18 A. It's primarily because they understood from
 19 its key customers of dielectric fluids that alternative
 20 design methods and fluids had been developed whereby
 21 the need for PCB's was not as great, therefore they
 22 could phase out of that use so Monsanto decided that
 23 they would no longer participate in that market.
 24 Q. So I guess that was one thing that I was

1 Q. Aroclor 1254, that was a product that was
 2 used in dielectric systems; is that --
 3 A. It was.
 4 Q. Okay. And 1242 was a dielectric Aroclor?
 5 A. Yes.
 6 Q. Okay. Just what I'm wondering, 1248 wouldn't
 7 have been necessarily dielectric, it would have been
 8 hydraulic? Is that a fair distinction or not?
 9 A. I don't want to mislead you, that's why I'm
 10 trying to think this out.
 11 Q. Sure.
 12 A. This does not mean that the 1242 and the 1254
 13 were not used in hydraulic systems.
 14 Q. Sure, I understand.
 15 A. I don't recall 1248 as such being used in
 16 electrical systems.
 17 Q. That's all I have, thank you very much, but
 18 Mr. Hensler will probably have some questions here for
 19 you.
 20 CROSS-EXAMINATION
 21 BY MR. HENSLER:
 22 Q. Thank you for your patience, Mr. Papageorge.
 23 We met this morning, my name's Louis Hensler.
 24 A. Okay.

Page 104 1 Q. I'm an associate with the law firm of Jones, 2 Day, Reavis & Pogue and we represent McGraw-Edison in 3 this case. This morning you gave some testimony about 4 a series of letters from Monsanto to Monsanto customers 5 discussing the potentiality of environmental pollution 6 by PCB's. Do you remember that testimony this morning? 7 A. I do. 8 Q. I want to ask you generally about those 9 letters. First of all, was Monsanto's communication 10 with its customers on that subject accomplished 11 principally through those letters? 12 A. I don't know that it was principally through 13 the letters. This was one of the ways. The other 14 approach that we felt was even more effective was the 15 personal contact by a Monsanto representative calling 16 on the customer and having an across-the-table kind of 17 discussion regarding what he knew and even to elaborate 18 on what the letters contained to share with them the 19 latest that he had been taught or told. 20 Q. Do you have any personal knowledge of any of 21 those discussions between Monsanto personnel and 22 McGraw-Edison employees? 23 A. I was assured repeatedly in my contacts with 24 marketing representative that this was an ongoing	Page 107 1 1254 or 1260," then the second fact says "PCB's with a 2 chlorine content of less than 54 percent have not been 3 found in the environment and appear to present no 4 potential problem to the environment." 5 I know I read a good bit there. Did I go over 6 that accurately as far as you could tell? 7 A. You did. 8 Q. And let me ask you for a clarification. Is 9 this letter -- those two facts when taken in 10 conjunction, does that indicate that the list of 11 products that I read under fact one at least at that 12 time were not considered by Monsanto to present a 13 potential problem to the environment? 14 A. Correct. 15 Q. So that if this letter went to a customer who 16 was purchasing one of the products, one or more of the 17 products for that matter, that are listed under fact 18 one, the message that Monsanto intended them to receive 19 was that those particular products weren't part of the 20 environmental concern that was being raised with 21 respect to the PCB's? 22 A. Correct. 23 Q. If you look at Page 2904. Is that part of 24 exhibit -- still part of Exhibit 5?
Page 105 1 activity. I have not been in a position other than my 2 few visits that I made to be an active participant. 3 Q. And you would have expected those discussions 4 to be consistent with the information that was conveyed 5 in the letters that we went over this morning? 6 A. Certainly. 7 Q. The letters that we went over this morning, 8 attached to those letters were address lists that were 9 in redactive form, we already went over that. Is it 10 your understanding that those letters were addressed 11 precisely as shown on the address list; in other words, 12 the individual who was named on the address list was 13 the individual to whom the letter was directed? 14 A. Certainly. 15 Q. How were those letters delivered? 16 A. Through the regular -- 17 Q. U.S. Mail, ups? 18 A. -- U.S. Mail system. 19 Q. First class -- 20 A. Yes. 21 Q. -- bulk? 22 A. First class. 23 Q. Now, you don't have any personal knowledge 24 whether they were specifically received, correct?	Page 108 1 A. Yes. 2 Q. I don't know if we went over that. That 3 states "Pydrauls and Aroclor start here," you see that 4 note? 5 A. I do. 6 Q. Do you have any understanding what that 7 means? 8 A. This page consisted a list of addressees of 9 the PCB environmental issue letter, or versions of it, 10 and the indication is that some of them that appeared 11 on this page were other than the PCB's that appeared as 12 Pydrauls or as Aroclors. In other words, there could 13 have been a Pyranol list, an Inerteen list. 14 Q. All right. If you look then at Exhibit 6 15 which is the letter dated February 18, 1970. 16 A. I see it. 17 Q. Does the text that -- let's start with the 18 first page of that. Does the text of the first page of 19 that appear to be identical to the text of the first 20 page of Exhibit 5? 21 A. True. 22 Q. Other than the date, of course? 23 A. Yes. 24 Q. All right. So that the testimony you gave
Page 106 1 A. That's true. 2 Q. And you certainly don't know what the 3 individual who received the letters did with them when 4 they received them? 5 A. That is correct. 6 Q. Could you take a look at Exhibit 5 for a 7 moment. 8 A. I have it. 9 Q. I'm still looking for it. Oh, I pulled it 10 out so I could get to it quickly. That's the February 11 9, 1970 letter that I think you testified went to 12 certain Monsanto customers. The document control 13 numbers begin at 2896; is that correct? 14 A. Correct. 15 Q. If you would look at -- on the first page 16 there. The third full paragraph begins "As you're 17 supplier of Aroclor 1254 and 1260 and formulated 18 products containing 1254 we wish to alert you to the 19 potential problems of environmental contamination as 20 referred to in the newspaper and magazine articles. We 21 would like to point out the following additional facts" 22 and fact number one says "Products such as Pydraul 90, 23 135, 230, 312, A-200, F-9, 150 and 60, Turbinol 153 and 24 Therminol FR-1 and FR-2 are not formulated with Aroclor	Page 109 1 about the additional facts listed on Exhibit 5 would 2 also be applicable to the identical text on Exhibit 6, 3 correct? 4 A. Correct. 5 Q. If you'd look for a moment at Exhibit 8 which 6 discusses the incinerator that Monsanto was 7 installing. 8 A. I have it. 9 Q. I just wanted to clarify. Customers who sent 10 material to be disposed of in the incinerator paid for 11 those services, right, they were charged for that? 12 A. Yes. 13 Q. If you'd take a look at Exhibit 14 for a 14 moment. 15 A. I have it. 16 Q. On Page 2962, that's BATES number 2962. 17 A. I have it. 18 Q. That's the internal Monsanto memo and you 19 gave some testimony on that earlier, correct? 20 A. Yes. 21 Q. Okay. In the first full paragraph, the last 22 sentence of that memo says "Also the letter was sent to 23 "bill to" locations, you will not find all "ship to" 24 locations for major customers on this list." Could you

