

Bio-Statistician/Mathematician-

This witness will be identified in the near future. At that time a curriculum vitae will be supplied.

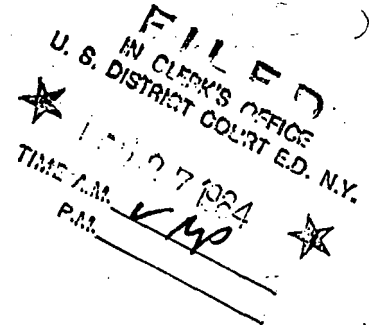
This witness will describe the mathematical/statistical model which will be used in the presentation of the figures to which the witness will testify. The theory subserving the testimony is that the multi-faceted presentation of symptoms and signs and test results in the same veteran makes a random composition of such an array extremely unlikely in view of the relative in-frequency of each facet of the array. As such, this testimony will be used in the generic and specific proximate causation areas.

HENDERSON & GOLDBERG, P.C.

1612 Frick Building
Pittsburgh, PA 15219

February 27, 1984

Thomas W. Henderson
Theodore Goldberg
Robert L. Jennings, Jr.
Joel Persky
Antonio D. Pyle
Thomas W. White



✓ Ms. Nancy Petrilla
U.S. District Clerk
U.S. District Courthouse
225 Cadman Plaza
Brooklyn, New York 11201

Re: MDL No. #381, Agent Orange Product Liability
Litigation

Dear Ms. Petrilla:

Please find enclosed for the Court file, Plaintiffs' Compliance with Guideline No. 34 on Plaintiffs' Government Causation witnesses which are to begin being deposed on March 1, 1984 in Washington, D.C.

Also please find enclosed an additional copy of Plaintiffs' Expanded Summaries on the following Plaintiffs' Causation Experts which I promised Magistrate Shindlin she would receive before Wednesday, February 29, 1984. Apparently, the original court copies were missing some pages. I apologize for this inconvenience.

Please be advised that by copy of this letter and the enclosed documents I have notified all parties on the attached service list of the filing of said documents with the Court and I have served the U.S. Department of Justice, Ms. Gretchen Witt, on or before noon, February 27, 1984, with the enclosed documents as per our agreement.

Thank you in advance for your kindness and cooperation in this matter.

Very truly yours,

Alison Pettiette
Alison Pettiette

cc: Enclosures
Ms. Gretchen Witt
See attached Service List

Hand Delivery

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HENDERSON & GOLDBERG, P.C.

1612 Frick Building
Pittsburgh, PA 15219

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February 27, 1984

HAND DELIVERY

Ms. Gretchen Witt
Mr. Arvin Maskin
U.S. Department of Justice
521 12th Street
Room 824
Washington, D.C.

Re: MDL No. 381, In re: Agent Orange
Product Liability Litigation

Dear Ms. Witt:

Enclosed please find Plaintiffs' Outlines in conformity to Page 34 of the U.S. Guidelines and Order of the Court in the above entitled and numbered cause on each Plaintiffs' Government Causation Witness whose deposition is to be scheduled and taken on or before March 15, 1984.

With regard to the listed documents for each of Plaintiffs' nine witnesses, we will supplement within 7 days of each deposition any other documents Plaintiffs' may wish to have the witness review prior to his/her deposition. However, as to Janet Springer, the list of documents is complete. This will confirm the deposition of Ms. Springer beginning Thursday, March 1, 1984 at 9am at the Hyatt Regency Hotel in Washington, in a conference room.

Thank you for your cooperation in this matter.

Very truly yours,



Alison Pettiette
Thomas Henderson

Enclosures

cc: Ms. Nancy Petrilla, U.S. District Clerk
See Attached Service List

12369

PLAINTIFF'S GOVERNMENT CAUSATION WITNESSES

I. Vernon M. Houk

A. Center for Disease Control (CDC) Atlanta, GA

B. Both factual and expert testimony is sought.

C. General Events

Pre-1961: Any factual knowledge of the history of herbicide spraying in U.S. and abroad; including, but not limited to, (1) industrial exposures and explosions; (2) registration of 2,4-D, 2,4,5-T with the Department of Agriculture and any other government agencies by any and/or all of the Defendants;

1961-present: Any factual knowledge of the history of herbicide spraying in the U.S. and abroad; including, but not limited to, (1) U.S. military use of Agent Orange and other phenoxy herbicides in Vietnam, (2) changes in the registration requirements of herbicides with the U.S. government and its agencies including knowledge of FIFRA, FFA, EPA, and OSHA; and (3) any knowledge of industrial and other human exposures to 2,4-D, 2,4,5-T in the U.S. and abroad;

See Answer and Supplemental Answer of Plaintiffs' to Defendants' Interrogatory No. 19 attached hereto and incorporated herein for all purposes re: events or occurrences which these causation witnesses may be expected to give any factual information they may have regarding the subjects outlined in said Answer.

Human Risk Assessment of Exposure to 2,4-D, 2,4,5-T and dioxins and any factual knowledge in support thereof.

D. Expert Testimony

1) Testimony is sought in witness' personal and official capacity.

2) Subject Matter

2,4-D, 2,4,5-T, TCDD's and dioxins; Agent Orange I/II (also White, Blue, Pink, Green, and Purple)

received 2/27/4

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and related chlorophenols and human risk assessment regarding exposure, including, but not limited to, one or more of the following subject areas:

- a) Chemistry/Biochemistry
- b) Manufacture and/or Production
- c) Toxicity
- d) Modes of Human Exposure
- e) Fate in the Environment (Humans, Plants, Animals)
- f) State of Art/State of Medical and Scientific Literature
 - 1) Plant Physiology/Studies
 - 2) Animal Physiology/Studies
 - 3) Human Studies
- g) Epidemiology/Biostatistics
 - 1) Plants, animals, humans
 - 2) Cancer Epidemiology
 - 3) Reproductive Epidemiology
- h) Adverse Health Effects

- 3) Yes, witness will be asked opinions about both published and/or on-going studies.
- 4) Yes, witness will be asked opinions about any studies or research witness has personally performed or actually participated in.
- 5) Yes, witness will be asked opinions about other governmental studies.
- 6) Yes, witness is expected to review the following documents prior to giving testimony:

See, EPA, Research and Development, Health Assessment Document on Dioxin for the Offices of Air Quality, Planning and Standards, prepared by the Environmental Criteria and Assessment Office, Cincinnati, Ohio 45248 (July 19

EPA, Research and Development, Health and Environmental Effects Profile for; Tetra Penta, and Hexachlorodibenno-p-dioxins, for the Office of Solid Waste and Emergency Response, by the Environmental Criteria and Assessment Office, Cincinnati, Ohio 45248 (June 1983).

EPA, Research and Development, Ambient Water Quality Criteria for 2,3,7,8 TCDD, prepared for Office of Water Regulations and Standards, by the Environmental Criteria and Assessment Office, Cincinnati, Ohio 45248 (July 1983).

EPA, Research and Development, Dioxins, Industrial Environmental Research Cincinnati, Ohio (1978).

A copy of these documents is attached.

- k. Major Alvin Young
- l. Dr. Rodney Boway
- m. Kenneth V. Thomsen
- n. David T. Buzzelli
- o. Dr. Michael Gross
- p. Dr. Renee Stringham
- q. Dr. Van Miller

SUPPLEMENTAL ANSWER TO INTERROGATORY NO. 19

Plaintiffs note preliminarily that the instant Order on producing fact witnesses states that fact witnesses are not due until March 2, 1984. However, Plaintiffs may call one or more of the following persons (or those from various categories listed below) at time of trial to testify as to factual knowledge they may have including:

1. Ranch Hand Personnel: These persons will testify to their knowledge of the Ranch Hand Operation, Ranch Handers' exposure to Agent Orange, and/or knowledge relating to the spraying, testing, and effects of Agent Orange on humans.
2. Members of the U. S. Armed Forces: These persons may testify to the circumstances and conditions surrounding the spraying of Agent Orange.
3. Persons present in Vietnam during the exposure period in question 1961-1972, including, but not limited to, military and paramilitary personnel of the U. S., New Zealand and Australia, who have knowledge of the spraying operations of the herbicides, the exposure of the Plaintiffs' class, the hazards accompanying any such exposure, the Plaintiffs' themselves, and the Defendant company representatives present in Vietnam to oversee the deliveries and spraying operations of the herbicides they manufactured.
4. Persons together with their demonstrative and documentary evidence who gave testimony (which will form the substance of their testimony herein) at the EPA Cancellation Hearings of 2,4,5-T (1979-1980) under FIFRA, including but not limited to:

- a. Dr. Roy Albert
- b. Dr. K. Diane Courtney
- c. Robert K. Baughman

10. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of how dioxins work upon plants, animals, and/or humans.
11. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any statistics concerning the effects of dioxins upon plants, animals, and/or humans.
12. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person including, but not limited to, members of EPA and other governmental agencies, who has factual knowledge of the following incidents:
 - a. Love Canal
 - b. Times Beach, Miss. and
 - c. Sevesco, Italy
 - d. RAF (1993, 1994 - Badloch in Germany)
 - e. Production mishaps and/or explosions since 1965 at any of the plants of any of the Defendants manufacturing, TCP, 2,4-D, 2,4,5-T phenol, chlorine, acetic acid, benzene, sodium hydroxide, potassium hydroxide, and/or Agent Orange, including mishaps in the packaging, and transporting of the Defendants' products to the U. S. Armed Forces bases for eventual shipment to Vietnam.
 - f. Spraying of Vietnam from 1961-1972.
13. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any surveys, tests, epidemiological studies of any kind relating to the effects of exposure to Agent Orange, 2,4-D, 2,4,5-T or any constituent thereof including the secondary by-product known as dioxins.
14. Any person with factual knowledge of how decisions are made within the United States government, particularly the decision to use and to continue to use phenoxy herbicides in Vietnam, particularly Agent Orange; any person with factual knowledge of government procurement contracts and the invitation to bidders, particularly those persons who negotiated the government contracts for all phenoxy herbicides (agents white, blue, purple, pink, green, orange I and II) with the individual defendants representatives between 1961-1972.

15. Any person with factual knowledge through any surveys, tests, epidemiological studies or otherwise undertaken by any state government, any private public or foreign corporation, the U. S. Congress or the government of any nation concerning the chemical compounds, 2,5-D, 2,4,5-T, dioxins, or related chlorophenols relating to the creation of dioxins, the detection of dioxins, the dangers of dioxins' exposure, and/or the toxicity, carcinogenicity, fetotoxicity, teratogenicity, acute and/or chronic effects on plants, animals and the human population.
16. Any and all persons listed in The Chemical Boyne by Alastair Hay as having factual knowledge regarding 2,4,5-T, 2,5-D, and its contaminant dioxins.
17. All worker compensation carriers for the Defendants and documentation of all occupational exposures filed since 1925 which evidence industrial injuries or diseases at the TCP, 2,4,5-T, 2,4-D, Phenol, packaging, and/or transportation plants of the Defendants.
18. Any and all current or prior workers compensation claimants of the Defendants who claimed relevant occupational exposures and/or relevant occupational injuries and/or diseases and/or symptoms at the relevant plants listed in Answer to No. 19 (sub 17) above.
19. Any and all members of the U. S. House of Representatives Committee on Oversight and Review of the EPA actions (1983) and/or any person together with their documentary and demonstrative evidence giving testimony at said hearing (which will form the substance of their testimony herein) on the failure of the EPA to take prompt and effective action to ban the production of 2,4-D, 2,4,5-T, and its contaminant dioxins.
20. Any and all persons having knowledge of relevant facts regarding the financial status of the Defendants and their ability to respond in punitive damages, including, but not limited to, their past, present, and future profits and earnings in the United States and abroad since 1925 through and including the present from the sale of the products made the basis of this lawsuit, i.e., 2,4-D, 2,4,5-T, phenoxy herbicides and the relevant herbicide market.
21. Any and all persons having knowledge of relevant facts regarding the ownership interests of the Defendants and their ability to respond in punitive damages, including, but not limited to, defendants' domestic and foreign subsidiaries, joint ventures, licensing agreements, and/or other public or private corporations in the U. S. and abroad, in which these defendants own a substantial financial interest since 1925 through and including the present.

22. Any and all persons listed by Plaintiffs' in both original and amended witness lists, as expert witness (medical, scientific or causation), government witness, government causation witness, defendants' employees and/or related personnel and/or any witnesses listed by all Defendants, may be called at time of trial to present factual information as to any issue involved in this case.

23. Any and all members of the scientific and/or medical community who have knowledge of relevant facts, including information on any of the previously listed subjects in this Answer, including, but not limited to:

- a. David Kriebel, Ph.D.
- b. Dr. Alan Poland
- c. Dr. Paul Goldmann, B.A.
- d. Dr. G. Rappo
- e. Dr. Castel, EASF
- f. Dr. E. W. McDonnell
- g. Dr. H. B. Thiborn
- h. Alvin Allen
- i. Marilyn Fingerhut

24. Any and all persons who have factual knowledge concerning the individual representative Plaintiff's damages, including, but not limited to, the following:

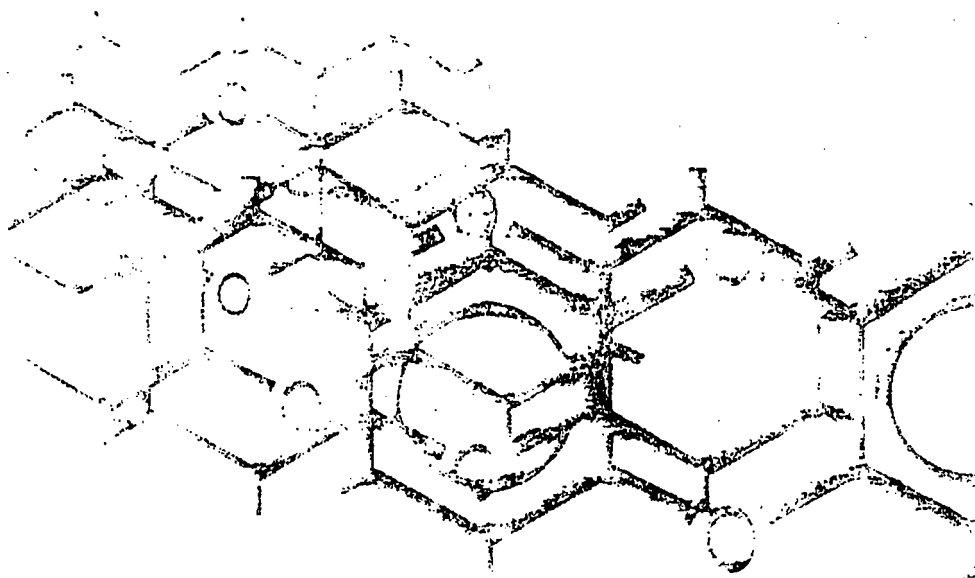
- a. Any and all medical persons who have examined, observed, treated and/or tested the Plaintiffs' for injuries diseases and/or related physical and emotional conditions which resulted from Plaintiff's exposure to Agent Orange, and/or phenoxy herbicides, their constituents, secondary by-products, wastes, residuals and contaminants.
- b. Any and all hospital personnel where Plaintiffs have been confined for treatment relating to their exposure to Defendants' products in Vietnam.
- c. Any and all persons with knowledge of the economic losses, psychological and/or intangible damages sustained by your Plaintiffs as a result of their injuries and diseases resulting from their exposure to Defendants' products in Vietnam.
- d. Any and all persons with knowledge of the past, present and/or future economic losses your Plaintiffs have or will sustain in the future as a result of their loss of wage earnings and/or wages earning capacity resulting from the injuries and diseases made the basis of this lawsuit which were caused by Plaintiffs exposure to Defendants' products in Vietnam.

United States
Environmental Protection
Agency

Federal Environmental Re-
sponse Laboratory
Cincinnati OH 45268

Research & Development

EPA Dioxins



12377

PLAINTIFF'S GOVERNMENT CAUSATION WITNESSES

1. Debdas Mukerjee

A. EPA, Washington, D.C.

B. Both factual and expert testimony is sought.

C. General Events

Pre-1961: Any factual knowledge of the history of herbicide spraying in U.S. and abroad; including, but not limited to, (1) industrial exposures and explosions; (2) registration 2,4-D, 2,4,5-T with the Department of Agriculture and any other government agencies by any and/or all of the Defendants;

1961-present: Any factual knowledge of the history of herbicide spraying in the U.S. and abroad; including, but not limited to, (1) U.S. military use of Agent Orange and other pher herbicides in Vietnam; (2) changes in the registration requirements of herbicides with U.S. government and its agencies including knowledge of FIFRA, FDA, EPA, and CSEA; and any knowledge of industrial and other human exposures to 2,4-D, 2,4,5-T in the U.S. and abroad;

See Answer and Supplemental Answer of Plaintiffs' to Defendants' Interrogatory No. 19 attached hereto and incorporated herein for all purposes re: events or occurrences which these causation witnesses may be expected to give any factual information they may have regarding the subjects outlined in said Answer.

Human Risk Assessment of Exposure to 2,4-D, 2,4,5-T and dioxins and any factual knowledge in support thereof.

D. Expert Testimony

1) Testimony is sought in witness' personal and official capacity.

2) Subject Matter

2,4-D, 2,4,5-T, TCDD's and dioxins; Agent Orange I/II (also White, Blue, Pink, Green, and Purple)

and related chlorophenols and human risk assessment regarding exposure, including, but not limited to, one or more of the following subject areas:

- a) Chemistry/Biochemistry
 - b) Manufacture and/or Production
 - c) Toxicity
 - d) Modes of Human Exposure
 - e) Fate in the Environment (Humans, Plants, Animals)
 - f) State of Art/State of Medical and Scientific Literature
 - 1) Plant Physiology/Studies
 - 2) Animal Physiology/Studies
 - 3) Human Studies
 - g) Epidemiology/Biostatistics
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- 3) Yes, witness will be asked opinions about both published and/or on-going studies.
 - 4) Yes, witness will be asked opinions about any studies or research witness has personally performed or actually participated in.
 - 5) Yes, witness will be asked opinions about other governmental studies.
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See, EPA, Research and Development, Health Assessment Document on Dioxin for the Offices of Air Quality, Planning and Standards, prepared by the Environmental Criteria and Assessment Office, Cincinnati, Ohio 45248 (July 19

EPA, Research and Development, Health and Environmental Effects Profile for; Tox-Pentac, and Hexachlorodibenzo-p-dioxins for the Office of Solid Waste and Emergency Response, by the Environmental Criteria and Assessment Office, Cincinnati Ohio 45248 (June 1983).

EPA, Research and Development, Ambient Water Quality Criteria for 2,3,7,8 TCDD, prepared for Office of Water Regulations and Standards, by the Environmental Criteria and Assessment Office, Cincinnati Ohio 45243 (July 1983).

EPA, Research and Development, Dioxins, Industrial Environmental Research Cincinnati, Ohio (1978).

A copy of these documents is attached.

SUPPLEMENTAL ANSWER TO INTERROGATORY NO. 19

Plaintiffs note preliminarily that the extant Order on producing fact witnesses states that fact witnesses are not due until March 1984. However, Plaintiffs may call one or more of the following persons (or those from various categories listed below) at time of trial to testify as to factual knowledge they may have, including:

1. Ranch Hand Personnel: These persons will testify to their knowledge of the Ranch Hand Operation, Ranch Handers' exposure to Agent Orange, and/or knowledge relating to the spraying, testing, and effects of Agent Orange on humans.
2. Members of the U. S. Armed Forces: These persons may testify to the circumstances and conditions surrounding the spraying of Agent Orange.
3. Persons present in Vietnam during the exposure period in question 1961-1972, including, but not limited to, military and paramilitary personnel of the U. S., New Zealand and Australia, who have knowledge of the spraying operations of the herbicides, the exposure of the Plaintiffs' class, the hazards accompanying any such exposure, the Plaintiffs' themselves, and the Defendant company representatives present in Vietnam to oversee the deliveries and spraying operations of the herbicides they manufactured.
4. Persons together with their demonstrative and documentary evidence who gave testimony (which will form the substance of their testimony herein) at the EPA Cancellation Hearings of 2,4,5-T (1979-1980) under FIFRA, including but not limited to:
 - a. Dr. Roy Albert;
 - b. Dr. K. Diane Courtney
 - c. Robert K. Baughman, Ph.D.
 - d. Dr. Olav Axelson
 - e. Dr. Renate Kimbrough
 - f. Dr. Dawn G. Goodman
 - g. Dr. Kirk T. Kitchin
 - h. Dr. Donald Thomas
 - i. Dr. Rainer Frentzel-Beyme
 - j. Dr. Matthew Meselson, Harvard

k. Major Alvin Young
l. Dr. Rodney Bovey
m. Kenneth V. Thamein
n. David T. Buzzelli
o. Dr. Michael Gross
p. Dr. Rence Stringham
r. Dr. Van Miller

5. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the manufacturing processes, chemistry, occupational exposure and/or toxicity of 2,4-D and/or 2,4,5-T or related chlorophenols; including, but not limited to, laborers; operators; supervisors; contract administrators; quality control personnel; engineers (process, chemical, mechanical and/or safety).
6. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the possible means of prophylactic protection from the hazards of dioxins' exposure; including, but not limited to, laborers, operators, supervisors, contract administrators, quality control personnel, engineers (process, chemical, mechanical and/or safety).
7. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the means to warn those who might be exposed to use of the herbicides in question, particularly Agent Orange, including, but not limited to, laborers, operators, supervisors, contract administrators, quality control personnel, engineers (process, chemical, mechanical and/or safety).
8. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any other manufacturing processes which could reduce the risks of exposure to Agent Orange and/or other phenoxy herbicides being contaminated with dioxins and further reduce the risk and hazard to human health of any such exposure.
9. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of conspiratorial conduct of the Defendants, individually and/or duplicative efforts (acts which are parallel in nature) which tended to or did in fact result in misleading the public and the United States government from gaining knowledge of the dangers attendant from exposure to Agent Orange and other phenoxy herbicides.

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10. Any current or previous employee, contractor, subcontractor, or in-house or private consultant of each of the Defendants or any other person who has factual knowledge of how dioxin work upon plants, animals, and/or humans.
11. Any current or previous employee, contractor, subcontractor, or in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any statistics concerning the effects of dioxins upon plants, animals and/or humans.
12. Any current or previous employee, contractor, subcontractor, or in-house or private consultant of each of the Defendants or any other person including, but not limited to, members of EPA and other governmental agencies, who has factual knowledge of the following incidents:
 - a. Love Canal
 - b. Times Beach, Missouri
 - c. Sevesco, Italy
 - d. BASF (1953, 1954 - Badische in Germany)
 - e. Production mishaps and/or explosions since 1925 at any of the plants of any of the Defendants manufacturing, T, 2,4-D, 2,4,5-T phenol, chlorine, acetic acid, benzene, sodium hydroxide, potassium hydroxide, and/or Agent Orange, including mishaps in the packaging, and transporting of the Defendants' products to the U. S. Armed Forces bases for eventual shipment to Vietnam.
 - f. Spraying of Vietnam from 1961-1972.
13. Any current or previous employee, contractor, subcontractor, or in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any surveys, tests, epidemiological studies of any kind relating to the effects of exposure to Agent Orange, 2,4-D, 2,4,5-T or any constituent thereof including the secondary by-product known as dioxins.
14. Any person with factual knowledge of how decisions are made within the United States government, particularly the decision to use and to continue to use phenoxy herbicides in Vietnam, particularly Agent Orange; any person with factual knowledge of government procurement contracts and the invitation to bidders, particularly those persons who negotiated the government contracts for all phenoxy herbicides (agents white, blue, purple, pink, green, orange I and II) with the individual defendants representatives between 1961-1972.

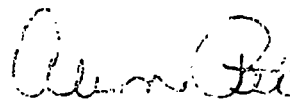
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15. Any person with factual knowledge through any surveys, tests, epidemiological studies or otherwise undertaken by any state government, any private public or foreign corporation, the U. S. Congress or the government of any nation concerning the chemical compounds, 2,5-D, 2,4,5-T, dioxins, or related chlorophenols relating to the creation of dioxins, the detection of dioxins, the carriers of dioxins' exposure, and/or the toxicity, carcinogenicity, fetotoxicity, teratogenicity, acute and/or chronic effects on plants, animals and the human population.
16. Any and all persons listed in The Chemical Scyche Alastair May, as having factual knowledge regarding 2,4,5-T, 2,4-D, and its contaminant dioxins.
17. All worker compensation carriers for the Defendant and documentation of all occupational exposures filed since 1925 which evidence industrial injuries or diseases at the TC 2,4,5-T, 2,4-D, Phenol, packaging, and/or transportation plants of the Defendants.
18. Any and all current or prior workers compensation claimants of the Defendant who claimed relevant occupational exposures and/or relevant occupational injuries and/or diseases and/or symptoms at the relevant plants listed in Answer to No. 19 (sub 7) above.
19. Any and all members of the U. S. House of Representatives Committee on Oversight's Review of the EPA actions (1983) and/or any person together with their documentary and demonstrative evidence giving testimony at said hearing (which will form the substance of their testimony herein) on the failure of the EPA to take prompt and effective action to ban the production of 2,4-D, 2,4,5-T, and its contaminant dioxins.
20. Any and all persons having knowledge of relevant facts regarding the financial status of the Defendants and their ability to respond in punitive damages, including, but not limited to, their past, present, and future profits and earnings in the United States and abroad since 1925 through and including the present from the sale of the products made the basis of this lawsuit, i.e., 2,4-D, 2,4,5-T, phenoxy herbicides and the relevant herbicide market.
21. Any and all persons having knowledge of relevant facts regarding the ownership interests of the Defendants and their ability to respond in punitive damages, including, but not limited to, defendants' domestic and foreign subsidiaries, joint ventures, licensing agreements, and/or other public or private corporations in the U. S. and abroad, in which these defendants own a substantial financial interest since 1925 through and including the present.

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- e. Any and all persons with knowledge of past, present and/or future reasonable and necessary costs of doctors, hospitals, nursery care, medical equipment, drugs, and any other related medical services rendered or to be rendered in the future to Plaintiffs as a result of their injuries and disease resulting from their exposure to Defendants' products in Vietnam.
- f. Any and all persons with knowledge of the physical disfigurement (past and present), physical and mental impairment (past and present), physical pain (past and present) and mental anguish (past and present) which Plaintiffs have sustained as a result of their exposure to Defendants' products in Vietnam and which in reasonable probability Plaintiffs will continue to sustain for an indefinite time into the future from beyond the date of this trial.

Respectfully submitted,


 Thomas W. Henderson, Esquire

 Allison Pettiette, Esquire

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Supplement to Plaintiff's Interrogatories were mailed Federal Express to Mr. William Krohley, Kelley, Erye & Warren, Mr. Gene Locks, Plaintiffs' Management Committee Agent Orange Office, with copies to personally serve the remaining Defendants at the Tuesday depositions and Ms. Nancy Petrilla, U.S. District Clerk, U.S. Courthouse, 225 Cadman Plaza, Brooklyn, New York 11201 this 20th day of February, 1984.


 Allison Pettiette

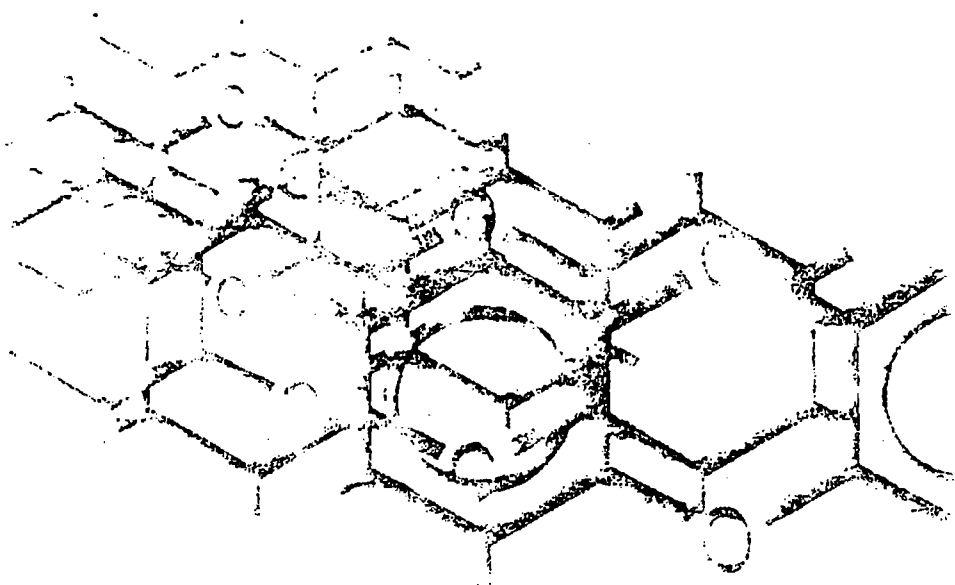
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United States
Environmental Protection
Agency

Industrial Environment
Laboratory
Cincinnati OH 45268

Research & Development

EPA Dioxins



12386

PLAINTIFF'S GOVERNMENT CAUSATION WITNESSES

I. Janet Springer

A. EPA, Washington, D.C.

B. Both factual and expert testimony is sought

C. General Events

Pre-1961: Any factual knowledge of the history of herbicide spraying in U.S. and abroad; including, but not limited to, (1) industrial exposures and explosions; (2) registration of 2,4-D, 2,4,5-T with the Department of Agriculture and any other government agencies by any and/or all of the Defendant

1961-present: Any factual knowledge of the history of herbicide spraying in the U.S. and abroad; including, but not limited to, (1) U.S. military use of Agent Orange and other herbicides in Vietnam; (2) changes in the registration requirements of herbicides with the U.S. government and its agencies including knowledge of EPA, FDA, EPA, and OSHA; and (3) any knowledge of industrial and other human exposures to 2,4-D, 2,4,5-T in the U.S. and abroad.

See Answer and Supplemental Answer of Plaintiff's to Defendants' Interrogatory No. 1 attached hereto and incorporated herein for all purposes re: events or occurrences which these causation witnesses may be expected to give any factual information they may have regarding the subjects outlined in said Answer.

Human Risk Assessment of Exposure to 2,4-D, 2,4,5-T and Dioxin and any factual knowledge in support thereof.

D. Expert Testimony

1) Testimony is sought in witness' personal and official capacity.

2) Subject Matter

2,4-D, 2,4,5-T, TCDD's and dioxin Agent Orange I/II (also White, Blue, Pink, Green and Purple)

and related chlorophenols and human risk assessment regarding exposure, including, but not limited to, one or more of the following subject areas:

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 - d) Modes of Human Exposure
 - e) Fate in the Environment (Humans, Plants, Animals)
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 - 3) Reproductive Epidemiology
 - h) Adverse Health Effects
- 3) Yes, witness will be asked opinions about both published and/or on-going studies.
 - 4) Yes, witness will be asked opinions about any studies or research witness has personally performed or actually participated in.
 - 5) Yes, witness will be asked opinions about other governmental studies.
 - 6) Yes, witness is expected to review the following documents prior to giving testimony:

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EPA, Research and Development, Health and Environmental Effects Profile for; Te Penta, and Hexachlorodibenzo-p-dioxin for the Office of Solid Waste and Emergency Response, by the Environmental Criteria and Assessment Office, Cincinnati Ohio 45248 (June 1983).

EPA, Research and Development, Ambient Water Quality Criteria for 2,3,7,8 TCDD, prepared for Office of Water Regulations and Standards, by the Environmental Criteria and Assessment Office, Cincinnati Ohio 45248 (July 1983).

EPA, Research and Development, Dioxins, Environmental Environmental Research, Cincinnati, Ohio (1978).

A copy of these documents is attached.

SUPPLEMENTAL ANSWER TO INTERROGATORY NO. 19

Plaintiffs note preliminarily that the extant Order on producing fact witnesses states that fact witnesses are not due until March 2, 1984. However, Plaintiffs may call one or more of the following persons (or those from various categories listed below) at time of trial to testify as to factual knowledge they may have, including:

1. Ranch Hand Personnel: These persons will testify to their knowledge of the Ranch Hand Operation, Ranch Handlers' exposure to Agent Orange, and/or knowledge relating to the spraying, testing, and effects of Agent Orange on humans.
2. Members of the U. S. Armed Forces: These persons may testify to the circumstances and conditions surrounding the spraying of Agent Orange.
3. Persons present in Vietnam during the exposure period in question 1961-1972, including, but not limited to, military and paramilitary personnel of the U. S., New Zealand and Australia, who have knowledge of the spraying operations of the herbicides, the exposure of the Plaintiffs' class, the hazards accompanying any such exposure, the Plaintiffs' themselves, and the Defendant company representatives present in Vietnam to oversee the deliveries and spraying operations of the herbicides they manufactured.
4. Persons together with their demonstrative and documentary evidence who gave testimony (which will form the substance of their testimony herein) at the EPA Cancellation Hearings of 2,4,5-T (1979-1980) under FIFRA, including but not limited to:
 - a. Dr. Roy Albert:
 - b. Dr. K. Diane Courtney
 - c. Robert K. Baughman, Ph.D.
 - d. Dr. Olav Axelson
 - e. Dr. Renate Kimbrough
 - f. Dr. Dawn G. Goodrich
 - g. Dr. Kirk T. Kitchin
 - h. Dr. Ronald Thomas
 - i. Dr. Rainer Frentzel-Beyne
 - j. Dr. Matthew Meselson, Harvard

k. Major Alvin Young
l. Dr. Rodney Povey
m. Kenneth V. Themein
n. David T. Buzzelli
o. Dr. Michael Gross
p. Dr. Renee Stringham
r. Dr. Van Miller

5. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the manufacturing processes, chemistry, occupational exposure and/or toxicity of 1,4-D and/or 2,4,5-T or related chlorophenols; including, but not limited to, laborers; operators; supervisors; contract administrators; quality control personnel; engineers (process, chemical, mechanical and/or safety).
6. Any current or previous employee, contractor, subcontractor in-house or private consultant of each of the Defendants or any other person who has knowledge of the possible means of prophylactic protection from the hazards of dioxins' exposure; including, but not limited to, laborers, operators, supervisors; contract administrators, quality control personnel, engineers (process, chemical, mechanical and/or safety).
7. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the means to warn those who might be exposed to use of the herbicides in question, particularly Agent Orange, including, but not limited to, laborers, operators, supervisors, contract administrators, quality control personnel, engineers (process, chemical, mechanical and/or safety).
8. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any other manufacturing processes which could reduce the risks of exposure to Agent Orange and/or other phenoxy herbicides being contaminated with dioxins and further reduce the risk and hazard to human health of any such exposure.
9. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of conspiratorial conduct of the Defendants, individually and/or duplicative efforts (acts which are parallel in nature) which tended to or did in fact result in misleading the public and the United States government from gaining knowledge of the dangers attendant from exposure to Agent Orange and other phenoxy herbicides.

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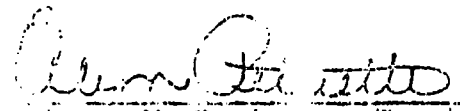
10. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of how dioxins work upon plants, animals, and/or humans.
11. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any statistics concerning the effects of dioxins upon plants, animals, and/or humans.
12. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person including, but not limited to, members of EPA and other governmental agencies who has factual knowledge of the following incidents:
 - a. Love Canal
 - b. Times Beach, Missouri
 - c. Seveso, Italy
 - d. BASF (1953, 1954 - Badische in Germany)
 - e. Production mishaps and/or explosions since 1925 at any of the plants of any of the Defendants manufacturing, T.P., 2,4-D, 2,4,5-T phenol, dioxins, acetic acid, benzene, sodium hydroxide, potassium hydroxide, and/or Agent Orange, including mishaps in the packaging, and transporting of the Defendants' products to the U. S. Armed Forces bases for eventual shipment to Vietnam.
 - f. Spraying of Vietnam from 1961-1972.
13. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any surveys, tests, epidemiological studies of any kind relating to the effects of exposure to Agent Orange, 2,4-D, 2,4,5-T or any constituent thereof including the secondary by-product known as dioxins.
14. Any person with factual knowledge of how decisions are made within the United States government, particularly the decision to use and to continue to use phenoxy herbicides in Vietnam, particularly Agent Orange; any person with factual knowledge of government procurement contracts and the invitation to bidders, particularly those persons who negotiated the government contracts for all phenoxy herbicides (agents white, blue, purple, pink, green, orange I and II) with the individual defendants representatives between 1961-1972.

15. Any person with factual knowledge through any surveys, tests, epidemiological studies or otherwise undertaken by any state government, any private public or foreign corporation, the U. S. Congress or the government of any nation concerning the chemical compounds, 2,5-D, 2,4,5-T, dioxins, or related chlorophenols relating to the creation of dioxins, the detection of dioxins, the dangers of dioxins' exposure, and/or the toxicity, carcinogenicity, fetotoxicity, teratogenicity, acute and/or chronic effects on plants, animals and the human population.
16. Any and all persons listed in The Chemical Scythe by Alastair Hay, as having factual knowledge regarding 2,4,5-T, 2,4-D, and its contaminant dioxins.
17. All worker compensation carriers for the Defendants and documentation of all occupational exposures filed since 1925 which evidence industrial injuries or diseases at the TCP, 2,4,5-T, 2,4-D, Phenol, packaging, and/or transportation plants of the Defendants.
18. Any and all current or prior workers compensation claimants of the Defendants who claimed relevant occupational exposures and/or relevant occupational injuries and/or diseases and/or symptoms at the relevant plants listed in Answer to No. 19 (sub 18) above.
19. Any and all members of the U. S. House of Representatives Committee on Oversight and Review of the EPA actions (1983) and/or any person together with their documentary and demonstrative evidence giving testimony at said hearing (which will form the substance of their testimony herein) on the failure of the EPA to take prompt and effective action to ban the production of 2,4-D, 2,4,5-T, and its contaminant dioxins.
20. Any and all persons having knowledge of relevant facts regarding the financial status of the Defendants and their ability to respond in punitive damages, including, but not limited to, their past, present, and future profits and earnings in the United States and abroad since 1925 through and including the present from the sale of the products made the basis of this lawsuit, i.e., 2,4-D, 2,4,5-T, phenoxy herbicides and the relevant herbicide market.
21. Any and all persons having knowledge of relevant facts regarding the ownership interests of the Defendants and their ability to respond in punitive damages, including, but not limited to, defendants' domestic and foreign subsidiaries, joint venturers, licensing agreements, and/or other public or private corporations in the U. S. and abroad, in which these defendants own a substantial financial interest since 1925 through and including the present.