1 explain that.
 2 A. What that implies is that the letter was sent
 3 to the "bill to" locations with the assumption that
 4 that "bill to" location is the unit within the
 5 customer's organization that had the responsibility
 6 within the customer's organization for dealing with
 7 subgroups within the organization and the intent was to
 8 make certain that it was sent to the key person, not
 9 necessarily to every person.
 10 Q. If you would look at Exhibit 17 for a moment.
 11 A. I have it.
 12 Q. I think you testified earlier that it would
 13 have been your understanding that this -- I forget what
 14 we call it but this form or this sheet would have been
 15 sent to customers of Aroclor 1016?
 16 A. Yes.
 17 Q. And I just wanted to clarify that it would
 18 have been sent to customers of Aroclor 1016 as of the
 19 November 4, 1975 date that's on the document, correct?
 20 A. After it was available, yes, sir. That's the
 21 date of availability.
 22 Q. Exhibit 19.
 23 MR. RIPPERGER: I'm sorry, what was the
 24 previous exhibit that you were referring to?

1 A. Seventeen.
 2 MR. RIPPERGER: Thank you.
 3 MR. HENSLER: Q. Now I'm asking you
 4 about 19. This is the call report for the visit -- I
 5 believe it was to the McGraw South Milwaukee plant --
 6 A. Yes.
 7 Q. -- that we discussed before. I just wanted
 8 to clarify your understanding that all of the personnel
 9 contacted listed in this memo were all employees of the
 10 South Milwaukee location as you understood it?
 11 A. That's as I understood it, yes, sir.
 12 Q. You didn't have any understanding at that
 13 time that you were talking to any McGraw-Edison
 14 employees from any other facilities or from the home
 15 office for that matter?
 16 MR. RIPPERGER: Object to the form.
 17 A. That is correct.
 18 Q. Exhibit 20, if you would. If you would look
 19 at Page 6. Let me skip that, let's go on to Page 7 of
 20 the document which now bears document control number
 21 MGE 384.
 22 A. I have it.
 23 Q. If you look at the last full paragraph on
 24 that page, I'll read that -- I'll read the last

1 sentence for the record. It says "However it is
 2 recognized that existing drain systems in, for example,
 3 capacitor manufacturing plants are probably
 4 contaminated as a result of past practices and PCB
 5 traces may continue to show up in affluent streams for
 6 some time." Could you clarify for me, is this
 7 indicating that for a facility that might have been
 8 discharging some PCB's in a time period before it
 9 became known that PCB's were an environmental concern
 10 might, even after they stopped discharging those, still
 11 be releasing some into the environment because of the
 12 background contamination that continued to exist from
 13 the earlier time period?
 14 MR. RIPPERGER: Object to the form.
 15 A. That is the understanding, yes.
 16 Q. Exhibit 24, this warning dated September 30,
 17 1970. I can't remember what you said before. This was
 18 a new warning, right, particularly this part about the
 19 PCB's at that time?
 20 A. New in 1970.
 21 Q. Okay. Would it be fair to say that none was
 22 really at the forefront of learning about and educating
 23 people on the potential problems with PCB's?
 24 A. I believe so, yes.

1 Q. Would it also be fair to say that it took
 2 some time for the industry as a whole to become
 3 educated about the subject?
 4 MR. RIPPERGER: Object to the form.
 5 A. Like everything, it does take some time, yes.
 6 Q. Let me ask you about Exhibit Number 25 for a
 7 moment. When you testified about this, I think you
 8 testified that it was distributed to customers. I'm
 9 wondering particularly what customers would have
 10 received this?
 11 A. Since it addressed the subject of Askarels it
 12 would have to be those customers that used PCB
 13 containing fluids in electrical equipment that were on
 14 record with Monsanto as of early 1971.
 15 Q. So it would have been those customers who
 16 were purchasing those products from Monsanto -- I think
 17 this document's dated March 4, 1971 -- in that time
 18 frame?
 19 A. Yes.
 20 Q. Okay. How was this distributed?
 21 A. This was assigned to the marketing department
 22 and they mailed it out and also had their field
 23 salesmen carry it with them in their briefcases and
 24 drop it off as they made their calls.

1 MR. RIPPERGER: I'm sorry, what exhibit
 2 are we looking at here?
 3 MR. HENSLER: Twenty-five.
 4 MR. RIPPERGER: Thank you.
 5 MR. HENSLER: Q. This exhibit talks
 6 about certain potential health effects from certain
 7 kinds of exposure to Askarel, correct?
 8 A. Yes.
 9 Q. And is it your understanding that these were
 10 essentially the known health effects at that time?
 11 A. Yes, sir.
 12 Q. Exhibit 26 is a material safety data sheet
 13 and I think you said this also was or would have been
 14 provided to Monsanto customers. How was that provided
 15 to Monsanto customers?
 16 A. I'm sorry?
 17 Q. How was this provided to Monsanto customers?
 18 A. Again, customers that were active at that
 19 point in time still purchasing the material were mailed
 20 copies of this through the marketing function.
 21 Q. And let me make that clarification as well
 22 with respect to the letters we went over about PCB's.
 23 Those were sent -- well, strike that, I don't need to
 24 go over that again. If you look at the second page of

1 this material safety data sheet, you testified briefly
 2 about the section that talks about effects of
 3 overexposure and you mentioned -- one thing you
 4 mentioned was chloracne which I see is the first thing
 5 mentioned here. You also talked about liver damage.
 6 You'll agree with me, won't you, that liver damage
 7 certainly isn't directly mentioned here?
 8 A. That's true.
 9 Q. In fact, other than chloracne this talks
 10 about systematic intoxication leads to nausea,
 11 vomiting, loss of weight, edema and abdominal pain?
 12 A. Yes.
 13 Q. That's the extent of the effects that are
 14 listed there, correct?
 15 A. Right.
 16 Q. And was it your understanding that those were
 17 the known effects at that time?
 18 A. Yes, sir.
 19 Q. Exhibit 27 was the Askarel Inspection and
 20 Maintenance Guide. You testified that there were
 21 earlier editions of this, correct?
 22 A. Yes.
 23 Q. And without looking at the early editions you
 24 can't tell whether any particular things that are in

Page 116 1 this edition were also in the early editions, correct? 2 MR. RIPPERGER: Object to the form. 3 A. Oh, I think I could pick out the material 4 that appeared in early editions because some of it is 5 just not changing. For example, the testing for its 6 quality and its properties, those do not change with 7 time. On the other hand I think I could spot the new 8 material. For example, on Page 5 of the document there 9 is a reference to an ANSI Committee C107. 10 Q. Right. 11 A. That's new data. New as compared to those 12 versions that were published in the '50's and '60's. 13 Q. That's the section captioned "Avoid 14 Environmental Pollution," Section 8? 15 A. Well, I'm looking at -- Section 8, I don't 16 see that. 17 Q. On Page 5, it's right in the middle of the 18 page. 19 A. On Page 5 -- oh. Well, that certainly is new 20 and then down below you'll see the heading ANSI 21 Committee C107. That material is new. And by new I'm 22 talking '74 and on. 23 Q. Okay. So some of this would have been 24 included in earlier editions and some of it wasn't?	Page 119 1 South Carolina was also a customer of Monsanto at about 2 that time; isn't that right? 3 MR. RIPPERGER: Object to the form. 4 A. Yes. 5 MR. RIPPERGER: Do you think you can 6 lead this witness? None of this testimony is going to 7 be admissible because you're asking leading questions 8 and I'm objecting to the form. I don't know if that's 9 all right but I don't think it's proper to be leading 10 him like you're doing. 11 Q. And it was your understanding that Sangamo 12 Electric Company and McGraw-Edison Facility in 13 Greensboro were separate entities, correct? 14 MR. RIPPERGER: Object to the form. 15 A. Yes. I personally don't know any connection 16 between Sangamo and McGraw-Edison. 17 Q. And the first two paragraphs of this letter 18 both refer to the Pickens, South Carolina plant, 19 correct? 20 MR. RIPPERGER: Object to the form. 21 A. They do. 22 Q. And in light of all of that do you think it's 23 possible that in the subject line of this memo where 24 this lists "McGraw-Edison Visit to St. Louis" that that
Page 117 1 A. And some is added that's new, yes. That's 2 typical of all versions. 3 Q. I guess that's why they call them revisions? 4 A. Correct. 5 Q. Now, you're aware, aren't you, that the 6 McGraw-Edison Company throughout the time period we've 7 been talking about today existed in a number of 8 different divisions, correct? 9 MR. RIPPERGER: Object to the form. 10 A. I know there were separate entities. I don't 11 know that they were called divisions, I don't know what 12 terminology was used, and I know they performed 13 different kinds of activities, varied activities, but 14 other than that I'm not too familiar with the details. 15 Q. And you don't have any knowledge about how 16 separate or integrated the various divisions of 17 McGraw-Edison were; is that correct? 18 A. That is true. 19 MR. RIPPERGER: Object to the form. 20 Q. And you don't know whether information 21 provided to one division of McGraw-Edison would have 22 been shared with or available to another division, 23 correct? 24 MR. RIPPERGER: Object to the form. You	Page 120 1 might perhaps be some sort of error? 2 MR. RIPPERGER: Object to the form. 3 A. There appears to be a discrepancy but I don't 4 know which is the correct designation. 5 Q. You don't have any specific recollection as 6 to -- as you sit here that McGraw-Edison personnel 7 visited Monsanto in St. Louis in August of '74, 8 correct? 9 MR. RIPPERGER: Object to the form. 10 A. I don't have any specific recollection 11 regarding the date of such a meeting. I do remember 12 meeting with representatives of McGraw-Edison. I also 13 know we met with representative of Sangamo. I don't 14 know which of those this memorandum covers. 15 Q. Fair enough. Could you mark that as 36. 16 (Papageorge Exhibit Number 36 17 marked for identification.) 18 Q. Mr. Papageorge, you've now been handed what's 19 been marked Exhibit 36 for the record. At the top it 20 says "Monsanto Call Report Organic Division" and it 21 bears document control number MGE 00206. Do you 22 recognize that document? 23 A. I cannot place this document. Don't remember 24 it.
Page 118 1 answer. 2 A. I have no way of knowing that. 3 Q. Exhibit 30, I think this was covered but I 4 just wanted to clarify. You gave some testimony about 5 the paragraph there about the PCB's and I just want to 6 clarify that your testimony was that that paragraph was 7 not always included on invoices for such products, 8 correct? 9 MR. RIPPERGER: Object to the form. 10 Q. In other words, prior to the seventies it was 11 not, correct? 12 MR. RIPPERGER: Object to the form. 13 A. On Exhibit 30 I see what appear to be two 14 paragraphs. The wording in those two paragraphs did 15 not appear on forms prior to 1970. 16 Q. Could you look at Exhibit 32 for a moment. 17 A. I have it. 18 Q. I found this one a little confusing and I'm 19 hoping maybe we can clear it up. The Greensboro, South 20 Carolina plant at McGraw-Edison was a customer of 21 Monsanto roughly during this time period, correct? 22 A. That's my understanding. 23 MR. RIPPERGER: Object to the form. 24 Q. And the Sangamo Electric Company in Pickens,	Page 121 1 Q. Do you recognize its form? 2 A. The form, yes. 3 Q. Can you tell me what it is. 4 A. This is one of Monsanto's -- it's called a 5 call report which is a summary by the field salesman to 6 his supervisors that a call was made on a customer and 7 the topics discussed. 8 Q. On Exhibit 36 the salesman listed there is 9 R.V. Weyland, do you see that? 10 A. I do. 11 Q. Do you know who that is? 12 A. I don't remember Mr. Weyland. 13 Q. The document is addressed to Cumming Paton. 14 You identified him earlier in this deposition, didn't 15 you? 16 A. Yes, I did. 17 Q. I am marking as Papageorge Exhibit 37 a 18 one-page document -- 19 MR. RIPPERGER: Let's go off the record. 20 (Whereupon an off-the-record 21 discussion was held.) 22 (Papageorge Exhibit Number 37 23 marked for identification.) 24 Q. Exhibit 37, for the record, bears the