12393

- e. Any and all persons with knowledge of past, present and/or future reasonable and necessary costs of doctors, hospitals, nursery care, medical equipment, drugs, and any other related medical services rendered or to be rendered in the future to Plaintiffs as a result of their injuries and disease resulting from their exposure to Defendants' products in Vietnam.
- f. Any and all persons with knowledge of the physical disfigurement (past and present), physical and mental impairment (past and present), physical pain (past and present) and mental anguish (past and present) which Plaintiffs have sustained as a result of their exposure to Defendants' products in Vietnam and which in reasonable probability Plaintiffs will continue to sustain for an indefinite time into the future far beyond the date of this trial.

Respectfully submitted,


Allison Pettiet, Esquire

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Supplement to Plaintiff's Interrogatories were mailed Federal Express to Mr. William Krohley, Kelley, Dye & Warren, Mr. Gene Locks, Plaintiffs' Management Committee Agent Orange Office, with copies to personally serve the remaining Defendants at the Tuesday depositions and Mr. Nancy Petrilla, U.S. District Clerk, U.S. Courthouse, 225 Cadman Plaza, Brooklyn, New York 11201 this 20th day of February, 1984.


Allison Pettiet

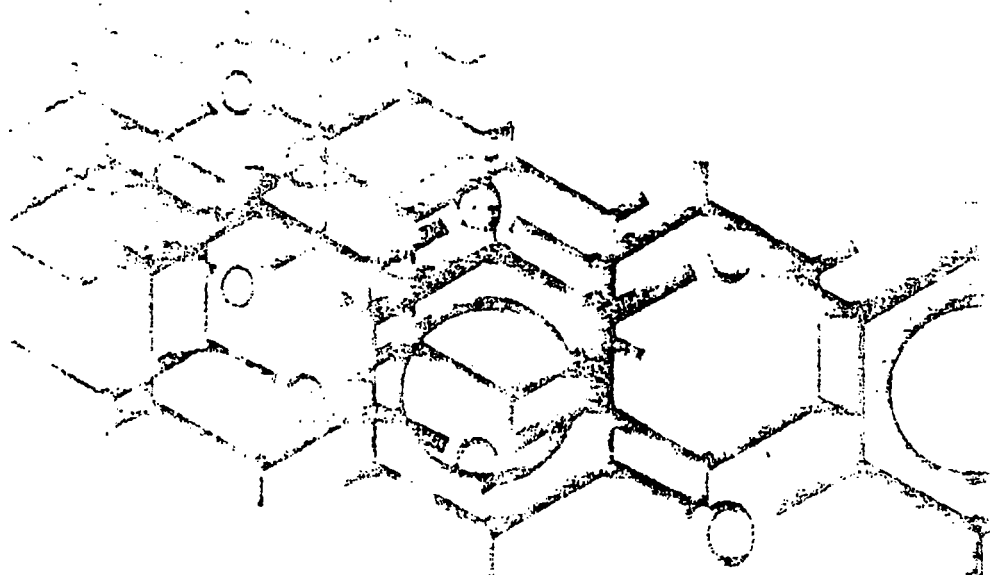
12394

United States
Environmental Protection
Agency

Industrial Environmental
Laboratory
Cincinnati OH 45218

Research & Development

EPA Dioxins



12395

PLAINTIFF'S GOVERNMENT CAUSATION WITNESSES

I. Peter Infante

A. National Institute for Occupational Safety & Health, Wash

B. Both factual and expert testimony is sought.

C. General Events

Pre-1961: Any factual knowledge of the history of herbicide spraying in U.S. and abroad; including, but not limited to, (1) industrial exposures and explosions; (2) registration of 2,4-D, 2,4,5-T with the Department of Agriculture and any other government agencies by any and/or all of the Defendants;

1961-present: Any factual knowledge of the history of herbicide spraying in the U.S. and abroad; including, but not limited to, (1) U.S. military use of Agent Orange and other pher herbicides in Vietnam; (2) changes in the registration requirements of herbicides with the U.S. government and its agencies including knowledge of FIFRA, FDA, EPA, and OSHA; and (3) any knowledge of industrial and other human exposures to 2,4-D, 2,4,5-T in the U.S. and abroad.

See Answer and Supplemental Answer of Plaintiffs' to Defendants' Interrogatory No. 19 attached hereto and incorporated herein for all purposes re. events or occurrences which these causation witnesses may be expected to give any factual information they may have regarding the subjects outlined in said Answer.

Human Risk Assessment of Exposure to 2,4-D, 2,4,5-T and dioxins and any factual knowledge in support thereof.

D. Expert Testimony

1) Testimony is sought in witness' personal and official capacity.

2) Subject Matter

2,4-D, 2,4,5-T, TCDD's and dioxins; Agent Orange (also White, Blue, Pink, Green, and Purple)

and related chlorophenols and human risk assessment regarding exposure, including, but not limited to, one or more of the following subject areas:

- a) Chemistry/Biochemistry
 - b) Manufacture and/or Production
 - c) Toxicity
 - d) Modes of Human Exposure
 - e) Fate in the Environment (Humans, Plants, Animals)
 - f) State of Art/State of Medical and Scientific Literature
 - 1) Plant Physiology/Studies
 - 2) Animal Physiology/Studies
 - 3) Human Studies
 - g) Epidemiology/Biostatistics
 - 1) Plants, animals, humans
 - 2) Cancer Epidemiology
 - 3) Reproductive Epidemiology
 - h) Adverse Health Effects
- 3) Yes, witness will be asked opinions about both published and/or on-going studies.
 - 4) Yes, witness will be asked opinions about any studies or research witness has personally performed or actually participated in.
 - 5) Yes, witness will be asked opinions about other governmental studies.
 - 6) Yes, witness is expected to review the following documents prior to giving testimony:

See, EPA, Research and Development, Health Assessment Document on Dioxins for the Office of Air Quality, Planning, and Standards, prepared by the Environmental Criteria and Assessment Office, Cincinnati, Ohio 45248 (July 1979)

EPA, Research and Development, Health and
Environmental Effects Profile for; Tetra
Penta, and Hexachlorodibenzodioxins,
for the Office of Solid Waste and Emer-
gency Response, by the Environmental
Criteria and Assessment Office, Cincinnati
Ohio 45248 (June 1983).

EPA, Research and Development, Ambient Water
Quality Criteria for 2,3,7,8 TCDD, pre-
pared for Office of Water Regulations
and Standards, by the Environmental
Criteria and Assessment Office, Cincinnati
Ohio 45248 (July 1983).

EPA, Research and Development, Acetaminophen,
Industrial Environmental Research
Cincinnati, Ohio (1978).

A copy of these documents is attached.

SUPPLEMENTAL ANSWER TO INTERROGATORY NO. 19

Plaintiffs note preliminarily that the extant Order on producing fact witnesses states that fact witnesses are not due until March 2, 1984. However, Plaintiffs may call one or more of the following persons (or those from various categories listed below) at time of trial to testify to their factual knowledge they may have, including:

1. Ranch Hand Personnel: These persons will testify to their knowledge of the Ranch Hand Operation, Ranch Handlers' exposure to Agent Orange, and/or knowledge relating to the spraying, testing, and effects of Agent Orange on humans.
2. Members of the U. S. Armed Forces: These persons may testify to the circumstances and conditions surrounding the spraying of Agent Orange.
3. Persons present in Vietnam during the exposure period in question 1961-1972, including, but not limited to, military and paramilitary personnel of the U. S., New Zealand and Australia, who have knowledge of the spraying operations of the herbicides, the exposure of the Plaintiffs' class, the hazards accompanying any such exposure, the Plaintiffs' themselves, and the Defendant company representative present in Vietnam to oversee the deliveries and spraying operations of the herbicides they manufactured.
4. Persons together with their demonstrative and documentary evidence who gave testimony (which will form the substance of their testimony herein) at the EPA Cancellation Hearings of 2,4,5-T (1979-1980) under FIFRA, including but not limited to:
 - a. Dr. Roy Albert:
 - b. Dr. K. Diane Courtney
 - c. Robert K. Baughman, Ph.D.
 - d. Dr. Olav Axelson
 - e. Dr. Renate Kimbrough
 - f. Dr. Dawn G. Goodman
 - g. Dr. Kirk T. Kitchin
 - h. Dr. Ronald Thomas
 - i. Dr. Rainer Frentzel-Beyme
 - j. Dr. Matthew Meselson, Harvard

k. Major Alvin Young
l. Dr. Rodney Bovey
m. Kenneth V. Thernin
n. David T. Buzzelli
o. Dr. Michael Gross
p. Dr. Renee Stringham
r. Dr. Van Miller

5. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the manufacturing processes, chemistry, occupational exposure and/or toxicity of 2,4-D and/or 2,4,5-T or related chlorophenols; including, but not limited to, laborers; operators; supervisors; contract administrators; quality control personnel; engineers (process, chemical, mechanical and/or safety).
6. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the possible means of prophylactic protection from the hazards of dioxins' exposure; including, but not limited to, laborers, operators, supervisors, contract administrators, quality control personnel, engineers (process, chemical, mechanical and/or safety).
7. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the means to warn those who might be exposed to use of the herbicides in question, particularly Agent Orange, including, but not limited to, laborers, operators, supervisors, contract administrators, quality control personnel, engineers (process, chemical, mechanical and/or safety).
8. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any other manufacturing processes which could reduce the risks of exposure to Agent Orange and/or other phenoxy herbicides being contaminated with dioxins and further reduce the risk and hazard to human health of any such exposure.
9. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of conspiratorial conduct of the Defendants, individually and/or duplicative efforts (acts which are parallel in nature) which tended to or did in fact result in misleading the public and the United States government from gaining knowledge of the dangers attendant from exposure to Agent Orange and other phenoxy herbicides.

12400

10. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of how dioxins work upon plants, animals, and/or humans.
11. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any statistics concerning the effects of dioxins upon plants, animals, and/or humans.
12. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person including, but not limited to, members of EPA and other governmental agencies, who has factual knowledge of the following incidents:
 - a. Love Canal
 - b. Times Beach, Missouri
 - c. Sevesco, Italy
 - d. BASF (1953, 1954 - Badische in Germany)
 - e. Production mishaps and/or explosions since 1925 at any of the plants of any of the Defendants manufacturing, 2,4-D, 2,4,5-T phenol, chlorine, acetic acid, benzene, sodium hydroxide, potassium hydroxide, and/or Agent Orange, including mishaps in the packaging, and transporting of the Defendants' products to the U. S. Armed Forces bases for eventual shipment to Vietnam.
 - f. Spraying of Vietnam from 1961-1972.
13. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any surveys, tests, epidemiological studies of any kind relating to the effects of exposure to Agent Orange, 2,4-D, 2,4,5-T or any constituent thereof including the secondary by-product known as dioxins.
14. Any person with factual knowledge of how decisions are made within the United States government, particularly the decision to use and to continue to use phenoxy herbicides in Vietnam, particularly Agent Orange; any person with factual knowledge of government procurement contracts and the invitation to bidders, particularly those persons who negotiated the government contracts for all phenoxy herbicides (agents white, blue, purple, pink, green, orange I and II) with the individual defendants representatives between 1961-1972.

12401

15. Any person with factual knowledge through any surveys, tests, epidemiological studies or otherwise undertaken by any state government, any private public or foreign corporation, the U. S. Congress or the government of any nation concerning the chemical compounds, 2,5-D, 2,4,5-T, dioxins, or related chlorophenols relating to the creation of dioxins, the detection of dioxins, the dangers of dioxins' exposure, and/or the toxicity, carcinogenicity, fetotoxicity, teratogenicity, acute and/or chronic effects on plants, animals and the human population.
16. Any and all persons listed in The Chemical Scythe by Mastain Hay, as having factual knowledge regarding 2,4,5-T, 2,5-D, and its contaminant dioxins.
17. All worker compensation carriers for the Defendants and documentation of all occupational exposures filed since 1925 which evidence industrial injuries or diseases at the TCP, 2,4,5-T, 2,4-D, Phenol, packaging, and/or transportation plants of the Defendants.
18. Any and all current or prior worker's compensation claimants of the Defendants who claimed relevant occupational exposures and/or relevant occupational injuries and/or diseases and/or symptoms at the relevant plants listed in Answer to No. 19 (sub 17) above.
19. Any and all members of the U. S. House of Representatives Committee on Oversight and Review of the EPA actions (1983) and/or any person together with their documentary and demonstrative evidence giving testimony at said hearing (which will form the substance of their testimony herein) on the failure of the EPA to take prompt and effective action to ban the production of 2,4-D, 2,4,5-T, and its contaminant dioxins.
20. Any and all persons having knowledge of relevant facts regarding the financial status of the Defendants and their ability to respond in punitive damages, including, but not limited to, their past, present, and future profits and earnings in the United States and abroad since 1925 through and including the present from the sale of the products made the basis of this lawsuit, i.e., 2,4-D, 2,4,5-T, phenoxxy herbicides and the relevant herbicide market.
21. Any and all persons having knowledge of relevant facts regarding the ownership interests of the Defendants and their ability to respond in punitive damages, including, but not limited to, Defendants' domestic and foreign subsidiaries, joint venturers, licensing agreements, and/or other public or private corporations in the U. S. and abroad, in which these defendants own a substantial financial interest since 1925 through and including the present.

22. Any and all persons listed by Plaintiffs' in both original and amended witness lists, as expert witness (medical, scientific or causation), government witness, government causation witness, defendants' employees and/or related personnel and/or any witnesses listed by all Defendants, may be called at time of trial to present factual information as to any issue involved in this case.

23. Any and all members of the scientific and/or medical community who have knowledge of relevant facts, including information on any of the previously listed subjects in this answer, including, but not limited to:

- a. David Kriebel, Ph.D.
- b. Dr. Alan Poland
- c. Dr. Paul Goldmann, BASF
- d. Dr. C. Rappe
- e. Dr. Oettel, BASF
- f. Dr. E. E. McDonnell
- g. Dr. K. S. Khanna
- h. Alvin Alm
- i. Marilyn Fingerhut

24. Any and all persons who have factual knowledge concerning the individual representative Plaintiffs' damages, including, but not limited to, the following:

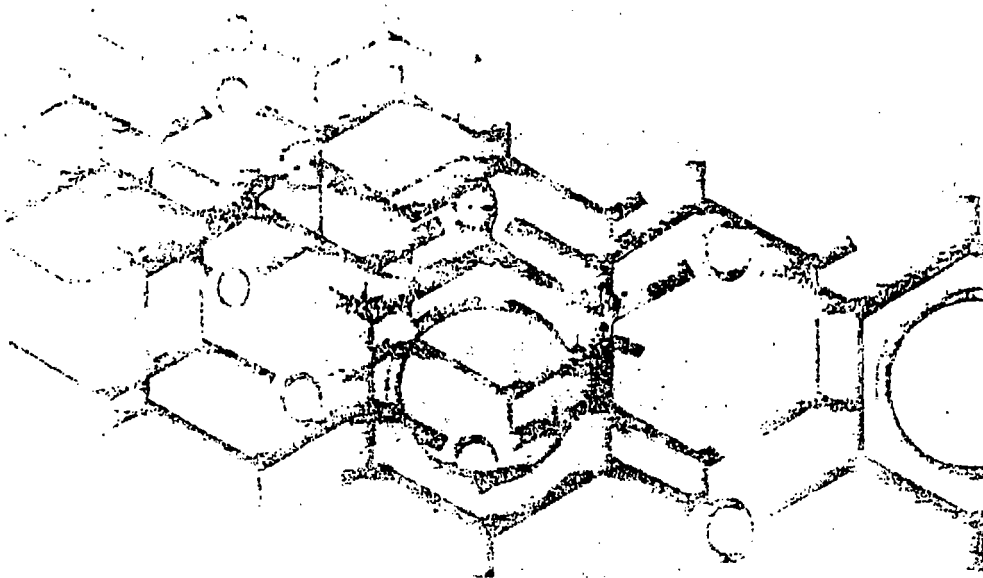
- a. Any and all medical persons who have examined, observed, treated and/or tested the Plaintiffs' for injuries, diseases and/or related physical and emotional conditions which resulted from Plaintiffs' exposure to Agent Orange, and/or phenoxy herbicides, their constituents, secondary by-products, wastes, residuals and contaminants.
- b. Any and all hospital personnel where Plaintiffs have been confined for treatment relating to their exposure to Defendants' products in Vietnam.
- c. Any and all persons with knowledge of the economic losses, psychological and/or intangible damages sustained by your Plaintiffs as a result of their injuries and diseases resulting from their exposure to Defendants' products in Vietnam.
- d. Any and all persons with knowledge of the past, present and/or future economic losses your Plaintiffs have or will sustain in the future as a result of their loss of wage earnings and/or wages earning capacity resulting from the injuries and diseases made the basis of this lawsuit which were caused by Plaintiffs' exposure to Defendants' products in Vietnam.

United States
Environmental Protection
Agency

Industrial Environmental Re-
search Laboratory
Cincinnati OH 45268

Research & Development

EPA Dioxins



12404

PLAINTIFFS' GOVERNMENT CAUSATION WITNESSES

I. D. Diane Courtney

A. EPA, Washington, D.C.

B. Both factual and expert testimony is sought.

C. General Events

Pre-1961: Any factual knowledge of the history of herbicide spraying in U.S. and abroad; including, but not limited to, (1) industrial exposures and exposures; (2) registration of 2,4-D, 2,4,5-T with the Department of Agriculture and any other government agencies by any and/or all of the Defendants;

1961-present: Any factual knowledge of the history of herbicide spraying in the U.S. and abroad; including, but not limited to, (1) U.S. military use of Agent Orange and other phenoxy herbicides in Vietnam; (2) changes in the registration requirements of herbicides with U.S. government and its agencies including knowledge of EPA, FDA, EPA, and OSHA; and (3) any knowledge of industrial and other human exposures to 2,4-D, 2,4,5-T in the U.S. and abroad;

See Answer and Supplemental Answer of Plaintiffs' to Defendants' Interrogatory No. 19 attached hereto and incorporated herein for all purposes re: events or occurrences which these causation witnesses may be expected to give any factual information they may have regarding the subjects outlined in said Answer.

Human Risk Assessment of Exposure to 2,4-D, 2,4,5-T and dioxins and any factual knowledge in support thereof.

D. Expert Testimony

1) Testimony is sought in witness' personal and official capacity.