Page 122 1 document control numbers MGE 943. Do you recognize 2 that document? 3 A. I do not. 4 Q. The addressee is a D. Wood. Do you remember 5 anyone at Monsanto in September, 1976 named D. Wood? 6 A. Yes, I do. 7 Q. Who is that? 8 A. David Wood was, in 1976, product manager 9 for functional fluids. 10 Q. The document is apparently drafted by a Jim 11 Alley. Do you know who that was? 12 A. Yes. 13 Q. Who was that? 14 A. Mr. Alley was in the marketing department 15 fulfilling the technical function on matters that 16 related to functional fluids being sold at that point 17 in time, 1976. 18 Q. Okay. Do you recognize that as his 19 signature? 20 A. I have not seen Mr. Alley's signature so I 21 don't know. 22 Q. I'm going to show you, for a moment, a 23 document that was produced pursuant to the subpoena to 24 Monsanto by Wausau, a document bearing document control	Page 125 1 performance which is what we were striving for. 2 Q. And what do you mean by -- what do you mean 3 by past discharges, specifically here where the letter 4 says residual PCB's due to past discharges? 5 A. These were discharges made in the 30 or 40 6 years of PCB uses based on the then accepted 7 understanding that PCB's were non-reactive, wouldn't 8 hurt anything, they're there like pebbles on the beach, 9 they're there only, they are not doing any harm. With 10 that kind of understanding there were some practices 11 then that were acceptable that led to the presence of 12 PCB's in the local waterways. 13 MR. RIPPERGER: I guess I'm going to 14 object to the answer as non-responsive to the question. 15 MR. HENSLER: I'll just state, for the 16 record, that that's my objection and I thought the 17 answer was responsive to my question. 18 MR. RIPPERGER: What's your objection? 19 MR. CHAMBERS: No, that's my objection 20 to make. It's improper for you to object to an answer 21 as non-responsive to one of my question. That was the 22 only point I was making. 23 MR. RIPPERGER: I disagree. 24 MR. HENSLER: Q. Mr. Papageorge, I've
Page 123 1 numbers MGE 966 through MGE 970. Do you recognize that 2 document? 3 A. I do not. 4 Q. Never seen anything like that before? 5 A. I have seen portions of the pages after the 6 initial page. 7 Q. You've not seen the initial sales summary or 8 what's captioned a sales summary? 9 A. I have not seen this summary, no. 10 Q. I won't mark that as an exhibit unless you 11 want to have it marked. 12 MR. RIPPERGER: I don't care if you mark 13 it. No, that's fine. 14 (Papageorge Exhibit Number 38 15 marked for identification.) 16 Q. Mr. Papageorge, the court reporter has marked 17 as Exhibit 38 a document dated January 18, 1974 that 18 bears document control numbers MGE 3055 through 3058. 19 Do you recognize that document? 20 A. Yes, I do. 21 Q. Would you tell me what it is, please. 22 A. This is a copy of a letter that I prepared 23 and signed and mailed on January 18, 1974 addressed to 24 the hearing clerk of the United States Environmental	Page 126 1 placed before you a document that bears the document 2 control numbers MGE 1354 through 1369. The cover is 3 called "Care and Grooming of Askarel Transformer 4 Fluid." Have you seen this document before? 5 A. Yes, I have. 6 Q. Could you just tell me what that is? 7 A. This is a product brochure designed for use 8 by the owners of transformers that contain PCB type 9 Askarel fluids. 10 Q. Do you know when that document was prepared? 11 A. Not specifically. I have a hard time reading 12 the date that's on the page marked MGE 001369. 13 Q. Wow, there's a date on there? 14 A. In the middle of that series of digits the -- 15 starting with the fifth digit which I think is a zero. 16 Q. 0962. 17 A. All right. That's September, 1962 is the 18 date of publication. 19 Q. I see. But whatever those digits are, that's 20 the month and year of publication? 21 A. Yes. Now, it doesn't apply to all versions 22 because the catalog number was revised. This 23 particular period they include the dates in that 24 number.
Page 124 1 Protection Agency. 2 Q. That's your signature appearing on Page 3058, 3 correct? 4 A. It is. 5 Q. On Pages 2 and 3 of the letter there are 6 several numbered paragraphs, specifically they're 7 objections, do you see those? 8 A. I do. 9 Q. Could you read, to yourself, if you like, 10 Number 8 and then explain for the record what's being 11 objected to there on Point Number 8. 12 A. I have read the paragraph. 13 Q. Can you explain to me the point that you were 14 making in that part of your letter. 15 A. I'll try. The objection is that unless the 16 presence of PCB's due to past discharges is considered 17 separately from the material currently being discharged 18 the standard being proposed is unduly punitive and 19 difficult to meet. 20 We were concerned at the time that even if the 21 operation ceased using PCB's, by the proposed approach 22 PCB's would still be found in samples and the operation 23 would be accused of discharging those PCB's currently 24 and we felt that this was not a way to measure current	Page 127 1 Q. I'll ask the court reporter to mark that as 2 Papageorge Exhibit 39, please. 3 (Papageorge Exhibit Numbers 39-40 4 marked for identification.) 5 Q. Mr. Papageorge, the court reporter has now 6 marked and you have before you Papageorge Exhibit 40. 7 For the record it bears document control numbers MGE 8 1370 through 1381. Do you recognize that document? 9 A. I do. 10 Q. Could you tell me what it is, please. 11 A. It's another version of a product bulletin 12 describing and promoting the use of PCB type 13 transformer fluids. 14 Q. And that's by Monsanto? 15 A. Prepared and issued by Monsanto. 16 Q. And if we could read the numbers on Page 1381 17 we could date this document the same way? 18 A. That's my understanding, yes, sir. I 19 personally cannot read that, it's -- 20 MR. RIPPERGER: I can't read it. 21 MR. HENSLER: I'll have to get out my 22 magnifying glass later. 23 A. That would help. 24 MR. RIPPERGER: I doubt it.