2) Subject Matter

2,4-D, 2,4,5-T, TCDD's and dioxins; Agent Orange (also White, Blue, Pink, Green, and Purple)

and related chlorophenols and human risk assessment, regarding exposure, including, but not limited to, one or more of the following subject areas:

- a) Chemistry/Biochemistry
- b) Manufacture and/or Production
- c) Toxicity
- d) Modes of Human Exposure
- e) Fate in the Environment (Humans, Plants, Animals)
- f) State of Art/State of Medical and Scientific Literature
 - 1) Plant Physiology/Studies
 - 2) Animal Physiology/Studies
 - 3) Human Studies
- g) Epidemiology/Biostatistics
 - 1) Plants, animals, humans
 - 2) Cancer Epidemiology
 - 3) Reproductive Epidemiology
- h) Adverse Health Effects

- 3) Yes, witness will be asked opinions about both published and/or on-going studies.
- 4) Yes, witness will be asked opinions about any studies or research witness has personally performed or actually participated in.
- 5) Yes, witness will be asked opinions about other governmental studies.
- 6) Yes, witness is expected to review the following documents prior to giving testimony:

See, EPA, Research and Development, Health Assessment Document on Dioxins for the Offices of Air Quality, Planning and Standards, prepared by
the Environmental Criteria and Assessment Office, Cincinnati, Ohio 45248 (July 1983)

SUPPLEMENTAL ANSWER TO INTERROGATORY NO. 19

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1. **Ranch Hand Personnel:** These persons will testify to their knowledge of the Ranch Hand Operation, Ranch Handlers' exposure to Agent Orange, and/or knowledge relating to the spraying, testing, and effects of Agent Orange on humans.
2. **Members of the U. S. Armed Forces:** These persons may testify to the circumstances and conditions surrounding the spraying of Agent Orange.
3. **Persons present in Vietnam during the exposure period in question 1961-1972, including, but not limited to, military and paramilitary personnel of the U. S., New Zealand and Australia, who have knowledge of the spraying operations of the herbicides, the exposure of the Plaintiffs' class, the hazards accompanying any such exposure, the Plaintiffs themselves, and the Defendant company representatives present in Vietnam to oversee the deliveries and spraying operations of the herbicides they manufactured.**
4. **Persons together with their demonstrative and documentary evidence who gave testimony (which will form the substance of their testimony herein) at the EPA Cancellation Hearings of 2,4,5-T (1979-1980) under FIFRA, including but not limited to:**
 - a. Dr. Roy Albert;
 - b. Dr. K. Diane Courtney
 - c. Robert K. Baughman, Ph.D.
 - d. Dr. Olav Axelsson
 - e. Dr. Renate Kimbrough
 - f. Dr. Dawn G. Goodman
 - g. Dr. Kirk T. Kitchin
 - h. Dr. Donald Thomas
 - i. Dr. Rainer Prentzel-Dayne
 - j. Dr. Matthew Meselson, Harvard

k. Major Alvin Young
l. Dr. Rodney Bovey
m. Kenneth V. Themein
n. David T. Buzzelli
o. Dr. Michael Gross
p. Dr. Renee Stringham
r. Dr. Van Miller

5. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the manufacturing processes, chemistry, occupational exposure and/or toxicity of 2,4-D and/or 2,4,5-T or related chlorophenols; including, but not limited to, laborers; operators; supervisors; contract administrators; quality control personnel; engineers (process, chemical, mechanical and/or safety).
6. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the possible means of preventing protection from the hazards of dioxins' exposure; including, but not limited to, laborers, operators, supervisors, contract administrators, quality control personnel, engineers (process, chemical, mechanical and/or safety).
7. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the means to warn those who might be exposed to use of the herbicides in question, particularly Agent Orange, including, but not limited to, laborers, operators, supervisors, contract administrators, quality control personnel, engineers (process, chemical, mechanical and/or safety).
8. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any other manufacturing processes which could reduce the risks of exposure to Agent Orange and/or other phenoxy herbicides being contaminated with dioxins and further reduce the risk and hazard to human health of any such exposure.
9. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of conspiratorial conduct of the Defendants, individually and/or duplicative efforts (acts which are parallel in nature) which tended to or did in fact result in misleading the public and the United States government from gaining knowledge of the dangers attendant from exposure to Agent Orange and other phenoxy herbicides.

12408

10. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of how dioxins work upon plants, animals, and/or humans.
11. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any statistics concerning the effects of dioxins upon plants, animals, and/or humans.
12. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person including, but not limited to, members of EPA and other governmental agencies, who has factual knowledge of the following incidents:
 - a. Love Canal
 - b. Times Beach, Missouri
 - c. Seveso, Italy
 - d. BASF (1953, 1954 - Badische in Germany)
 - e. Production mishaps and/or explosions since 1925 at any of the plants of any of the Defendants manufacturing, TCP, 2,4-D, 2,4,5-T phenol, chlorine, acetic acid, benzene, sodium hydroxide, potassium hydroxide, and/or Agent Orange, including mishaps in the packaging, and transporting of the Defendants' products to the U. S. Armed Forces bases for eventual shipment to Vietnam.
 - f. Spraying of Vietnam from 1961-1972.
13. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any surveys, tests, epidemiological studies of any kind relating to the effects of exposure to Agent Orange, 2,4-D, 2,4,5-T or any constituent thereof including the secondary by-product known as dioxins.
14. Any person with factual knowledge of how decisions are made within the United States government, particularly the decision to use and to continue to use phenoxy herbicides in Vietnam, particularly Agent Orange; any person with factual knowledge of government procurement contracts and the invitation to bidders, particularly those persons who negotiated the government contracts for all phenoxy herbicides (agents white, blue, purple, pink, green, orange I and II) with the individual defendants representatives between 1961-1972.

15. Any person with factual knowledge through any surveys, tests, epidemiological studies or otherwise undertaken by any state government, any private public or foreign corporation, the U. S. Congress or the government of any nation concerning the chemical compounds, 2,5-D, 2,4,5-T, dioxins, or related chlorophenols relating to the creation of dioxins, the detection of dioxins, the dangers of dioxins' exposure, and/or the toxicity, carcinogenicity, fetotoxicity, teratogenicity, acute and/or chronic effects on plants, animals and the human population.
16. Any and all persons listed in The Chemical Scythe by Alastair Hay, as having factual knowledge regarding 2,4,5-T, 2,4-D, and its contaminant dioxins.
17. All worker compensation carriers for the Defendants and documentation of all occupational exposures filed since 1925 which evidence industrial injuries or diseases at the TCP, 2,4,5-T, 2,4-D, Phenol, packaging, and/or transportation plants of the Defendants.
18. Any and all current or prior workers compensation claimants of the Defendants who claimed relevant occupational exposures and/or relevant occupational injuries and/or diseases and/or symptoms at the relevant plants listed in Answer to No. 19 (sub 17) above.
19. Any and all members of the U. S. House of Representatives Committee on Oversight Review of the EPA actions (1983) and/or any person together with their documentary and demonstrative evidence giving testimony at said hearing (which will form the substance of their testimony herein) on the failure of the EPA to take prompt and effective action to ban the production of 2,4-D, 2,4,5-T, and its contaminant dioxins.
20. Any and all persons having knowledge of relevant facts regarding the financial status of the Defendants and their ability to respond in punitive damages, including, but not limited to, their past, present, and future profits and earnings in the United States and abroad since 1925 through and including the present from the sale of the products made the basis of this lawsuit, i.e., 2,4-D, 2,4,5-T, phenoxy herbicides and the relevant herbicide market.
21. Any and all persons having knowledge of relevant facts regarding the ownership interests of the Defendants and their ability to respond in punitive damages, including, but not limited to, defendants' domestic and foreign subsidiaries, joint venturers, licensing agreements, and/or other public or private corporations in the U. S. and abroad, in which these defendants own a substantial financial interest since 1925 through and including the present.

15. Any person with factual knowledge through any surveys, tests, epidemiological studies or otherwise undertaken by any state government, any private public or foreign corporation, the U. S. Congress or the government of any nation concerning the chemical compounds, 2,5-D, 2,4,5-T, dioxins, or related chlorophenols relating to the creation of dioxins, the detection of dioxins, the dangers of dioxins' exposure, and/or the toxicity, carcinogenicity, fetotoxicity, teratogenicity, acute and/or chronic effects on plants, animals and the human population.
16. Any and all persons listed in The Chemical Scandal by Alastair Hay, as having factual knowledge regarding 2,4,5-T, 2,4-D, and its contaminant dioxins.
17. All worker compensation carriers for the Defendants and documentation of all occupational exposures filed since 1925 which evidence industrial injuries or diseases at the TCP, 2,4,5-T, 2,4-D, Phenol, packaging, and/or transportation plants of the Defendants.
18. Any and all current or prior workers compensation claimants of the Defendants who claimed relevant occupational exposures and/or relevant occupational injuries and/or diseases and/or symptoms at the relevant plants listed in answer to No. 19 (sub 17) above.
19. Any and all members of the U. S. House of Representatives Committee on Oversight Review of the EPA actions (1983) and/or any person together with their documentary and demonstrative evidence giving testimony at said hearing (which will form the substance of their testimony herein) on the failure of the EPA to take prompt and effective action to ban the production of 2,4-D, 2,4,5-T, and its contaminant dioxins.
20. Any and all persons having knowledge of relevant facts regarding the financial status of the Defendants and their ability to respond in punitive damages, including, but not limited to, their past, present, and future profits and earnings in the United States and abroad since 1925 through and including the present from the sale of the products made the basis of this lawsuit, i.e., 2,4-D, 2,4,5-T, phenoxy herbicides and the relevant herbicide market.
21. Any and all persons having knowledge of relevant facts regarding the ownership interests of the Defendants and their ability to respond in punitive damages, including, but not limited to, defendants' domestic and foreign subsidiaries, joint venturers, licensing agreements, and/or other public or private corporations in the U. S. and abroad, in which these defendants own a substantial financial interest since 1925 through and including the present.

22. Any and all persons listed by Plaintiffs' in both original and amended witness lists, as expert witness (medical, scientific or causation), government witness, government causation witness, defendants' employees and/or related personnel and/or any witnesses listed by all Defendants, may be called at time of trial to present factual information as to any issue involved in this case.

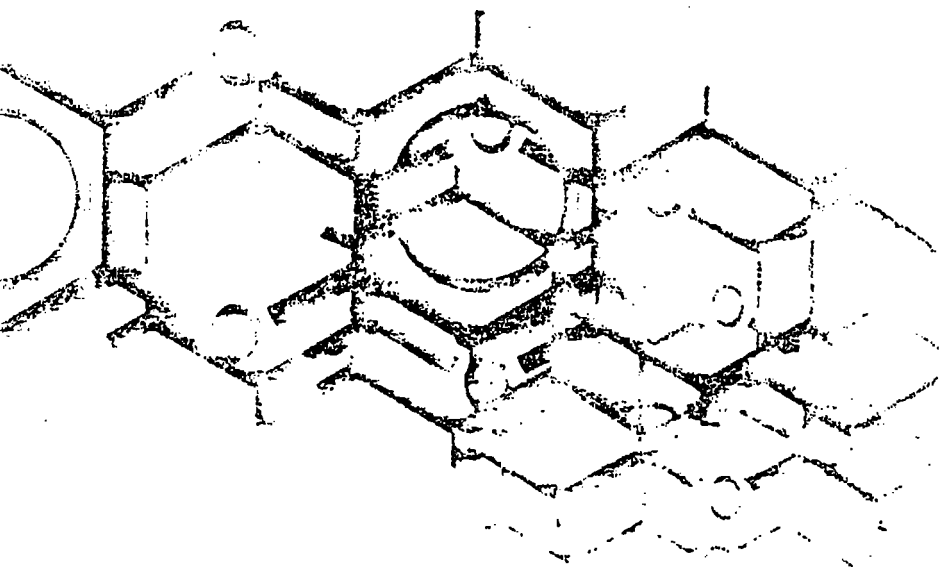
23. Any and all members of the scientific and/or medical community who have knowledge of relevant facts, including information on any of the previously listed subjects in this Answer, including, but not limited to:

- a. David Kriebel, Ph.D.
- b. Dr. Alan Poland
- c. Dr. Paul Goldmann, BASF
- d. Dr. C. Rappe
- e. Dr. Oettel, BASF
- f. Dr. E. E. McDonnell
- g. Dr. K. S. Khiera
- h. Alvin Alm
- i. Marilyn Fingerhut

24. Any and all persons who have factual knowledge concerning the individual representative Plaintiff's damages, including, but not limited to, the following:

- a. Any and all medical persons who have examined, observed, treated and/or tested the Plaintiffs' for injuries, diseases and/or related physical and emotional conditions which resulted from Plaintiffs' exposure to Agent Orange, and/or phenoxy herbicides, their constituents, secondary by-products, wastes, residuals and contaminants.
- b. Any and all hospital personnel where Plaintiffs have been confined for treatment relating to their exposure to Defendants' products in Vietnam.
- c. Any and all persons with knowledge of the economic losses, psychological and/or intangible damages sustained by your Plaintiffs as a result of their injuries and diseases resulting from their exposure to Defendants' products in Vietnam.
- d. Any and all persons with knowledge of the past, present and/or future economic losses your Plaintiffs have or will sustain in the future as a result of their loss of wage earnings and/or wages earning capacity resulting from the injuries and diseases made the basis of this lawsuit which were caused by Plaintiffs exposure to Defendants' products in Vietnam.

12413



EPA DIOXINS

Research & Development

United States
Environmental Protection
Agency

Industrial Environmental
Laboratory
City of New York 10008



PLAINTIFF'S GOVERNMENT CAUSATION WITNESSES

I. Philip W. Landrigan

- A. Center for Disease Control (CDC), Nat'l Inst. Occupational Safety and Health, Cincinnati, Ohio
- B. Both factual and expert testimony is sought.
- C. General Events

Pre-1961: Any factual knowledge of the history of herbicide spraying in U.S. and abroad; including, but not limited to, (1) industrial exposures and explosions; (2) registration 2,4-D, 2,4,5-T with the Department of Agriculture and any other government agencies any and/or all of the Defendants;

1961-present: Any factual knowledge of the history of herbicide spraying in the U.S. and abroad; including, but not limited to, (1) U.S. military use of Agent Orange and other pher herbicides in Vietnam (2) changes in the registration requirements of herbicides with U.S. government and its agencies including knowledge of DFEPA, FDA, EPA, and OSHA; and any knowledge of industrial and other human exposures to 2,4-D, 2,4,5-T in the U.S. and abroad;

See Answer and Supplemental Answer of Plaintiffs' to Defendants' Interrogatory No. 19 attached hereto and incorporated herein for all purposes re: events or occurrences which these causation witnesses may be expected to give any factual information they may have regarding the subjects outlined in said Answer.

Human Risk Assessment of Exposure to 2,4-D, 2,4,5-T and dioxins and any factual knowledge in support thereof.

D. Expert Testimony

1) Testimony is sought in witness' personal and official capacity.

2) Subject Matter

2,4-D, 2,4,5-T, TCDD's and dioxins; Agent Orange (also White, Blue, Pink, Green, and Purple)

the information contained and contained
therein, is hereby notified by
the Department of Justice, that the
information contained therein is being
made available to the public.

It is requested that the following
information be furnished to the
Department of Justice, in order that
the information may be made available
to the public. The information should
be furnished in the form of a letter
to the Department of Justice, and
should be dated and captioned as
follows: "Information for the
Department of Justice, dated
[date], and captioned as follows:
[caption]."

The information should be furnished
in the form of a letter to the
Department of Justice, and should
be dated and captioned as follows:
"Information for the Department of
Justice, dated [date], and captioned
as follows: [caption]."

The information should be furnished
in the form of a letter to the
Department of Justice, and should
be dated and captioned as follows:
"Information for the Department of
Justice, dated [date], and captioned
as follows: [caption]."

The information should be furnished
in the form of a letter to the
Department of Justice, and should
be dated and captioned as follows:
"Information for the Department of
Justice, dated [date], and captioned
as follows: [caption]."

EPA, Research and Development, Health and Environmental Effects Profile for, Te Penta, and Hexachlorodibenzo-p-dioxin for the Office of Solid Waste and Emergency Response, by the Environmental Criteria and Assessment Office, Cincinnati, Ohio 45248 (June 1983).

EPA, Research and Development, Ambient Water Quality Criteria for 2,3,7,8-TCDD prepared for Office of Water Regulations and Standards, by the Environmental Criteria and Assessment Office, Cincinnati, Ohio 45248 (July 1983).

EPA, Research and Development, Dioxins, Industrial Environmental Research Cincinnati, Ohio (1978).

A copy of these documents is attached.

SUPPLEMENTAL ANSWER TO INTERROGATORY NO. 19

Plaintiffs note preliminarily that the instant Order on producing fact witnesses states that fact witnesses are not due until March 2, 1984. However, Plaintiffs may call one or more of the following persons (or those from various categories listed below) at time of trial to testify as to factual knowledge they may have, including:

1. **Ranch Hand Personnel:** These persons will testify to their knowledge of the Ranch Hand Operation, Ranch Handlers' exposure to Agent Orange, and/or knowledge relating to the spraying, testing, and effects of Agent Orange on humans.
2. **Members of the U. S. Armed Forces:** These persons may testify to the circumstances and conditions surrounding the spraying of Agent Orange.
3. **Persons present in Vietnam during the exposure period in question 1961-1972, including, but not limited to, military and paramilitary personnel of the U. S., New Zealand and Australia, who have knowledge of the spraying operations of the herbicides, the exposure of the Plaintiffs' class, the hazards accompanying any such exposure, the Plaintiffs' themselves, and the Defendant company representatives present in Vietnam to oversee the deliveries and spraying operations of the herbicides they manufactured.**
4. **Persons together with their demonstrative and documentary evidence who gave testimony (which will form the substance of their testimony herein) at the EPA Cancellation Hearings on 2,4,5-T (1976-1980) under FIFRA, including but not limited to:**
 - a. Dr. Roy Albert:
 - b. Dr. E. Diane Courtney
 - c. Robert K. Baughman, Ph.D.
 - d. Dr. Olav Axelson
 - e. Dr. Renate Kimbrough
 - f. Dr. Dawn G. Goodman
 - g. Dr. Kirk T. Kitchin
 - h. Dr. Ronald Thomas
 - i. Dr. Rainer Frentzel-Beyne
 - j. Dr. Matthew Marcelson, Harvard

12417

10. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of how dioxin work upon plants, animals, and/or humans.

11. Any current or previous employee, contractor, subcontractor,

12. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the manufacturing processes, chemistry, occupational exposure and/or toxicity of 2,4-D and/or 2,4,5-T or related chlorophenols; including, but not limited to, laborers; operators; supervisors; contract administrators; quality control personnel; engineers (process, chemical, mechanical and/or safety).

6. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the possible means of prophylactic protection from the hazards of dioxins' exposure; including, but not limited to, laborers, operators, supervisors, contract administrators, quality control personnel, engineers (process, chemical, mechanical and/or safety).

7. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the means to warn those who might be exposed to use of the herbicides in question, particularly Agent Orange, including, but not limited to, laborers, operators, supervisors, contract administrators, quality control personnel, engineers (process, chemical, mechanical and/or safety).

8. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any other manufacturing processes which could reduce the risks of exposure to Agent Orange and/or other phenoxy herbicides being contaminated with dioxins and further reduce the risk and hazard to human health of any such exposure.