Page 128 1 (Papageorge Exhibit Number 41 2 marked for identification.) 3 Q. Mr. Papageorge, you now have before you a 4 document that's been marked Papageorge Exhibit 41 by 5 the court reporter. For the record the cover says 6 "Monsanto Askarel Inspection and Maintenance Guide" 7 revised September I believe that says 1963. The 8 document control numbers are MGE 1410 through 1441. 9 Have you seen that document before? 10 A. Yes, I have. 11 Q. Would you tell me what that is, please. 12 A. This is another version of a bulletin that's 13 intended to supply customers and users of PCB type 14 Askarel fluids in transformers with the advantages of 15 their use and how to take care of the unit and service 16 it so it continues to function properly. 17 (Papageorge Exhibit Number 42 18 marked for identification.) 19 Q. Mr. Papageorge, the court reporter has now 20 marked as Exhibit 42 and you have before you a document 21 bearing BATES numbers MGE 1507 through 1518. Do you 22 recognize that document? 23 A. Yes, I do. 24 Q. Can you tell me what that is?	Page 131 1 A. This is another version of the series of 2 bulletins relating to Askarel type fluids which contain 3 PCB's marketed by Monsanto and gives the reader ideas 4 on use and maintenance of the equipment containing 5 these fluids. It's a Monsanto document but this 6 particular copy also has the added name of one of 7 Monsanto's customers on the title page. 8 Q. Allis-Chalmers? 9 A. Allis-Chalmers, yes. 10 Q. If you look at Page 1598, can you tell me the 11 date of production of this document? 12 A. Yes, I see April '71. 13 Q. So am I correct in assuming that this is 14 essentially a later version of what we've previously 15 marked as Exhibit 41? 16 A. Yes. 17 (Papageorge Exhibit Number 44 18 marked for identification.) 19 Q. Mr. Papageorge, you now have before you a 20 copy of a document that the court reporter has marked 21 as Papageorge Exhibit 44. For the record the BATES 22 numbers are MGE 1599 through 1610. Do you recognize 23 that document? 24 A. I do.
Page 129 1 A. This is an example of another version of a 2 product brochure in which the use of Askarel fluid 3 containing PCB's used in transformers is described in 4 terms of its performance in fire resistance and 5 benefits in transformers. 6 Q. And who produced this? Who produced this? 7 MR. RIPPERGER: Object to the form. No 8 foundation. 9 A. I'm sorry? 10 Q. Who produced this document? 11 A. This is a Monsanto document -- or brochure 12 prepared by Monsanto personnel and shared with 13 customers of Monsanto's Askarel fluid. 14 Q. In your experience did you find documents 15 such as this produced by Monsanto to be accurate? 16 A. Yes, it's the state of the art, if you will, 17 at the time it was published. 18 Q. At that time? 19 A. Yes. 20 Q. And, again, if we could read the numbers on 21 Page MGE 1518 would that be a way to date this 22 document? 23 A. Yes, sir. It appears to be '67. 24 Q. Right, I can see the year '67, I just can't	Page 132 1 Q. Could you tell me what it is, please. 2 A. It's a later version of the document we 3 called Exhibit 42. 4 (Papageorge Exhibit Number 45 5 marked for identification.) 6 Q. Mr. Papageorge, you have before you what's 7 been marked Papageorge Exhibit 45 by the court 8 reporter. For the record the document control numbers 9 are MGE 1611 through 1625. You recognize that 10 document, sir? 11 A. I do. 12 Q. Could you tell me what it is, please. 13 A. It's another version, a still later version 14 from the document we had marked as Exhibit 44 and it's 15 dated July, '71. 16 (Papageorge Exhibit Number 46 17 marked for identification.) 18 Q. Mr. Papageorge, you now have before you a 19 document marked by the court reporter as Papageorge 20 Exhibit 46. For the record the document control 21 numbers are MGE 1626, if I have that right, through MGE 22 1653. Did I give the right document control numbers? 23 Is it 1626 through 1653? 24 A. Correct. Oh, you were asking me, I'm sorry.
Page 130 1 see the month. Can you see that any better than I can? 2 A. No, I can't. With my trifocals? 3 (Papageorge Exhibit Number 43 4 marked for identification.) 5 Q. I'll note, for the record, Mr. Papageorge 6 just pointed out to me that the front page of Exhibit 7 42 bears the date 8-67 which is at least consistent 8 with the date we saw on the back. Do you have any 9 understanding as to what the handwriting on the front 10 of Exhibit 42 means? 11 A. I have an understanding, yes. 12 Q. What's your understanding? 13 A. Apparently the person that wrote "Sample Book 14 New 8/67" was involved in the review and distribution 15 of copies of this and identified it for his personal 16 record as being a sample book; in other words, a sample 17 of the -- of the bulletin that was published in larger 18 volumes for distribution. 19 Q. I see. You now have before you what the 20 court reporter has marked as Papageorge Exhibit 43. 21 The BATES numbers, for the record, are MGE 1567 through 22 1598. Do you recognize that document? 23 A. I do. 24 Q. Can you tell me what that is?	Page 133 1 Q. Do you recognize that document? 2 A. I do. 3 Q. And can you tell me what that is, please. 4 A. This is another version of a bulletin on the 5 Inspection and Maintenance Guide for Askarel in 6 electric equipment. I am having some difficulty 7 determining its date of publication. 8 (Papageorge Exhibit Number 47 9 marked for identification.) 10 Q. Mr. Papageorge, you now have before you a 11 document that the court reporter has marked as 12 Papageorge Exhibit 47. For the record the document 13 control numbers are MGE 2221 through 2268. Would you 14 please take a look at that and tell me if you recognize 15 that, please. 16 A. I do recognize it. It is a product technical 17 bulletin addressing the Aroclor products used as 18 dielectrics in capacitors and transformers and it 19 consists primarily of the physical properties of these 20 materials and promotes their use in electrical 21 equipment. 22 Q. And I want to correct something for the 23 record because I think I gave the wrong document 24 control numbers on that. The document control numbers

1 on the document you're looking at are 2269 through
2 2290; is that correct?
3 A. That's correct.
4 Q. Okay.
5 MR. RIPPERGER: Wait a second. What was
6 the previous one?
7 MR. HENSLER: We haven't marked that one
8 yet. I got out of order.
9 MR. RIPPERGER: All right. So what's
10 this one, the 2269?
11 A. Correct.
12 MR. RIPPERGER: What's the number, I'm
13 sorry?
14 MR. HENSLER: It's still --
15 A. Forty-seven.
16 MR. HENSLER: -- Forty-seven. Q. Are
17 you able from looking at Exhibit 47 to put a date on
18 the publication of the document?
19 A. If you'll look on the Page MGE 002289 --
20 Q. Yes, sir.
21 A. -- you will see a reference to 11-71. It's
22 sort of in the middle of that series of digits.
23 Q. Okay. Yes.
24 A. I would suggest that this is November of '71.