9. Any current or previous employee, contractor, subcontractor,

15. Any person with factual knowledge through any surveys, tests, epidemiological studies or otherwise undertaken by any state government, any private public or foreign corporation, the U. S. Congress or the government of any nation concerning the chemical compounds, 2,5-D, 2,4,5-T, dioxins, or related chlorophenols relating to the creation of dioxins, the detection of dioxins, the dangers of dioxins' exposure, and/or the toxicity carcinogenicity, fetotoxicity, teratogenicity, acute and/or chronic effects on plants, animals and the human population.
16. Any and all persons listed in The Chemical Scythe by Alastair Hay, as having factual knowledge regarding 2,4,5-T, 2,4-D, and its contaminant dioxins.
17. All workers compensation claims for the Defendants and documentation of all occupational exposures filed since 1925 which evidence industrial injuries or diseases at the T. 2,4,5-T, 2,4-D, Phenol, packaging, and/or transportation plants of the Defendants.
18. Any and all current or prior workers compensation claimants of the Defendants who claim relevant occupational exposures and/or relevant occupational injuries and/or diseases and/or symptoms the relevant plants listed in Answer No. 19 (see 17) above.
19. Any and all members of the U. S. House of Representatives Committee on Oversight Review of the EPA actions (1983) and/or any person together with their documentary and demonstrative evidence giving testimony at said hearing (which will form the substance of their testimony herein) on the failure of the EPA to take prompt and effective action to ban the production of 2,4-D, 2,4,5-T, and its contaminant dioxins.
20. Any and all persons having knowledge of relevant facts regarding the financial status of the Defendants and their ability to respond in punitive damages, including, but not limited to, their past, present, and future profits and earnings in the United States and abroad since 1925 through and including the present from the sale of the products made the basis of this lawsuit, i.e., 2,4-D, 2,4,5-T, phenoxy herbicides and the relevant herbicide market.
21. Any and all persons having knowledge of relevant facts regarding the ownership interests of the Defendants and their ability to respond in punitive damages, including, but not limited to, defendants' domestic and foreign subsidiaries, joint ventures, licensing agreements, and/or other public or private corporations in the U. S. and abroad, in which these defendants own a substantial financial interest since 1925 through and including the present.

22. Any and all persons listed by Plaintiffs' in both original and amended witness lists, as expert witness (medical, scientific or causation), government witness, government causation witness, defendants' employees and/or related personnel and/or any witnesses listed by all Defendants, may be called at time of trial to present factual information as to any issue involved in this case.

23. Any and all members of the scientific and/or medical community who have knowledge of relevant facts, including information on any of the previously listed subjects in this Answer, including, but not limited to:

- a. David Kriebel, Ph.D.
- b. Dr. Alan Poland
- c. Dr. Paul Goldmann, RASF
- d. Dr. C. Rappe
- e. Dr. Oettel, RASF
- f. Dr. E. E. McDonnell
- g. Dr. K. S. Khiera
- h. Alvin Al
- i. Marilyn Fingerhut

24. Any and all persons who have factual knowledge concerning the individual representative Plaintiff's damages, including, but not limited to, the following:

- a. Any and all medical persons who have examined, observed, treated and/or tested the Plaintiffs' for injuries, diseases and/or related physical and emotional conditions which resulted from Plaintiffs' exposure to Agent Orange, and/or phenoxy herbicides, their constituents, secondary by-products, wastes, residuals and contaminants.
- b. Any and all hospital personnel where Plaintiffs have been confined for treatment relating to their exposure to Defendants' products in Vietnam.
- c. Any and all persons with knowledge of the economic losses, psychological and/or intangible damages sustained by your Plaintiffs as a result of their injuries and diseases resulting from their exposure to Defendants' products in Vietnam.
- d. Any and all persons with knowledge of the past, present and/or future economic losses your Plaintiffs have or will sustain in the future as a result of their loss of wage earnings and/or wages earning capacity resulting from the injuries and diseases made the basis of this lawsuit which were caused by Plaintiffs exposure to Defendants' products in Vietnam.

12423

- e. Any and all persons with knowledge of past, present and/or future reasonable and necessary costs of doctors, hospitals, nursery care, medical equipment, drugs, and any other related medical services rendered or to be rendered in the future to Plaintiffs as a result of their injuries and disease resulting from their exposure to Defendants' products in Vietnam.
- f. Any and all persons with knowledge of the physical disfigurement (past and present), physical and mental impairment (past and present), physical pain (past and present) and mental anguish (past and present) which Plaintiffs have sustained as a result of their exposure to Defendants' products in Vietnam and which in reasonable probability Plaintiffs will continue to sustain for an indefinite time into the future far beyond the date of this trial.

Respectfully submitted,



Thomas W. Henderson, Esquire
Allison Pettiette, Esquire

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Supplement to Plaintiff's Interrogatories, were mailed Federal Express to Mr. William Krehley, Kelley, Drye & Warren, Mr. Gene Locks, Plaintiffs' Management Committee Agent Orange Office, with copies to personally serve the remaining Defendants at the Tuesday depositions and Ms. Nancy Petrillo, U.S. District Clerk, U.S. Courthouse, 225 Cadman Plaza, Brooklyn, New York 11201 this 20th day of February, 1964.

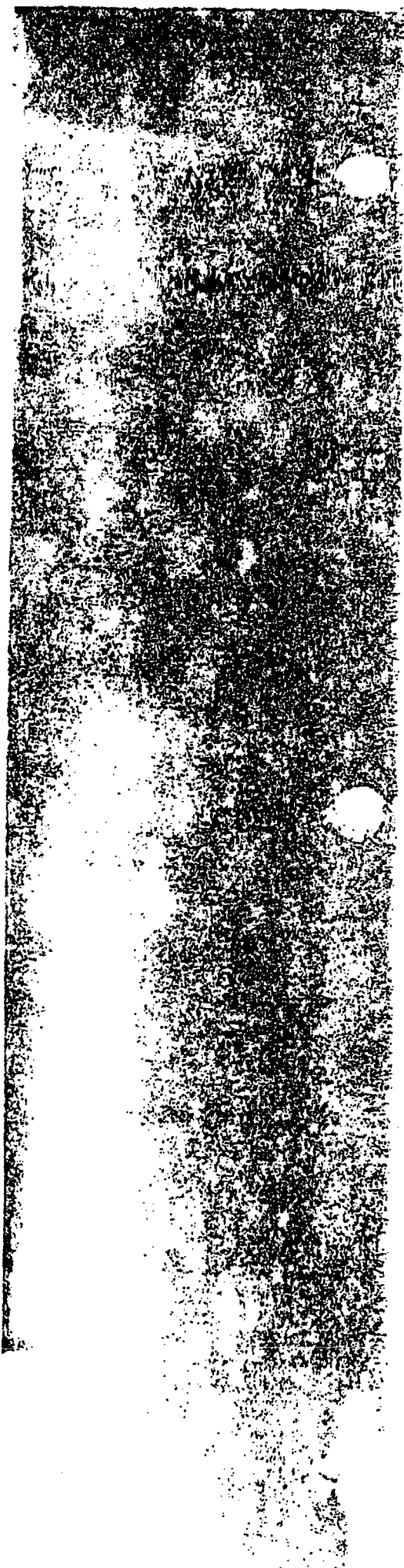

Allison Pettiette

12422

EPA Dioxins

Research & Development

United States
Environmental Protection
Agency
Washington, DC 20460



PLAINTIFF'S GOVERNMENT CAUSATION WITNESSES

I. Donald Barnes

A. EPA, Washington, D.C.

B. Both factual and expert testimony is sought.

C. General Events

Pre-1961: Any factual knowledge of the history of herbicide spraying in U.S. and abroad; including, but not limited to, (1) industry exposures and explosions; (2) registration 2,4-D, 2,4,5-T with the Department of Agriculture and any other government agencies any and/or all of the Defendants;

1961-present: Any factual knowledge of the history of herbicide spraying in the U.S. and abroad; including, but not limited to, (1) U.S. military use of Agent Orange and other pho herbicides in Vietnam; (2) changes in the registration requirements of herbicides with U.S. government and its agencies including knowledge of FIFRA, FDA, EPA, and OSHA; and any knowledge of industrial and other human exposures to 2,4-D, 2,4,5-T in the U.S. and abroad;

See Answer and Supplemental Answer of Plaintiffs' to Defendants' Interrogatory No. 19 attached hereto and incorporated herein for all purposes re: events or occurrences which these causation witnesses may be expected to give any factual information they may have regarding the subjects outlined in said Answer.

Human Risk Assessment of Exposure to 2,4-D, 2,4,5-T and dioxins and any factual knowledge in support thereof.

D. Expert Testimony

1) Testimony is sought in witness' personal and official capacity.

2) Subject Matter

2,4-D, 2,4,5-T, TCDD's and dioxins; Agent Orange I/II (also White, Blue, Pink, Green, and Purple)

and related chlorophenols and human risk assessment regarding exposure, including, but not limited to, one or more of the following subject areas:

- a) Chemistry, Biochemistry
 - b) Manufacture and/or Production
 - c) Toxicity
 - d) Modes of Human Exposure
 - e) Fate in the Environment (Humans, Plants, Animals)
 - f) State of Art/State of Medical and Scientific Literature
 - 1) Plant Physiology/Studies
 - 2) Animal Physiology/Studies
 - 3) Human Studies
 - g) Epidemiology/Biostatistics
 - 1) Plants, animals, humans
 - 2) Cancer Epidemiology
 - 3) Reproductive Epidemiology
 - h) Adverse Health Effects
- 3) Yes, witness will be asked opinions about both published and/or on-going studies.
 - 4) Yes, witness will be asked opinions about any studies or research witness has personally performed or actually participated in.
 - 5) Yes, witness will be asked opinions about other governmental studies.
 - 6) Yes, witness is expected to review the following documents prior to giving testimony:

See, EPA, Research and Development, Health Assessment Document on Dioxins for the Office of Air Quality, Planning and Standards, prepared by the Environmental Criteria and Assessment Office, Cincinnati, Ohio 45248 (July 1977)

EPA, Research and Development, Health and Environmental Effects Profile for; Tetra, Penta, and Hexachlorodibenzo-p-dioxins for the Office of Solid Waste and Emergency Response, by the Environmental Criteria and Assessment Office, Cincinnati, Ohio 45248 (June 1983).

EPA, Research and Development, Ambient Water Quality Criteria for 2,3,7,8 TCDD, prepared for Office of Water Regulations and Standards, by the Environmental Criteria and Assessment Office, Cincinnati, Ohio 45248 (July 1983).

EPA, Research and Development, Dioxins, Industrial Environmental Research Cincinnati, Ohio (1978).

A copy of these documents is attached.

SUPPLEMENTAL ANSWER TO INTERROGATORY NO. 19

Plaintiffs note preliminarily that the exhibit Order on fact witnesses states that fact witnesses are not due until March 1984. However, Plaintiffs may call one or more of the following persons (those from various categories listed below) at time of trial to testify to factual knowledge they may have, including:

1. Ranch Hand Personnel: These persons will testify to knowledge of the Ranch Hand Operation, Ranch Hand exposure to Agent Orange, and/or knowledge relating to the testing, and effects of Agent Orange on humans.
2. Members of the U. S. Armed Forces: These persons may testify to the circumstances and conditions surrounding the use of Agent Orange.
3. Persons present in Vietnam during the exposure period in question 1961-1972, including, but not limited to, military and paramilitary personnel of the U. S., New Zealand, Australia, who have knowledge of the spraying operations of the herbicides, the exposure of the Plaintiffs' class to the hazards accompanying any such exposure, the Plaintiffs themselves, and the Defendant company representatives present in Vietnam to oversee the deliveries and spraying operations of the herbicides they manufactured.
4. Persons together with their demonstrative and documentary evidence who gave testimony (which will form the substance of their testimony herein) at the EPA Cancellation Hearings of 2,4,5-T (1979-1980) under FIFRA, including but not limited to:
 - a. Dr. Roy Albert:
 - b. Dr. M. Diane Courtney
 - c. Robert K. Baughman, Ph.D.
 - d. Dr. Olav Axelson
 - e. Dr. Renate Kinkorrough
 - f. Dr. Dawn G. Goodman
 - g. Dr. Kirk T. Kitchin
 - h. Dr. Ronald Thomas
 - i. Dr. Rainer Frentzel-Deyme
 - j. Dr. Matthew Meselson, Harvard

12426

k. Major Alvin Young
 l. Dr. Rodney Bovey
 m. Kenneth V. Thomein
 n. David T. Buzzelli
 o. Dr. Michael Gross
 p. Dr. Renee Stringham
 r. Dr. Van Miller

5. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the manufacturing processes, chemistry, occupational exposure and/or toxicity of 2,4-D and/or 2,4,5-T or related chlorophenols; including, but not limited to, laborers; operators; supervisors; contract administrators; quality control personnel; engineers (process, chemical, mechanical and/or safety).
6. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the possible prophylactic protection from the hazards of dioxins including, but not limited to, laborers, operators, supervisors, contract administrators, quality control personnel, engineers (process, chemical, mechanical and/or safety).
7. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the means to prevent those who might be exposed to use of the herbicides in question, particularly Agent Orange, including, but not limited to, laborers, operators, supervisors, contract administrators, quality control personnel, engineers (process, chemical, mechanical and/or safety).
8. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any manufacturing processes which could reduce the risk of exposure to Agent Orange and/or other phenoxy herbicides being contaminated human health with dioxins and further reduce the risk and hazard to human health of any such exposure.
9. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of conspiratorial conduct of the Defendants, individually and/or duplicative efforts (acts which are parallel in nature) which tended to or did in fact result in misleading the public and the United States government from gaining knowledge of the dangers attendant from exposure to Agent Orange and other phenoxy herbicides.

12427

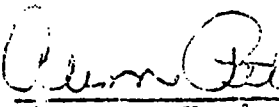
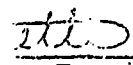
10. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of how dioxins work upon plants, animals, and/or humans.
11. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any statistics concerning the effects of dioxins upon plants, animals, and/or humans.
12. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person including, but not limited to, members of EPA and other governmental agencies, who has factual knowledge of the following incidents:
 - a. Love Canal
 - b. Times Beach, Missouri
 - c. Sevesco, Italy
 - d. BASF (1953, 1961 - Badische in Germany)
 - e. Production mishaps and/or explosions since 1925 at any of the plants of any of the Defendants manufacturing, TCC, 2,4-D, 2,4,5-T phenol, chlorine, acetic acid, benzene, sodium hydroxide, potassium hydroxide, and/or Agent Orange, including mishaps in the packaging, and transporting of the Defendants' products to the U. S. Armed Forces bases for eventual shipment to Vietnam.
 - f. Spraying of Vietnam from 1961-1972.
13. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any surveys, tests, epidemiological studies of any kind relating to the effects of exposure to Agent Orange, 2,4-D, 2,4,5-T or any constituent thereof including the secondary by-product known as dioxins.
14. Any person with factual knowledge of how decisions are made within the United States government, particularly the decision to use and to continue to use phenoxy herbicides in Vietnam, particularly Agent Orange; any person with factual knowledge of government procurement contracts and the invitation to bidders, particularly those persons who negotiated the government contracts for all phenoxy herbicides (agents white, blue, purple, pink, green, orange I and II) with the individual defendants representatives between 1961-1972.

12428

22. Any and all persons listed by Plaintiffs' in both original and amended witness lists, as expert witness (medical, scientific or causation), government witness, government causation witness, defendants' employees and/or related persons and/or any witnesses listed by all Defendants, may be called at time of trial to present factual information as to any issue involved in this case.
23. Any and all members of the scientific and/or medical community who have knowledge of relevant facts, including information on any of the previously listed subjects in this Answer, including but not limited to:
- a. David Kriebel, Ph.D.
 - b. Dr. Alan Poland
 - c. Dr. Paul Goldmann, BASF
 - d. Dr. C. Lappe
 - e. Dr. Oestel, BASF
 - f. Dr. E. E. McDonnell
 - g. Dr. K. S. Khiera
 - h. Alvin Alm
 - i. Marilyn Fingerhut
24. Any and all persons who have factual knowledge concerning the individual representative Plaintiffs' damages, including, but not limited to, the following:
- a. Any and all medical persons who have examined, observed, treated and/or tested the Plaintiffs' for injuries, diseases and/or related physical and emotional conditions which resulted from Plaintiffs' exposure to Agent Orange, and/or phenoxy herbicides, their constituents, secondary by-products, wastes, residuals and contaminants.
 - b. Any and all hospital personnel where Plaintiffs have been confined for treatment relating to their exposure to Defendants' products in Vietnam.
 - c. Any and all persons with knowledge of the economic losses, psychological and/or intangible damages sustained by your Plaintiffs as a result of their injuries and diseases resulting from their exposure to Defendants' products in Vietnam.
 - d. Any and all persons with knowledge of the past, present and/or future economic losses your Plaintiffs have or will sustain in the future as a result of their loss of wage earnings and/or wages earning capacity resulting from the injuries and diseases made the basis of this lawsuit which were caused by Plaintiffs' exposure to Defendants' products in Vietnam.

- e. Any and all persons with knowledge of past, present and/or future reasonable and necessary costs of doctors, hospitals, nursery care, medical equipment, drugs, and any other related medical services or to be rendered in the future to Plaintiffs as a result of their injuries and disease resulting from their exposure to Defendants' products in Vietnam.
- f. Any and all persons with knowledge of the physical disfigurement (past and present), physical and mental impairment (past and present), physical pain (past and present) and mental anguish (past and present) which Plaintiffs have sustained as a result of their exposure to Defendants' products in Vietnam and which in the reasonable probability Plaintiffs will continue to sustain for an indefinite time into the future beyond the date of this trial.

Respectfully submitted,


 Thomas W. Henderson, Esquire

 Allison Pettiette, Esquire

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Supplement to Plaintiff's Interrogatories were mailed Federal Express to Mr. William Krohley, Kelley, Drye & Warren, Mr. Gene Locks, Plaintiff's Management Committee Agent Orange Office, with copies to persons to serve the remaining Defendants at the Tuesday depositions and Ms. Nancy Petrilla, U.S. District Clerk, U.S. Courthouse, 225 Cadman Plaza, Brooklyn, New York 11201 this 20th day of February, 1964.