1 Above that -- above the line just below the list of
2 Monsanto offices there --
3 Q. Yes.
4 A. -- you'll see 8-71. That's the date that the
5 list was compiled.
6 Q. I see.
7 A. The publication comes three months later.
8 Q. So you're saying the list of offices was
9 created in August of '71 and the publication was made
10 in November of '71?
11 A. That's what I'm saying, yes.
12 Q. And this document would reflect the state of
13 the art in the November time frame?
14 A. That's correct.
15 (Papageorge Exhibit Number 48
16 marked for identification.)
17 Q. I have now asked the court reporter to mark
18 as Papageorge Exhibit 48 the document I had previously
19 read the control numbers for, they are 2221 through MGE
20 2268. Do you recognize that document?
21 A. I do.
22 Q. Could you tell me what it is, please.
23 A. This is a product bulletin describing
24 Monsanto's Aroclor products and containing references

1 to possible uses of these products.
2 Q. Are you able to tell me the date of
3 publication of this document?
4 A. Only by noting in the upper right-hand corner
5 of the top page a handwritten note referring to the
6 looks like "Second reprinting, several corrections, May
7 1962, 5,000 copies".
8 Q. Is the material that's reflected in this
9 document consistent with what you would expect to find
10 in a document of the vintage May, 1962?
11 MR. RIPPERGER: Objection to the form.
12 A. Yes.
13 (Papageorge Exhibit Number 49
14 marked for identification.)
15 Q. Mr. Papageorge, the court reporter has now
16 marked as Exhibit 49 a document containing document
17 control numbers MGE 2604 through 2627. Would you take
18 a look at that, please, and tell me if you recognize
19 it?
20 A. I recognize it.
21 Q. Can you tell me what it is, please.
22 A. It's a product bulletin describing Monsanto's
23 hydraulic fluid which was sold under the trade name
24 Pydraul F-9. It describes Pydraul F-9's properties,

1 uses and the types of auxiliary products that could be
2 used in systems that handle this. For example,
3 couplings, hoses, gaskets and so on.
4 Q. If you look at Page MGE 2625, please, there's
5 a section 1016 there captioned "Toxicity and Safe
6 Handling Information".
7 A. I see that.
8 Q. Does that reflect Monsanto's understanding of
9 the appropriate handling for this product, at least as
10 of that time?
11 A. Correct.
12 MR. RIPPERGER: Object to the form.
13 What time are we referring to?
14 MR. HENSLER: That's an excellent
15 question. Q. Are you able to tell me a date of
16 publication of this document?
17 A. On Page 19 of the bulletin which is MGE
18 002626 I have a hard time reading the date. I hesitate
19 guessing.
20 Q. Is it -- if we could read the numbers would
21 the last four numbers on the lower left-hand corner
22 reflect the date of publication of this document?
23 A. That is my understanding, yes, sir.
24 (Papageorge Exhibit Number 50

1 marked for identification.)
2 Q. Mr. Papageorge, you now have before you a
3 document that the court reporter has marked as
4 Papageorge Exhibit 50. The document control numbers
5 are MGE 2640 through 2650. Would you please take a
6 look at that and tell me if you recognize it.
7 A. Yes, I do.
8 Q. Could you tell me what it is.
9 A. It's a technical bulletin published by
10 Monsanto on the product Pydraul 312 describing its
11 properties, its performance, some procedures on how to
12 change over systems and handling and storage of the
13 material.
14 Q. Can you tell from this document a date of
15 publication?
16 A. I believe I can. It's a -- on the bottom of
17 the page designated as MGE 002648 I see a 0965 which is
18 telling me this was printed in September of '65.
19 MR. RIPPERGER: Can I see your version
20 of it, please. I don't see the 5. Can you show me
21 where you're reading from? You see that as a 9 '65?
22 A. Yes.
23 MR. RIPPERGER: Okay.
24 A. That's what it looks like to me.

1 MR. HENSLER: Looks like it to me too.
2 (Papageorge Exhibit Number 51
3 marked for identification.)
4 MR. HENSLER: Q. Mr. Papageorge, the
5 court reporter has marked as Papageorge Exhibit 51 a
6 document bearing the document control numbers MGE 12682
7 through 2691. Would you please take a look at that and
8 let me know if you recognize it.
9 A. I recognize it.
10 Q. Is that a later version of what was
11 previously marked Papageorge Exhibit 50?
12 A. Yes.
13 Q. Can you tell from Papageorge 51 a publication
14 date for that document?
15 A. As best I can tell the date is 0668, June,
16 '68.
17 (Papageorge Exhibit 52
18 marked for identification.)
19 Q. Mr. Papageorge, you have before you a
20 document that the court reporter has marked as
21 Papageorge Exhibit 52. Document control numbers are
22 MGE 2724 through 2739. Would you take a look at that,
23 please, and let me know if you recognize it.
24 A. I recognize it.