 Allison Pettiette

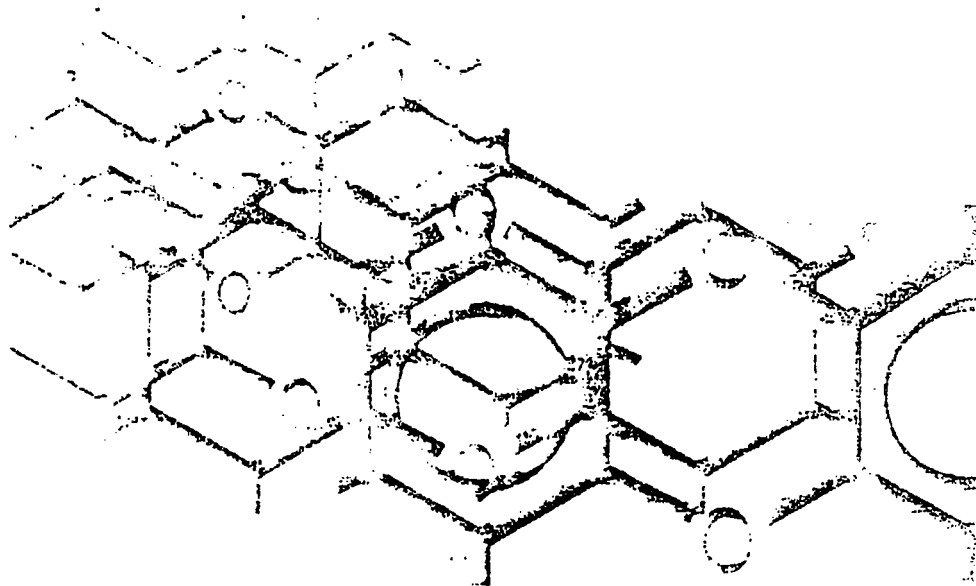
12430

United States
Environmental Protection
Agency

Industrial Environmental Re-
search Laboratory
Cincinnati OH 45268

Research & Development

EPA Dioxins



12431

PLAINTIFF'S GOVERNMENT CAUSATION WITNESSES

I. Umberto Saffiotti

A. National Cancer Institute, Washington, D.C.

B. Both factual and expert testimony is sought.

C. General Events

Pre-1961: Any factual knowledge of the history of herbicide spraying in U.S. and abroad; including, but not limited to, (1) industrial exposures and explosions; (2) registration of 2,4-D, 2,4,5-T with the Department of Agriculture and any other government agencies by any and/or all of the Defendants;

1961-present: Any factual knowledge of the history of herbicide spraying in the U.S. and abroad; including, but not limited to, (1) U.S. military use of Agent Orange and other phen herbicides in Vietnam; (2) changes in the registration requirements of herbicides with the U.S. government and its agencies including knowledge of FIFRA, FDA, EPA, and OSHA; and (3) any knowledge of industrial and other human exposures to 2,4-D, 2,4,5-T in the U.S. and abroad;

See Answer and Supplemental Answer of Plaintiffs' to Defendants' Interrogatory No. 19 attached hereto and incorporated herein for all purposes re: events or occurrences which these causation witnesses may be expected to give any factual information they may have regarding the subjects outlined in said Answer.

Human Risk Assessment of Exposure to 2,4-D, 2,4,5-T and dioxins and any factual knowledge in support thereof.

D. Expert Testimony

1) Testimony is sought in witness' personal and official capacity.

2) Subject Matter,

2,4-D, 2,4,5-T, TCDD's and dioxins; Agent Orange I/II (also White, Blue, Pink, Green, and Purple

and related chlorophenols and human risk assessment regarding exposure, including, but not limited to, one or more of the following subject areas:

- a) Chemistry/Biochemistry
- b) Manufacture and/or Production
- c) Toxicity
- d) Modes of Human Exposure
- e) Fate in the Environment (Humans, Plants, Animals)
- f) State of Art/State of Medical and Scientific Literature
 - 1) Plant Physiology/Studies
 - 2) Animal Physiology/Studies
 - 3) Human Studies
- g) Epidemiology/Biostatistics
 - 1) Plants, animals, humans
 - 2) Cancer Epidemiology
 - 3) Reproductive Epidemiology
- h) Adverse Health Effects

- 3) Yes, witness will be asked opinions about both published and/or on-going studies.
- 4) Yes, witness will be asked opinions about any studies or research witness has personally performed or actually participated in.
- 5) Yes, witness will be asked opinions about other governmental studies.
- 6) Yes, witness is expected to review the following documents prior to giving testimony:

See, EPA, Research and Development, Health Assessment Document on Dioxins for the Offices of Air Quality, Planning and Standards, prepared by the Environmental Criteria and Assessment Office, Cincinnati, Ohio 45248 (July 1

EPA, Research and Development, Health and
Environmental Effects Profile for; Tet
Penta, and Hexachlorodibenzo-p-dioxins
For the Office of Solid Waste and Emer-
gency Response, by the Environmental
Criteria and Assessment Office, Cincin
Ohio 45248 (June 1983).

EPA, Research and Development, Ambient Water
Quality Criteria for 2,3,7,8 TCDD, pre-
pared for Office of Water Regulations
and Standards, by the Environmental
Criteria and Assessment Office, Cincin
Ohio 45248 (July 1983).

EPA, Research and Development, Dioxins,
Industrial Environmental Research
Cincinnati, Ohio (1978).

A copy of these documents is attached.

SUPPLEMENTAL ANSWER TO INTERROGATORY NO. 19

Plaintiffs note preliminarily that the extant Order on producing fact witnesses states that fact witnesses are not due until March 2, 1984. However, Plaintiffs may call one or more of the following persons (or those from various categories listed below) at time of trial to testify as to factual knowledge they may have, including:

1. Ranch Hand Personnel: These persons will testify to their knowledge of the Ranch Hand Operation, Ranch Handers' exposure to Agent Orange, and/or knowledge relating to the spraying, testing, and effects of Agent Orange on humans.
2. Members of the U. S. Armed Forces: These persons may testify to the circumstances and conditions surrounding the spraying of Agent Orange.
3. Persons present in Vietnam during the exposure period in question 1961-1972, including, but not limited to, military and paramilitary personnel of the U. S., New Zealand and Australia, who have knowledge of the spraying operations of the herbicides, the exposure of the Plaintiffs' class, the hazards accompanying any such exposure, the Plaintiffs' themselves, and the Defendant company representatives present in Vietnam to oversee the deliveries and spraying operations of the herbicides they manufactured.
4. Persons together with their demonstrative and documentary evidence who gave testimony (which will form the substance of their testimony herein) at the EPA Cancellation Hearings of 2,4,5-T (1979-1980) under FIFRA, including but not limited to:
 - a. Dr. Roy Albert:
 - b. Dr. K. Diane Courtney
 - c. Robert K. Baughman, Ph.D.
 - d. Dr. Olav Axelson
 - e. Dr. Renate Kimbrough
 - f. Dr. Dawn G. Goodman
 - g. Dr. Kirk T. Kitchin
 - h. Dr. Ronald Thomas
 - i. Dr. Rainer Frentzel-Beyme
 - j. Dr. Matthew Meselson, Harvard

k. Major Alvin Young
l. Dr. Rodney Bovey
m. Kenneth V. Thernin
n. David T. Buzzelli
o. Dr. Michael Gross
p. Dr. Renee Stringham
r. Dr. Van Miller

5. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the manufacturing processes, chemistry, occupational exposure and/or toxicity of 2,4-D and/or 2,4,5-T or related chlorophenols; including, but not limited to, laborers; operators; supervisors; contract administrators; quality control personnel; engineers (process, chemical, mechanical and/or safety).
6. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the possible means of prophylactic protection from the hazards of dioxins' exposure; including, but not limited to, laborers, operators, supervisors, contract administrators, quality control personnel, engineers (process, chemical, mechanical and/or safety).
7. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the means to warn those who might be exposed to use of the herbicides in question, particularly Agent Orange, including, but not limited to, laborers, operators, supervisors, contract administrators, quality control personnel, engineers (process, chemical, mechanical and/or safety).
8. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any other manufacturing processes which could reduce the risks of exposure to Agent Orange and/or other phenoxy herbicides being contaminated with dioxins and further reduce the risk and hazard to human health of any such exposure.
9. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of conspiratorial conduct of the Defendants, individually and/or duplicative efforts (acts which are parallel in nature) which tended to or did in fact result in misleading the public and the United States government from gaining knowledge of the dangers attendant from exposure to Agent Orange and other phenoxy herbicides.

12436

15. Any person with factual knowledge through any surveys, tests, epidemiological studies or otherwise undertaken by any state government, any private public or foreign corporation, the U. S. Congress or the government of any nation concerning the chemical compounds, 2,5-D, 2,4,5-T, dioxins, or related chlorophenols relating to the creation of dioxins, the detection of dioxins, the dangers of dioxins' exposure, and/or the toxicity, carcinogenicity, fetotoxicity, teratogenicity, acute and/or chronic effects on
10. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of how dioxins work upon plants, animals, and/or humans.
11. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any statistics concerning the effects of dioxins upon plants, animals, and/or humans.
12. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person including, but not limited to, members of EPA and other governmental agencies who has factual knowledge of the
- a. Love Canal
 - b. Times Beach, Missouri
 - c. Sevesco, Italy
 - d. BASF (1953, 1954 - Badische in Germany)
 - e. Production mishaps and/or explosions since 1925 at any of the plants of any of the Defendants manufacturing, TCP, 2,4-D, 2,4,5-T phenol, chlorine, acetic acid, benzene, sodium hydroxide, potassium hydroxide, and/or Agent Orange, including mishaps in the packaging, and transporting of the Defendants' products to the U. S. Armed Forces bases for eventual shipment to Vietnam.
 - f. Spraying of Vietnam from 1961-1972.
13. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any surveys, tests, epidemiological studies of any kind relating to the effects of exposure to Agent Orange, 2,4-D, 2,4,5-T or any constituent thereof including the secondary by-product known as dioxins.
14. Any person with factual knowledge of how decisions are made within the United States government, particularly the decision to use and to continue to use phenoxy herbicides in Vietnam.

22. Any and all persons listed by Plaintiffs' in both original and amended witness lists, as expert witness (medical, scientific or causation), government witness, government causation witness, defendants' employees and/or related personnel and/or any witnesses listed by all Defendants, may be called at time of trial to present factual information as to any issue involved in this case.
23. Any and all members of the scientific and/or medical community who have knowledge of relevant facts, including information on any of the previously listed subjects in this Answer, including, but not limited to:
- a. David Kriebel, Ph.D.
 - b. Dr. Alan Poland
 - c. Dr. Paul Goldmann, BASF
 - d. Dr. C. Rappe
 - e. Dr. Oettel, BASF
 - f. Dr. E. E. McDonnell
 - g. Dr. K. S. Khiera
 - h. Alvin Alm
 - i. Marilyn Fingerhut
24. Any and all persons who have factual knowledge concerning the individual representative Plaintiff's damages, including, but not limited to, the following:
- a. Any and all medical persons who have examined, observed, treated and/or tested the Plaintiffs' for injuries, diseases and/or related physical and emotional conditions which resulted from Plaintiffs' exposure to Agent Orange, and/or phenoxy herbicides, their constituents, secondary by-products, wastes, residuals and contaminants.
 - b. Any and all hospital personnel where Plaintiffs have been confined for treatment relating to their exposure to Defendants' products in Vietnam.
 - c. Any and all persons with knowledge of the economic losses, psychological and/or intangible damages sustained by your Plaintiffs as a result of their injuries and diseases resulting from their exposure to Defendants' products in Vietnam.
 - d. Any and all persons with knowledge of the past, present and/or future economic losses your Plaintiffs have or will sustain in the future as a result of their loss of wage earnings and/or wages earning capacity resulting from the injuries and diseases made the basis of this lawsuit which were caused by Plaintiffs exposure to Defendants' products in Vietnam.

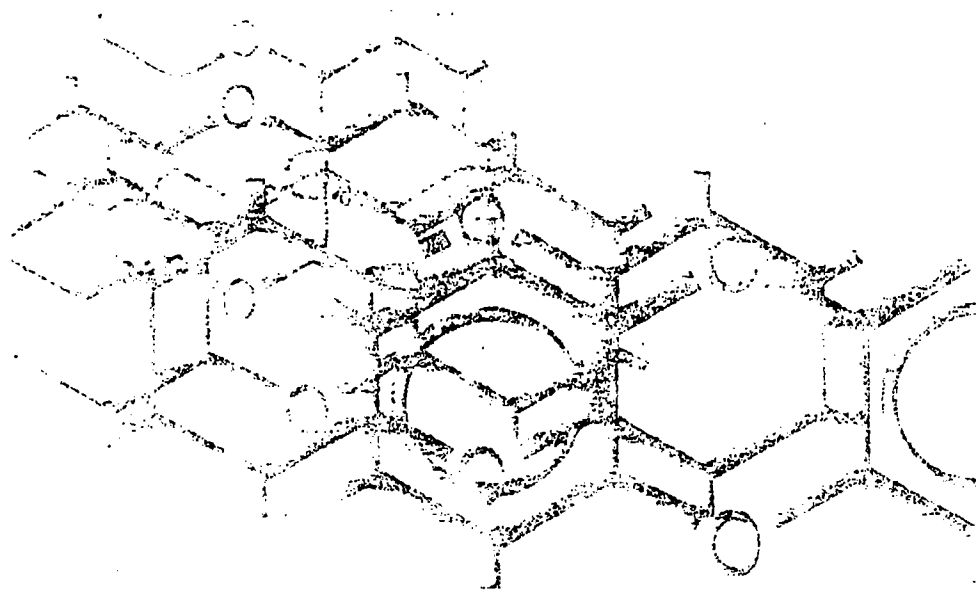
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United States
Environmental Protection
Agency

Industrial Environmental
Laboratory
Cincinnati OH 45268

Research & Development

EPA Dioxins



12439

and related chlorophenols and human risk assessment regarding exposure, including, but not limited to, one or more of the following subject areas:

- a) Chemistry/Biochemistry
- b) Manufacture and/or Production
- c) Toxicity
- d) Modes of Human Exposure
- e) Fate in the Environment (Humans, Plant Animals)
- f) State of Art/State of Medical and Science Literature
 - 1) Plant Physiology/Studies
 - 2) Animal Physiology/Studies
 - 3) Human Studies
- g) Epidemiology/Biostatistics
 - 1) Studies animals, humans
 - 2) Cancer Epidemiology
 - 3) Non-Cancer Epidemiology
- h) Adverse Health Effects

- 1) Yes, witnesses will be asked opinions about such published and/or on going studies
- 2) Yes, witnesses will be asked opinions about any study or research witness has personally performed or actually participated in.
- 3) Yes, witnesses will be asked opinions about other governmental studies.
- 4) Yes, witness is expected to review the following documents prior to giving testimony:

Yes, EPA, Research and Development, Health Assessment Document on Dioxins for the Office of Air Quality, Planning and Standards, prepared by the Environmental Criteria and Assessment Office, Cincinnati, Ohio 45240 (Vol.

PLAINTIFF'S GOVERNMENT CAUSATION WITNESSES

I. James Masor

A. Center for Disease Control (CDC) Atlanta, GA

B. Both factual and expert testimony is sought.

C. General Issues

Pre-1961 Any factual knowledge of the history of herbicide spraying in U.S. and abroad; including but not limited to, (1) industrial exposures and explosions; (2) registration of 2,4-D, 2,4,5-T with the Department of Agriculture and any other government agencies by any and/or all of the Defendants;

1961-present: Any factual knowledge of the history of herbicide spraying in the U.S. and abroad; including, but not limited to, (1) U.S. military use of Agent Orange and other phenol herbicides in Vietnam; (2) changes in the registration requirements of herbicides with the U.S. government and its agencies including knowledge of FIFRA, FDA, EPA, and CSHA; and (3) any knowledge of industrial and other human exposure to 2,4-D, 2,4,5-T in the U.S. and abroad;

See Answer and Supplemental Answer of Plaintiff to Defendants Interrogatory No. 19 attached hereto and incorporated herein for all purposes re: events or occurrences which these causation witnesses may be expected to give any factual information they may have regarding the subjects outlined in said Answer.

Human Risk Assessment of Exposure to 2,4-D, 2,4,5-T and dioxins and any factual knowledge in support thereof.

D. Expert Testimony

Testimony is sought in witness' personal and official capacity.

(1) Subject Matter

2,4-D, 2,4,5-T, TCDF's and dioxins; Agent Orange I/II (also White, Blue, Black, Green, and Purple)

EPA, Research and Development, Health and Environmental Effects Profile for: Tetra Penta, and Hexachlorodibenzo-p-dioxins, for the Office of Solid Waste and Emergency Response, by the Environmental Criteria and Assessment Office, Cincinnati Ohio 45246 (June 1983).

EPA, Research and Development, Ambient Water Quality Criteria for 2,3,7,8 TCDD, prepared for Office of Water Regulations and Standards, by the Environmental Criteria and Assessment Office, Cincinnati Ohio 45248 (July 1983).

EPA, Research and Development, Dioxins, Industrial Environmental Research Cincinnati, Ohio (1975).

A copy of these documents is attached.

SUPPLEMENTAL ANSWER TO INTERROGATORY NO. 19

Plaintiffs note preliminarily that the instant Order on producing fact witnesses states that fact witnesses are required until March 2, 1984. However, Plaintiffs may call one or more of the following persons (or those from various categories listed below) at time of trial to testify as to factual knowledge they may have, including:

1. Ranch Hand Personnel: These persons will testify to their knowledge of the Ranch Hand Operation, Ranch Handers' exposure to Agent Orange, and/or knowledge relating to the spraying, testing, and effects of Agent Orange on humans.
2. Members of the U. S. Armed Forces: These persons may testify to the circumstances and conditions surrounding the spraying of Agent Orange.
3. Persons present in Vietnam during the exposure period (in question 1287-1291), including, but not limited to, military and paramilitary personnel of the U. S., New Zealand and Australia, who have knowledge of the spraying operations on the herbicides, the exposure of the Plaintiffs' class, the hazards accompanying any such exposure, the Plaintiffs' themselves, and the Defendant company representatives present in Vietnam to oversee the deliveries and spraying operations of the herbicides they manufactured.
4. Persons together with their demonstrative and documentary evidence who gave testimony (which will form the substance of their testimony herein) at the VPA Cancellation Hearings of 2,4,5-T (1970-1980) under FIFRA, including but not limited to:
 - a. Dr. Roy Alberts
 - b. Dr. K. Diane Courtney
 - c. Robert K. Pangburn, Ph.D.
 - d. Dr. Clay Iverson
 - e. Dr. Bruce Kimbrough
 - f. Dr. Dean G. Goodson
 - g. Dr. Clark P. Ritchie
 - h. Dr. Ronald Thomas
 - i. Dr. Brian P. Neal-Beyan
 - j. Dr. Matthew Macdonald, Harvard

k. Major Alvin Young
 l. Dr. Rodney Covey
 m. Kenneth V. Thomein
 n. David T. Bulwold
 o. Dr. Michael Gross
 p. Dr. Renee Stringham
 r. Dr. Van Miller

5. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the manufacturing processes, chemistry, occupational exposure and/or toxicity of 2,4-d and/or 2,4,5-T or related chlorophenols; including, but not limited to, laborers; operators; supervisors; contract administrators; quality control personnel; engineers (process, chemical, mechanical and/or safety).
6. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the possible means of prophylactic protection from the hazards of dioxin exposure; including, but not limited to, laborers; operators; supervisors; contract administrators; quality control personnel; engineers (process, chemical, mechanical and/or safety).
7. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has knowledge of the means to warn those who might be exposed to use of the herbicides in question, particularly Agent Orange, including, but not limited to, laborers; operators; supervisors; contract administrators; quality control personnel; engineers (process, chemical, mechanical and/or safety).
8. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any other manufacturing process which could reduce the risks of exposure to Agent Orange and/or other phenoxy herbicides being contained with dioxins and further reduce the risk and hazard to human health of any such exposure.
9. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of conspiratorial conduct of the Defendants, individually and/or duplicative efforts (acts which are parallel in nature, which tended to or did in fact result in disclosing to a public and the United States government firms gaining knowledge of the dangers attendant from exposure to Agent Orange and other phenoxy herbicides).

12444

10. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of how dioxins work upon plants, animals, and/or humans.
11. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any statistics concerning the effects of dioxins upon plants, animals, and/or humans.
12. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person, including, but not limited to, members of EPA and other governmental agencies, who has factual knowledge of the following incidents:
 - a. Love Canal
 - b. Times Beach, Missouri
 - c. Seveso, Italy
 - d. PCB, DDT, and other chemicals in the milk
 - e. Production mishaps and/or explosion since 1925 at any of the plants of any of the Defendants: manufacturing, MCP, 2,4-D, 2,4-DP, phosol, dieldrin, acetic acid, benzene, sodium hydrosulfide, potassium hydrosulfide, and/or Agent Orange, including mishaps in the packaging, and transporting of the Defendants' products to the U. S. Armed Forces bases for eventual shipment to Vietnam.
 - f. Scrapping of the area from 1961-1971.
13. Any current or previous employee, contractor, subcontractor, in-house or private consultant of each of the Defendants or any other person who has factual knowledge of any surveys, tests, toxicological studies or any kind of testing in the effects of exposure to Agent Orange, 2,4-D, 2,4-DP or any constituent thereof including the secondary by-product known as dioxins.
14. Any person with factual knowledge of how decisions are made within the United States government, particularly the decision to use and to continue to use phenoxy herbicides in Vietnam, particularly Agent Orange; any person with factual knowledge of government procurement contracts and the invitation to bidders, particularly those persons who negotiated the government contracts for all phenoxy herbicides (for example white, blue, purple, pink, orange, orange I and II) with the individual defendants representative between 1961-1971.

15. Any person with factual knowledge through any surveys, tests, epidemiological studies or otherwise undertaken by any state government, any private public or foreign corporation, the U. S. Congress or the government of any nation concerning the chemical compounds, 2,5-D, 2,4,5-T, dioxins, or related chlorophenols relating to the creation of dioxins; the detection of dioxins, the dangers of dioxins' exposure, and/or the toxicity, carcinogenicity, fetotoxicity, teratogenicity, acute and/or chronic effects on plants, animals and the human population.
16. Any and all persons listed in The Chemical Scythe by Alastair Hay, as having factual knowledge regarding 2,4,5-T, 2,4-D, and its contaminant dioxins.
17. All worker compensation claims for the Defendants and documentation of all occupational exposures filed since 1925 which evidence industrial injuries or diseases at the TCP, 2,4,5-T, 2,4-D, Thermal, packaging, and/or evaporation plants of the Defendants.
18. Any and all records of private workers compensation claimants of the Defendants who claim relevant occupational exposures and/or relevant occupational injuries and/or diseases and/or symptoms of the relevant injuries and/or diseases as set forth in Sub 17) shown.
19. Any and all members of the U. S. House of Representatives Committee on Oversight and Reform of the EPA Actions (1983) and/or any persons regularly with their documentary and demonstrative evidence giving testimony at said hearing, (which will form the substance of their testimony herein) on the failure of the EPA to take prompt and effective action to ban the production of 2,4-D, 2,4,5-T, and its contaminant dioxins.
20. Any and all persons having knowledge of relevant facts regarding the financial status of the Defendants and their ability to respond in punitive damages, including, but not limited to, their past, present, and future profits and earnings in the United States and abroad since 1925 through and including the present from the sale of the products made the basis of this lawsuit, i.e., 2,4-D, 2,4,5-T, phenoxy herbicides and the relevant herbicide market.
21. Any and all persons having knowledge of relevant facts regarding the ownership interests of the Defendants and their ability to respond in punitive damages, including, but not limited to, defendants' domestic and foreign subsidiaries, joint ventures, licensing agreements, and/or other public or private corporations in the U. S. and abroad, in which these defendants own a substantial financial interest since 1925 through and including the present.

22. Any and all persons listed by Plaintiffs' in both original and amended witness lists, as expert witnesses (medical, scientific or causation), government witness, government causation witness, defendants' employees and/or related personnel and/or any witnesses listed by all Defendants, may be called at time of trial to present factual information as to any issue involved in this case.

23. Any and all members of the scientific and/or medical community who have knowledge of relevant facts, including information on any of the previously listed subjects in this lawsuit, including, but not limited to:

- a. David R. Bell, M.D.
- b. Dr. Alan Cohen
- c. Dr. Paul Goldman, M.D.
- d. Dr. C. Rappa
- e. Dr. Gertel, M.D.
- f. Dr. R. E. McDaniel
- g. Dr. H. S. Whiera
- h. Alvin Alm
- i. Marilyn Engstrom

24. Any and all persons who have factual knowledge concerning the individual and association Plaintiffs' damages, including, but not limited to, the following:

- a. Any and all medical persons who have examined, observed, treated and/or tested the Plaintiffs' for injuries, diseases and/or related physical and emotional conditions which resulted from Plaintiffs' exposure to Agent Orange, and/or phenoxy herbicides, their constituents, secondary by products, wastes, residuals and/or variants.
- b. Any and all hospital personnel where Plaintiffs have been confined for treatment relating to their exposure to Defendants' products in Vietnam.
- c. Any and all persons with knowledge of the economic losses, psychological and/or intangible damages sustained by your Plaintiffs as a result of their injuries and diseases resulting from their exposure to Defendants' products in Vietnam.
- d. Any and all persons with knowledge of the past, present and/or future economic losses your Plaintiffs have or will sustain in the future as a result of their loss of wage earnings and/or wages earning capacity resulting from the injuries and diseases made the basis of this lawsuit which were caused by Plaintiffs' exposure to Defendants' products in Vietnam.

- e. Any and all persons with knowledge of past, present and/or future reasonable and necessary costs of doctors, hospitals, nursery care, medical equipment, drugs, and any other related medical services rendered or to be rendered in the future to Plaintiffs as a result of their injuries and disease resulting from their exposure to Defendants' products in Vietnam.
- f. Any and all persons with knowledge of the physical disfigurement (past and present), physical and mental impairment (past and present), physical pain (past and present) and mental anguish (past and present) which Plaintiffs have sustained as a result of their exposure to Defendants' products in Vietnam and which in reasonable probability Plaintiffs will continue to sustain for an indefinite time into the future far beyond the date of this trial.

Respectfully submitted,


Thomas W. Henderson, Esquire
Allison Pettiette, Esquire

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Supplement to Plaintiff's Interrogatories were mailed Federal Express to Mr. William Krohlay, Kelley, Day & Weisen, Mr. Gene Locks, Plaintiffs' Management Committee Agent Orange Office, with copies to personally serve the remaining Defendants on their today's positions and Ms. Nancy Petrilla, U.S. District Court, U.S. Courthouse, 100 Cadogan Plaza, Brooklyn, New York 11201 this 20th day of February, 1981.


Allison Pettiette

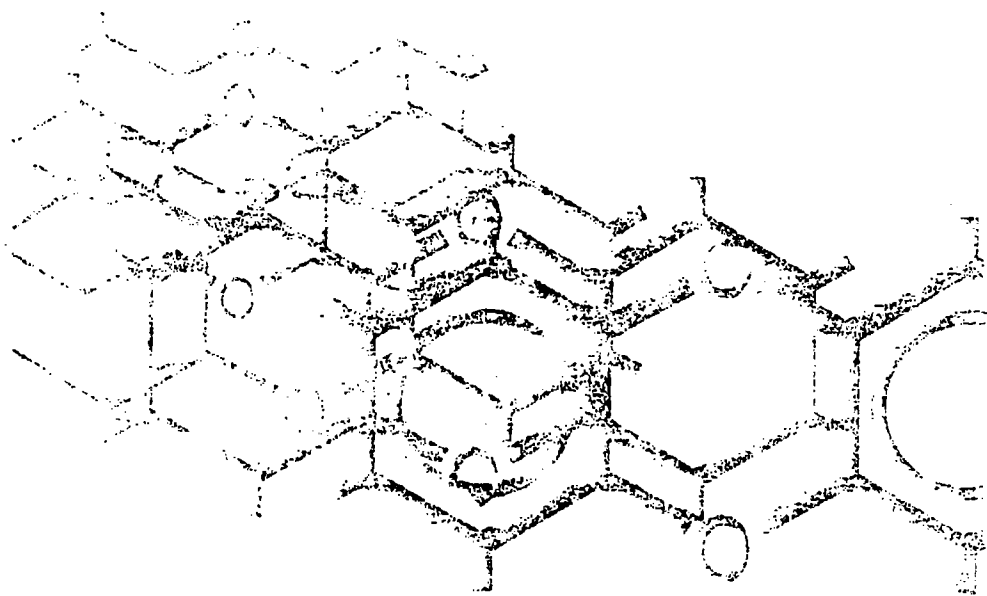
12448

United States
Environmental Protection
Agency

Industrial Environmental Lab-
oratory
Cincinnati OH 45268

Research & Development

EPA Dioxins



12143

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

X

In Re

"AGENT ORANGE"

MDL NO. 381

PRODUCT LIABILITY LITIGATION

X

FILED
IN CLERK'S OFFICE
U. S. DISTRICT COURT E.D. N.Y.
★
TIME AM. 10:24
PM. 14
★

DEFENDANTS LIST OF FACT WITNESSES
SUBMITTED PURSUANT TO THE SCHEDULING ORDER
FOR THE COMPLETION OF DISCOVERY

BUDD, LARNER, KENT, GROSS,
PICILLO & ROSENBAUM, P.C.
33 Washington Street
Newark, New Jersey 07102
(201) 622-7400

1944
12450

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

_____X

In Re

"AGENT ORANGE"

MDL NO. 381

PRODUCT LIABILITY LITIGATION

_____X

DEFENDANTS LIST OF FACT WITNESSES
SUBMITTED PURSUANT TO THE SCHEDULING ORDER
FOR THE COMPLETION OF DISCOVERY

BUDD, LARNER, KENT, GROSS,
PICILLO & ROSENBAUM, P.C.
33 Washington Street
Newark, New Jersey 07102
(201) 622-7400

12451

DEFENDANTS LIST OF FACT WITNESSES
SUBMITTED PURSUANT TO THE SCHEDULING ORDER
FOR THE COMPLETION OF DISCOVERY

On behalf of all defendants, and pursuant to the Scheduling Order For The Completion Of Discovery dated January 10, 1984, counsel for Thompson Chemical Company hereby submits the following list of potential witnesses to be called at trial, attached hereto as Schedule A. These witnesses shall be called to testify as to the issue of the government contract defense.

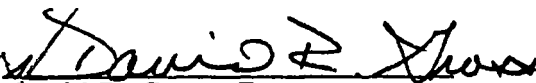
Furthermore, attached hereto as Schedule B, defendants hereby submit a list of witnesses presently scheduled to be deposed at a future date. Therefore, defendants reserve the right, after these witnesses are deposed to determine whether or not these individuals shall be called upon at trial.

Each individual defendant also reserves the right to submit an additional list of witnesses on their own behalf which they may choose to call upon to testify.

Dated February 29, 1984

Respectfully submitted,

BUDD, LARNER, KENT, GROSS,
PICILLO & ROSENBAUM, P.C.

By 
David R. Gross, Esq.

33 Washington Street
Newark, New Jersey 07102
(201) 622-7400
Attorneys for Defendant
Thompson Chemical Company

RIVKIN, LEFF, SHERMAN & RADLER
100 Garden City Plaza
Garden City, New York 11530
Attorneys for Defendant
The Dow Chemical Company

TOWNLEY & UPDIKE
405 Lexington Avenue
New York, New York 10174
(212) 682-4567
Attorneys for Defendant
Monsanto Company

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2. General Stanzwick Hay
3. Julius Johnson
4. Harold Kinney
5. Debdas Mukerjee
6. Elmer Wheeler

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

In Re

"AGENT ORANGE"

PRODUCT LIABILITY LITIGATION

MDL NO. 381

**DEFENDANTS LIST OF FACT
WITNESSES SUBMITTED PURSUANT
TO THE SCHEDULING ORDER FOR
THE COMPLETION OF DISCOVERY**

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Thompson Chemical Company**

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

FILED
IN CLERK'S OFFICE
U. S. DISTRICT COURT E.D. N.Y.
★ May 1 1984 ★
TIME 1:00 PM
FILED ✓

-----x
In re :
"AGENT ORANGE" : MDL No. 381
Product Liability Litigation :
-----x

DEFENDANT DIAMOND SHAMROCK
CHEMICALS COMPANY'S PRELIMINARY
LISTING OF FACT WITNESSES

Pursuant to the Special Master's Final Amended Recommended Scheduling Order, approved by the Court on January 10, 1984, defendant Diamond Shamrock Chemicals Company ("Diamond Shamrock") sets forth below its preliminary listing of fact witnesses who may give live testimony at trial in support of Diamond Shamrock's claims and defenses. This listing does not address deposition testimony that may be used at trial, which will be identified as part of preparation of the pretrial order. In accordance with the Scheduling Order and the Magistrate's Pretrial Order No. 9, Diamond Shamrock reserves the right to supplement and amend this preliminary listing.

1949
12465

Name and
Present Address

Description of General
Nature of Testimony

Dr. Donald J. Birmingham
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Testimony concerning research and investigation of chloracne by U.S. Public Health Service in the 1950's and 1960's, including visits to Diamond Shamrock's former Newark plant.

Robert L. Chonoles
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Testimony concerning manufacturing operations at Diamond Shamrock's former Newark plant, including: the removal of dioxin from trichlorophenol; and the U.S. Public Health Service study of the Newark workers in 1968-69.

Sigmund R. Eckhaus
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Testimony concerning United States' program for the construction of an Agent Orange manufacturing facility, and communications with producers of Agent Orange in connection with that program.

Dr. Marcus M. Key
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Houston, Texas 77025

Testimony concerning research and investigation of chloracne by U.S. Public Health Service in the 1960's including visit to Diamond Shamrock's former Newark plant.

Jane Lewis
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Testimony concerning the procurement and production of Agent Orange pursuant to the Defense Production Act, including directives and priority ratings issued by the United States.

Dr. Alan P. Poland
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Testimony concerning medical study of the workers at Diamond Shamrock's former Newark plant in 1968-69, and research and investigation of trichlorophenol, 2,4,5-T and dioxin at National Communicable Disease Center in the 1960's.

Dr. Paul A. Possick
46 Winding Way
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Testimony concerning medical study of the workers at Diamond Shamrock's former Newark plant in 1968-69.

Name and
Present Address

Warren C. Shaw
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Description of General
Nature of Testimony

Testimony concerning USDA regulation of 2,4,5-T under FIFRA in 1950's and 1960's, and USDA research and investigation concerning health effects and efficacy of 2,4,5-T.

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Dated: New York, New York
February 29, 1984

Respectfully submitted,

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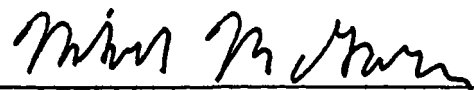
AFFIDAVIT OF SERVICE

STATE OF NEW YORK)
 : ss.:
COUNTY OF NEW YORK)

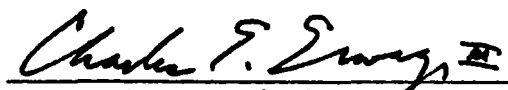
MICHAEL M. GORDON, being duly sworn, deposes and says:

1. I am not a party to this action, am over 18 years of age and reside in New York County, New York.

3. On February 29, 1984, I served the annexed Defendant Diamond Shamrock Chemicals Company's Preliminary Listing of Fact Witnesses on each of the persons named on the annexed list by depositing a true copy of same enclosed in a postpaid properly addressed wrapper, in an official depository under the exclusive care and custody of the United States Postal Service within the State of New York. The copy to David J. Dean, Esq. was sent by Federal Express. A copy was also sent by Federal Express to the Agent Orange Plaintiffs' Management Committee, 26 Court Street, Suite 905, Brooklyn, New York.


Michael M. Gordon

Sworn to before me this
29th day of February, 1984


Notary Public

CHARLES E. ERWAY, JR.
Notary Public, State of New York
No. 4739184
Qualified in Kings County
Commission Expires March 30, 1985

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IN CLERK'S OFFICE
U. S. DISTRICT COURT E.D. N.Y.
★ FEB 10 1984 ★
TIME A.M.
P.M. 11:40

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----x
In re

: MDL No. 381

: "AGENT ORANGE"

: Product Liability Litigation
-----x

DEFENDANT DIAMOND SHAMROCK'S OBJECTIONS
TO PLAINTIFFS' PRELIMINARY LIST OF
POTENTIAL DEPONENTS PRESENTLY OR FORMERLY
EMPLOYED BY DIAMOND SHAMROCK

1849
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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----x
In re : MDL No. 381
"AGENT ORANGE" :
Product Liability Litigation :
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DEFENDANT DIAMOND SHAMROCK'S OBJECTIONS
TO PLAINTIFFS' PRELIMINARY LIST OF
POTENTIAL DEPONENTS PRESENTLY OR FORMERLY
EMPLOYED BY DIAMOND SHAMROCK

Preliminary Statement

Pursuant to the direction of Magistrate Scheindlin at the February 9, 1984 pre-trial conference, defendant Diamond Shamrock Chemicals Company ("Diamond Shamrock") sets forth below its objections to plaintiffs' preliminary list of present or former Diamond Shamrock employees who may be deposed by plaintiffs, served on February 9, 1984 ("Plaintiffs' List"). Diamond Shamrock requests, however, that consideration of its objections by the Magistrate be deferred pending receipt and review of plaintiffs' "priority" deposition list.

DISCUSSION

Since the commencement of deposition discovery in the "Agent Orange" litigation in 1982, plaintiffs have deposed nine present or former Diamond Shamrock employees on substantive

issues. An additional three employees have been examined pursuant to Pretrial Order No. 57.

On December 12, 1983, counsel for plaintiffs confirmed in writing that their deposition discovery of Diamond Shamrock would be completed by the examination of five additional former employees: Richard Marrese, Donald Purdy, Cy Perkins, James King and Stanley Honour. See letter from Edward J. Gorman to Michael M. Gordon dated December 12, 1983 (Exhibit A hereto). Dr. Marrese and Mr. Purdy were examined on December 13, 1983 and January 5, 1984, respectively. The depositions of Mr. Perkins and Mr. King were both tentatively scheduled, and then postponed at plaintiffs' request for various reasons, including ill health of plaintiffs' counsel. The deposition of Mr. Honour remains unscheduled.

Now, only 12 weeks before trial, plaintiffs have identified ten former Diamond Shamrock employees that they may wish to depose, in addition to the three witnesses previously requested and remaining to be scheduled. Thus, if their List is accepted at face value, plaintiffs seek at the last minute to double the number of Diamond Shamrock depositions taken in this litigation. Their List similarly more than triples the number of outstanding depositions to be scheduled, in total repudiation of plaintiffs' most recent assurances to Diamond Shamrock.

Plaintiffs' unannounced new "wave" of Diamond Shamrock depositions, in the face of recent representations to the contrary, would seriously and unfairly prejudice Diamond Shamrock's own pre-trial preparations. Instead of the three remaining

depositions agreed to in December, Diamond Shamrock would now be compelled to locate and prepare for depositions of 13 former employees, most of whom reside far from New York and are unlikely to agree to travel here for their examinations. The strain on the resources of Diamond Shamrock's counsel that would result at this critical stage of the proceedings is obvious. Absent a compelling explanation for plaintiffs' failure to apprise Diamond Shamrock of their intentions and to pursue scheduling of Diamond Shamrock depositions during the past several months, plaintiffs should not be permitted to sidetrack Diamond Shamrock's trial preparations in the few precious weeks remaining before jury selection.