1 Q. What is it?
 2 A. It's a Monsanto publication referred to as a
 3 Selector 1 for a series of Monsanto's Pydraul hydraulic
 4 fluids.
 5 Q. Are you able to tell me the date of
 6 publication of that document?
 7 A. I will try. As best I can tell this is June
 8 of '69.
 9 (Papageorge Exhibit Number 53
 10 marked for identification.)
 11 Q. Mr. Papageorge, you now have before you what
 12 the court reporter has marked as Papageorge Exhibit
 13 53. The document control numbers are MGE 2740 through
 14 2755. You recognize that document?
 15 A. I have seen this document before.
 16 Q. Could you tell me what it is, please.
 17 A. It's another bulletin by Monsanto. It's
 18 called Selector 2 for Monsanto's Pydraul hydraulic
 19 fluids describing another series of Pydraul products
 20 and their recommended uses and procedures for change
 21 over and as best as I can tell it also is dated June of
 22 1969.
 23 Q. Do you know the difference between Pydraul
 24 Selector 1 and Pydraul Selector 2 which have been

1 Monsanto's Pydraul hydraulic fluids.
 2 Q. Are you able to tell me a date of publication
 3 of that?
 4 A. I cannot determine a date of publication.
 5 (Papageorge Exhibit Number 57
 6 marked for identification.)
 7 Q. Mr. Papageorge, the court reporter just
 8 handed you what she has marked Papageorge 57. For the
 9 record the document control numbers are MGE 2802
 10 through 2834. Would you please take a look at that and
 11 let me know if you recognize it.
 12 A. I recognize it.
 13 Q. Would you tell me what it is, please.
 14 A. It is another version of the Monsanto
 15 bulletin referring to Askarels and is the inspection
 16 and maintenance guide for the use of Askarel fluids
 17 containing PCB's in electrical equipment.
 18 Q. Are you able to tell me the date of
 19 publication of this document?
 20 A. I don't believe so. I see no indication of
 21 date of publication.
 22 Q. If you look at MGE 2834. If we could read
 23 the numbers in the lower left-hand corner of that page,
 24 according to your understanding would those give us

1 marked as Exhibit 52 and Exhibit 53? Do you know why
 2 one is called Selector 1 and one is called Selector 2?
 3 A. As I remember it had to do with the
 4 performance of the groupings of the two sets of
 5 Pydrauls and it was primarily based on cost of the
 6 fluid. There were a low cost series without the
 7 superior properties and then there was a higher cost
 8 version with properties that would fit more severe
 9 operating conditions.
 10 (Papageorge Exhibit Number 54
 11 marked for identification.)
 12 Q. Mr. Papageorge, you now have before you what
 13 the court reporter has marked as Papageorge Exhibit
 14 54. The document control numbers are MGE 2756 through
 15 2777. Would you please take a look at that and tell me
 16 if you recognize it.
 17 A. I recognize the exhibit.
 18 Q. Could you tell me what it is, please.
 19 A. It's another version of a selector guide for
 20 Monsanto's Pydraul hydraulic fluids.
 21 Q. Can you tell me the date of publication of
 22 this document?
 23 A. I don't see any reference to a date. I
 24 cannot date it.

1 the date of publication for this document?
 2 A. Yes.
 3 Q. Very good. Thank you for your patience. I
 4 have nothing further unless Mr. Ripperger does.
 5 MR. RIPPERGER: Yeah, I have some
 6 follow-ups.
 7 RE-CROSS-EXAMINATION
 8 BY MR. RIPPERGER:
 9 Q. I'd like to refer you, if I could, please, to
 10 Exhibits 57, 56, 55, 54. With all of those documents I
 11 believe you indicated that you were unable to date
 12 them; is that correct?
 13 A. That is correct.
 14 Q. So that these documents could have been
 15 drafted at any point in time?
 16 A. Well, when you say could have, yes.
 17 Q. Right. With respect to Exhibit 48, if you
 18 would turn back to that one, please.
 19 A. I have it.
 20 Q. Other than the notation in the upper
 21 right-hand corner does this document at all give any
 22 indication as to when it was published?
 23 A. I could not find it. There is nothing there
 24 that's obvious to me.

1 Q. All right.
 2 (Papageorge Exhibit Number 55
 3 marked for identification.)
 4 Q. Mr. Papageorge, you have before you what the
 5 court reporter has marked as Papageorge Exhibit 55.
 6 For the record the document control numbers are MGE
 7 2778 through 2785. Would you please take a look at
 8 that and tell me if you recognize it.
 9 A. I do recognize it.
 10 Q. And can you tell me --
 11 A. It is a Monsanto publication which contains
 12 information on how to convert existing hydraulic
 13 systems to the use of Monsanto's Pydraul hydraulic
 14 fluids. I cannot establish the date of publication.
 15 (Papageorge Exhibit Number 56
 16 marked for identification.)
 17 Q. Mr. Papageorge, you now have what the court
 18 reporter has marked as Papageorge Exhibit 56. Document
 19 control numbers are MGE 2786 through 2801. Do you
 20 recognize that document?
 21 A. I do.
 22 Q. Would you tell me what it is, please.
 23 A. It's another version of a Monsanto brochure
 24 on how to convert hydraulic systems to the use of

1 Q. So, again, this document could have been
 2 drafted at any point in time?
 3 A. When you say any point I --
 4 Q. Well, any point --
 5 A. Does it go back to the 1800's, no.
 6 Q. No, no, I understand. This document could
 7 have been drafted at any point in time that Monsanto
 8 was manufacturing Aroclor?
 9 A. I hesitate because Monsanto was manufacturing
 10 Aroclors prior to World War II. Many of the comments
 11 in these documents refer to uses that were not
 12 developed until the 1950's so when you say any point in
 13 time during manufacture it's possible that for a couple
 14 early decades it would have been possible had they
 15 known about the potential uses that they were
 16 eventually applied to.
 17 Q. At any rate, you're unable to date Exhibit
 18 48?
 19 A. That's true.
 20 Q. Okay. Exhibit 40, if you'd turn back to that
 21 one, please.
 22 A. I have it.
 23 Q. I believe that you indicated that you were
 24 unable to date that document?

1 MR. CHAMBERS: Objection. The record
2 will speak for itself.
3 A. Yes, I could not because I could not read the
4 blurred catalog number.
5 Q. So this document could have been -- well, let
6 me ask you this, given the format of the document with
7 the type and the pictures that are depicted,
8 particularly on Page 1 and the rest of the pages, does
9 that indicate to you that this document was probably
10 drafted quite some time ago?
11 MR. CHAMBERS: Objection to the form of
12 the question.
13 A. Oh, I'm -- I'm no authority on --
14 Q. Okay.
15 A. I would suggest, sir, that perhaps a more
16 meaningful clue is the use of the mail zip code. This
17 is a double digit and later on you'll see five digit
18 references.
19 Q. What are you referring to?
20 A. The Monsanto Chemical address.
21 Q. Where it says St. Louis 66?
22 A. St. Louis 66. Now I'm sure you can go to the
23 post office and find out when they went from 66 to six
24 thousand something for St. Louis. That might help

1 establish a period of time when this was in use.
2 Q. Have you actually seen Exhibit 40 before
3 today?
4 A. Oh, yes.
5 MR. HENSLER: Objection. Asked and
6 answered.
7 Q. When did you first have an opportunity to see
8 Exhibit 40?
9 A. With my assignment in PCB issues in 1970 I
10 was exposed to these kind of things and I remember from
11 way back then.
12 Q. Okay. I'd like you to turn back to Exhibit
13 17, please. I believe Mr. Hensler asked you a couple
14 questions about this document. This document -- well,
15 what does that document purport to show?
16 A. This summarizes Monsanto's medical department
17 information regarding the toxicity on Aroclor 1016.
18 Q. Do you have any understanding as to whether
19 such a document as that was generated by Monsanto's
20 medical department when Aroclor 1016 was first
21 developed?
22 A. Yes.
23 Q. And did the medical department generate such
24 a document when it was first developed?

1 A. As best I remember we had an equivalent type
2 of document for 1016 in about 1972.
3 Q. Okay. Can you turn to Exhibit 25, please.
4 A. I have it.
5 Q. Again Mr. Hensler asked you some questions
6 about this document and I just wanted to clarify a
7 couple things. I believe you said that this document
8 was -- I'm sorry to look over your shoulder but I can't
9 find my version of it. I believe you indicated that
10 this document was somehow distributed by salesmen to
11 people, is that what you indicated?
12 A. That's one method of distribution, yes.
13 Q. Can you explain to me how that would come
14 about, how salesmen would distribute a document such as
15 Exhibit 25 through their salesmen?
16 A. Well, several ways, one is during their
17 periodic sales meetings where a group of them are
18 assembled and brought up to date on new developments.
19 In many cases, not just for the products we're talking
20 about here but for any Monsanto product they all would
21 be handled -- or handed envelopes full of handout
22 material, including toxicity statements. That's one
23 way. Another is when the salesmen visit St. Louis to
24 see his bosses and get caught up to date, pick these

1 up, drop by the medical department and get them.
2 Another of course is by direct mailing where his
3 supervisors in St. Louis contact the medical department
4 and get copies and send them through the mail.
5 Q. Was that Monsanto's practice in the early
6 seventies when a document such as Exhibit 25 was
7 generated to make sure that such a document would be
8 distributed to Monsanto's customers?
9 A. Oh, yes.
10 Q. I'd like to turn back, lastly, to an exhibit
11 that I'm not quite sure of the number of. Let's go off
12 the record. Oh, never mind. That's all I have. Thank
13 you very much, Mr. Papageorge, I really appreciate it.
14 Do you have some more follow-up, Louis?
15 MR. HENSLER: I just want to ask one
16 question.
17 MR. RIPPERGER: Okay. One always leads
18 to two, you know that.
19 MR. HENSLER: I hope not.
20 RECROSS-EXAMINATION
21 BY MR. HENSLER:
22 Q. On Exhibit 17.
23 A. Exhibit 17.
24 Q. That's the toxicity information sheet for

1 Aroclor 1016. This question isn't actually about this
2 document so let me just ask it. When you were
3 testifying about this document a moment ago you said
4 you believed you recalled in 1972 that an equivalent
5 type of document had been created by Monsanto and I
6 just wanted to clarify what you meant by equivalent.
7 What I'm assuming you meant was a document that's
8 similar but not necessarily identical in every detail
9 as Exhibit 17, is that what you meant?
10 A. Yes. What I had in mind is the material
11 safety data sheet, a copy of which we saw here which
12 used the Occupational Safety and Health Agency's format
13 and at that time in '72 we took all the active PCB
14 products and put that information on that OSHA,
15 O-S-H-A, form. That's what I meant by an equivalent
16 format.
17 Q. That's all. You've been exceptionally
18 patient and I appreciate that.
19 MR. RIPPERGER: I don't have anything
20 else. Mr. Papageorge, I'm sure as many times as you've
21 gone through this that you understand you have a right
22 to read and review the transcript. Would you like to
23 exercise that right?
24 THE WITNESS: whatever the group feels

1 comfortable with.
2 MR. RIPPERGER: Actually it's your
3 choice.
4 THE WITNESS: Is it?
5 MR. RIPPERGER: Yes.
6 THE WITNESS: Okay. I might as well
7 look at it because I don't really know what I said up
8 to this point.
9 MR. RIPPERGER: All right. He'll read
10 and sign.
11 (Signature Not Waived.)
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1 STATE OF ILLINOIS)
 2) SS
 3 COUNTY OF MADISON)
 4 I, TRICIA EMDE HUFF, a Notary Public in and for
 5 the County of Madison, State of Illinois, DO HEREBY
 6 CERTIFY that pursuant to agreement between counsel
 7 there appeared before me on August 1, 1997 at the St.
 8 Louis Marriot Hotel, St. Louis, Missouri, WILLIAM B.
 9 PAPAGEORGE, P.E. who was first duly sworn by me to
 10 testify the whole truth of his knowledge touching upon
 11 the matter in controversy aforesaid so far as he should
 12 be examined and examination was taken by me in
 13 shorthand and afterwards transcribed upon the
 14 typewriter; and said transcript having first been read
 15 and signed by the deponent is filed with the Clerk of
 16 the Court.

17 IN WITNESS WHEREOF I have hereunto set my hand and
 18 affixed my Notarial Seal this 12th day of August, September
 19 1997.

20 *Tricia Emde Huff*
 21
 22 Notary Public--CSR #084-003532
 23

24 My Commission expires February 19, 2001.

1
 2
 3 (Witnesses' name)

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 6
 7
 8 IN THE COUNTY OF
 9
 10 STATE OF

11
 12 IN WITNESS WHEREOF I have hereunto set my hand
 13 and affixed my Notarial Seal this day of ,
 14 1997.

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 16
 17 NOTARY PUBLIC
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 24

"OFFICIAL SEAL"
 TRICIA EMDE HUFF
 NOTARY PUBLIC, STATE OF ILLINOIS
 MY COMMISSION EXPIRES 02/19/01