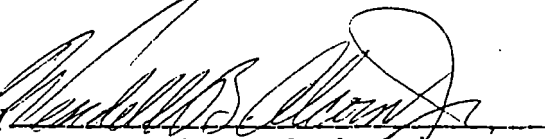
In fairness to plaintiffs, Diamond Shamrock recognizes that plaintiffs themselves estimate that only a fraction of the deponents they have listed will actually be examined. Plaintiffs have also stated their intention to submit by February 15, 1984 a "priority list" that is expected to contain only one-half to one-quarter of the names set forth in their original list. See tr. at 9214-15. Accordingly, Diamond Shamrock requests that consideration of its objections to the number of former Diamond Shamrock employees identified as deponents in Plaintiffs' List be deferred to permit receipt and review of plaintiffs' priority

list, and discussion of that list between counsel for Diamond Shamrock and plaintiffs.

Dated: New York, New York
February 14, 1984

Respectfully submitted,

CADWALADER, WICKERSHAM & TAFT

BY 

A Member of the Firm
Attorneys for Defendant
Diamond Shamrock Chemicals
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12474

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GEORGE W. KELLY
ALLAN M. KAPLAN
RICHARD F. POHL
(ADM. PENN. BAR)
EDWARD F. HAYES, III

December 12, 1983

Cadwalder, Wickersham & Taft, Esqs.
One Wall Street
New York, New York 10005

Attention of Michael M. Gordon, Esq.

RE: In re "Agent Orange"
Product Liability Litigation
MDL No. 381

Dear Mr. Gordon:

This will confirm our telephone conversation of December 8, 1983 wherein you advised that Mr. S. S. Savage is deceased and Mr. S. B. Honour, still shares this earth with us although his exact whereabouts are unknown.

Presently scheduled for depositions are Mr. Marrese, Perdy, Perkins and King.

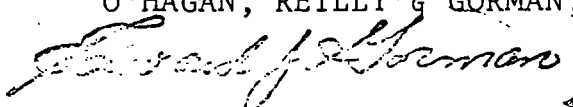
As you know Mr. Fiorella has written to Mr. Lex Creamer regarding his deposition but to date we have not heard from this gentleman. What we are looking for is a witness with knowledge of the various South American episodes involving chloracne and the use of 2, 4, 5,T. I doubt if we will hear from Mr. Creamer.

If you will be kind enough therefore to arrange to have Mr. Honour presented for deposition, he, in addition to those gentlemen mentioned above, will complete our discovery.

Thank you for your cooperation, I remain

Very truly yours,

O'HAGAN, REILLY & GORMAN, P.C.


EDWARD J. GORMAN

12475

CC: Albert Fiorella, Esq.
D. Russo, Esq.

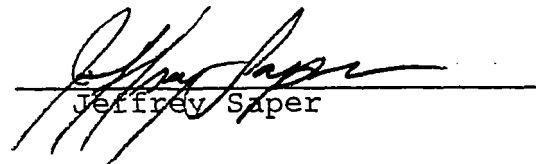
AFFIDAVIT OF SERVICE

STATE OF NEW YORK)
: ss.:
COUNTY OF NEW YORK)

JEFFREY SAPER, being duly sworn, deposes and says:

1. I am not a party to this action, am over 18 years of age and reside in Queens County, New York.

2. On February 14, 1984, I served the annexed Defendant Diamond Shamrock's Objections to Plaintiffs' Preliminary List of Potential Deponents Presently or Formerly Employed by Diamond Shamrock on each of the persons named on the annexed list by depositing a true copy of same enclosed in a postpaid properly addressed wrapper, in an official depository under the exclusive care and custody of the United State Postal Service within the State of New York. The copy to David J. Dean, Esq. was sent by Express Mail. A copy was also sent by hand to the Agent Orange Plaintiffs' Management Committee, 26 Court Street, Suite 905, Brooklyn, New York.


Jeffrey Saper

Sworn to before me this

14th day of February, 1984.


Notary Public

MICHAEL MACKIN GORDON
Notary Public, State of New York
No. 31-4643865
Qualified in New York County
Commission Expires March 30, 1985

12478

SERVICE LIST

FOR DEFENDANTS

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Rivkin, Leff, Sherman & Radler
(for DOW CHEMICAL)
100 Garden City Plaza
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Morton G. Silberman
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The Inns of Court
99 Court Street
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John C. Sabetta
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405 Lexington Avenue
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Kelley Drye & Warren
(for HERCULES, INC.)
101 Park Avenue
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(for HOOKER PLASTICS &
CHEMICALS CORP.)
2600 The Fidelity Building
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Richard Goldstein
Shea & Gould
330 Madison Avenue
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(for UNIROYAL)
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David R. Gross
Budd, Lerner, Kent, Gross,
Picillo & Rosenbaum
(for THOMPSON CHEMICALS)
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Newark, New Jersey 07102

Arvin Maskin
Department of Justice
(for THIRD PARTY DEFENDANT USA)
Safeway Building
521 12th Street, N.W.
Washington, D.C. 20530

L. Kevin Sheridan
Executive Assistant
U.S. Attorney
Eastern District of New York
United States Courthouse
225 Cadman Plaza East
Brooklyn, New York 11201

COPIES OF ALL DOCUMENTS MUST
BE SENT TO:

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Judicial Panel on Multidistrict
Litigation
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Washington, D.C. 20005

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February 14, 1984

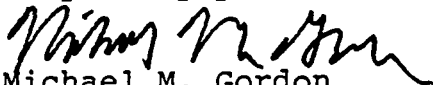
Honorable Shira A. Scheindlin
United States Magistrate
United States District Court
Eastern District of New York
United States Courthouse
225 Cadman Plaza East
Brooklyn, New York 11201

Re: In re "Agent Orange" Product
Liability Litigation, MDL No. 381

Dear Magistrate Scheindlin:

Pursuant to your direction at the February 9, 1984 pre-trial conference, I enclose Defendant Diamond Shamrock's Objections to Plaintiffs' Preliminary List of Potential Defendants Presently or Formerly Employed by Diamond Shamrock.

Very truly yours,


Michael M. Gordon

MMG/mam
Enclosure
BY HAND

cc(w/encl.): Clerk of the Court✓
Service List

12478

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

In re

"AGENT ORANGE"

MDL No. 381

Product Liability Litigation

PRESENT LIST OF PLAINTIFFS'
CAUSATION WITNESSES
WITH ATTACHED SUMMARIES
IN ACCORDANCE WITH FRCP 26(b)(4)(A)(i)

1. Charles Baron, M.D.	Exhibit "A"
2. Deborah Anne Barsotti, Ph.D.	Exhibit "B"
3. Ronald Codario, M.D.	Exhibit "C"
4. Arthur W. Galston, Ph.D.	Exhibit "D"
5. John Garofalo, M.D.	Exhibit "E"
6. Lennart Hardell, M.D.	Exhibit "F"
7. Maureen C. Hatch, Ph.D.	Exhibit "G"
8. Alastair W.M. Hay, Ph.D.	Exhibit "H"
9. Herbert Kay, Ph.D.	Exhibit "I"
10. Ronald H. Kerman, Ph.D.	Exhibit "J"
11. Marvin S. Legator, Ph.D.	Exhibit "K"
12. Alan Scott Levin, M.D.	Exhibit "L"
13. Peter Orris, M.D., M.P.H.	Exhibit "M"
14. Marvin A. Schneiderman, Ph.D.	Exhibit "N"
15. Ellen K. Silbergeld, Ph.D.	Exhibit "O"
16. Raymond Singer, Ph.D.	Exhibit "P"
17. Theodor D. Sterling, Ph.D.	Exhibit "Q"
18. Biostatistician/Mathematician (Additional)	Exhibit "R"

PLAINTIFFS' MANAGEMENT COMMITTEE

By Thomas W. Henderson
Thomas W. Henderson, Esquire

12479

Dr. Charles M. Baron, M.D., is a physiatrist practicing in Philadelphia, Pennsylvania. His curriculum vitae will be supplied.

Dr. Baron will testify as to the performance and interpretation of various tests in the veterans. These will include an eltroencephalogram on both sleep and waking states with nasopharyngeal leads. He will also perfrom electromyograms, nerve conduction velocity tests, and somato sensory evoked potentials of the upper and lower extemities.

Dr. Baron will then testify as to the mechanisms by which toxins produce the changes noted in the tests and what the various tests are capable of determining as to the medical status of the patient.

Then he will relate the results obtained in the testing of each plaintiff examined, give opinions as to the causation of those results where possible from the evidence revealed by the tests, and state the prognosis for the individual plaintiff for further deterioration in test results and/or for the individual's condition as a whole.

Dr. Deborah Anne Barsotti is an Assistant Professor of Toxicology in the Department of Pharmacology and Toxicology of the Philadelphia College of Pharmacy and Science in Philadelphia, Pennsylvania. Her curriculum vitae is attached.

Dr. Barsotti is a toxicologist who has done substantial personal investigative work with halogenated aromatic hydrocarbons. This category of chemicals includes various biphenyls and dioxins, and specifically includes tetrachlorodibenzo-p-dioxin (TCDD). She will testify as to the relative chemical stability and lipophilicity of these chemicals as well as their resistance to degradation, and will testify that these qualities are what account for the perceived and documented bioaccumulation of the chemicals in the human system. Dr. Barsotti will emphasize the difference in results between chronic and acute exposures to these chemicals, testifying as to the varying types of responses to acute and chronic exposures.

Dr. Barsotti will discuss her own work as well as review the literature in these areas, noting differences in routes of administration, and in the species and genetic strain of the animals involved. She will explain these variations and where they permit extrapolation of results from animals to humans. In particular, Dr. Barsotti will also testify as to the similarities in response to these chemicals by rhesus monkeys and by humans, and will explain how the similarities permit extrapolation in this instance.

Dr. Barsotti will also discuss reproductive toxicity,

teratology and post-natal toxicity, including instances where no gross or clinical signes of maternal toxicity could be detected.

CURRICULUM VITAE

DEBORAH ANNE BARSOTTI

ADDRESS: Home - 4818 Trinity Place
Phila., PA 19143
215-724-5387

Business - Phila. College of Pharmacy & Science
Dept. of Pharmacology & Toxicology
43rd & Kingsessing Mall
Phila., PA 19104
215-596-8978

CITIZENSHIP: USA

BIRTHDATE: September 14, 1949

MARITAL STATUS: Married; no children

EDUCATION: Humboldt State University
Arcata, California - 1967-1972
Bachelor of Arts
Biology-Medical Technology

Humboldt State University
Arcata, California - 1972-1973
Graduate School
Coursework: Electron microscopy
Endocrinology
Instrumentation

University of Wisconsin
Madison, Wisconsin - 1973-1980
Doctor of Philosophy
Pathology
Thesis Title: Gross, Clinical & Reproductive Effects
of Polychlorinated Biphenyls (PCBs) in
the Rhesus Monkey

EXPERIENCE: Phila. College of Pharmacy & Science
Phila., PA - January, 1983 to Present
Asst. Professor, Dept. of Pharmacology/Toxicology
Instruct Biological Methods in Toxicology, Toxicology
III & Techniques in Electron Microscopy
Advise undergraduate students
Faculty advisor for Tox Club
Member, Advisory Committee for four graduate students
Conduct independent research

Assistant Scientist - July, 1982 to January, 1983
Project Associate - June, 1980 to June, 1982
University of Wisconsin
Dept. of Pathology
Madison, Wisconsin

Coordinated multifaceted research projects involving over 120 rhesus monkeys exposed to low levels of toxins (halogenated aromatic hydrocarbons) and integrated the clinical data and observations with the residue analyses of tissues and fluids obtained by gas chromatography (GC) and confirmed by mass spectrometry (MS).

Supervised the clinical and reproductive evaluations as well as the care of laboratory animals.

Developed data management and word processing systems utilizing on-site computers and tie-ins to a Sperry Univac 1100 to sort, collate and statistically evaluate data.

Conducted gross necropsies and microscopic evaluations and prepared necropsy reports.

Research Assistant - 1976-1980
University of Wisconsin
Dept. of Pathology
Madison, Wisconsin

Conducted radioimmunoassays for serum progesterone and estradiol for use in evaluating the reproductive parameters in rhesus monkeys.

Performed clinical assessments on lab. animals including hematology and clinical chemistries.

Supervised and evaluated data and prepared reports for contractual work.

Separated cellular fractions of tissue homogenates by ultracentrifugation and assayed homogenates and resultant fractions for content of various components.

Provided animal husbandry for rhesus monkey and rat colonies.

Supervised unit members on protocols for experimentation and proper methods of conducting basic laboratory analyses.

Pre-Doctoral Fellow - 1974-1976
University of Wisconsin
Dept. of Pathology
Madison, Wisconsin

Stocked and organized a laboratory for the clinical and reproductive analyses of laboratory animals.

Prepared protocols for long-term feeding studies in the laboratory animals including those for gross, clinical and reproductive assessments.

Developed radioimmunoassay procedures for serum progesterone and estradiol.

Conducted metabolism and distribution studies in rats and rhesus monkeys using radiolabeled isomers of halogenated aromatic hydrocarbons and other chemicals.

Laboratory Assistant - 1970-1972
Humboldt State University
Student Health Center
Arcata, California

Duties included assisting in routine clinical laboratory practices involved in urinalysis, gonococcal screening, VDRLs, heterophiles for mononucleosis, throat cultures and pregnancy tests.

AWARDS/HONORS: National Sea Grant Graduate Student of the Year - 1976.

PROFESSIONAL SOCIETIES:

American Society for Primatologists
Mid-Atlantic Chapter, Society of Toxicology

SEMINARS/MEETINGS:

Participant - Federation of American Societies for Experimental Biology (FASEB), Atlantic City, NJ, April, 1976. Topic: "Effects of polychlorinated biphenyls on reproduction in the primate".

Participant - American Association of Pathologists and Bacteriologists, Boston, MA, March, 1976. Topic: "The Association of Transplacental and Mammary Movement of PCBs with Infant Morbidity and Mortality".

Invited Speaker - 9th Annual Sea Grant Association Meeting, Los Angeles, CA, November, 1976. Topic: "Toxicology of PCBs in the Adult and Infant Rhesus Monkey".

Participant - FASEB, Chicago, IL, April, 1977. Topic: "Effects of polychlorinated biphenyls in nonhuman primates".

Participant - American Chemical Society, 11th Great Lakes Regional Meeting, Stevens Point, WI, June, 1977. Topic: "Responses of infant primates to interuterine and neonatal exposure to polychlorinated biphenyls".

Invited Speaker - Community Meeting on PCBs, University of Wisconsin, Parkside, March, 1977.

Participant - International Symposium on Pathobiology of Environmental Pollutants, Storrs, CT, June, 1977. Topics: "Pathology of rhesus macaques (*Macaca mulatta*) exposed to tetrachlorodibenzo-p-dioxin (TCDD)" and "Exposure of polychlorinated biphenyl (PCB) to infant rhesus macaques (*Macaca mulatta*)".

Invited Speaker - Community Meeting on PCBs, Door County, WI, September, 1977.

Invited Speaker - 45th Annual Convention of Association of Midwest Fish and Wildlife Agencies, Milwaukee, WI, July, 1978. Topic: "Consequences of dietary PCB consumption in rhesus monkeys".

Invited Consultant - Symposium on PBB Litigation, Traverse City, MI, July, 1978. Topic: "PBB toxicity in the rhesus monkey".

Invited Speaker - Smerkee's Conservation Club, Sheboygan, WI, February, 1979. Topic: "PCBs and their effects on rhesus monkeys".

Participant - FASEB, Dallas, TX, April, 1979. Topic: "Residual effects of polychlorinated biphenyls on adult nonhuman primates and their offspring".

Expert Witness - State of North Carolina, Halifax County; testimony on toxicity of PCBs, June, 1979.

Participant - Sea Grant Symposium on Toxic Materials and their Effects on Marine Resources, Madison, WI, July, 1979.

PUBLICATIONS:

Barsotti, D. A. and Van Miller, J. P.: Reproductive assessments of rhesus monkeys housed in climate controlled conditions. *Amer. J. Primatol.*, submitted 1983.

Barsotti, D. A.: Long term reproductive assessment of rhesus monkeys exposed to chlorinated biphenyls (Aroclor 1248). *Fd. Cosmet. Toxicol.*, submitted 1983.

Barsotti, D. A. and Van Miller, J. P.: Accumulation of a commercial polychlorinated biphenyl mixture (Aroclor 1010) in adult rhesus monkeys and their nursing offspring. *Toxicology*. In press.

Bowman, R. E., Heironimus, M. P. and Barsotti, D. A.: Locomotor hyperactivity in PCB-exposed rhesus monkeys. *Neurotoxicol.* 2:251-268, 1981.

Barsotti, D. A., Abrahamson, L. J., Marlar, R. J. and Allen, J. R.: The effect of climate controlled housing on the reproductive potential of the rhesus monkey. *J. Reprod. Fertil.* 59:15-20, 1980.

- Barsotti, D. A. and Allen, J. R.: Health implications of Aroclor 1016 on nursing rhesus monkey infants. *Toxicol. Appl. Pharmacol.* 52:135, 1980 (Abstract).
- Allen, J. R., Barsotti, D. A. and Carstens, L. A.: Residual effects of polychlorinated biphenyls on adult nonhuman primates and their offspring. *J. Toxicol. Environ. Hlth.* 6:55-66, 1980.
- Allen, J. R., Barsotti, D. A. and Van Miller, J. P.: Toxicological effects of Aroclor 1016 on nonhuman primates. EPA Report #68-02:2464, 1980.
- Barsotti, D. A., Abrahamson, L. J. and Allen, J. R.: Hormonal alterations in female rhesus monkeys fed diets containing 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Bull. Environ. Contam. Toxicol.* 21:463-469, 1979.
- Barsotti, D. A., Carstens, L. A. and Allen, J. R.: Residual effects of polychlorinated biphenyls on adult nonhuman primates and their offspring. *Fed. Proc.* 38:1119, 1979 (Abstract).
- Allen, J. R., Barsotti, D. A. and Lambrecht, L. K.: Reproductive effects of halogenated aromatic hydrocarbons on nonhuman primates. *New York Academy of Sciences*, 320:419-427, 1979.
- Allen, J. R., Barsotti, D. A. and Van Miller, J. P.: Pathology of rhesus macaques (*Macaca mulatta*) exposed to tetrachlorodibenzo-p-dioxin (TCDD). *International Symposium on Pathology of Environmental Pollutants*, National Research Council, 346-355, 1979.
- Allen, J. R., Van Miller, J. P. and Barsotti, D. A.: Toxicological responses of nonhuman primates to 1,2,4,6,7,8-hexachlorodibenzo-p-dioxin (HCDD). *Toxicol. Appl. Pharmacol.* 47:179, 1979 (Abstract).
- Carstens, L. A., Barsotti, D. A. and Allen, J. R.: Exposure of polychlorinated biphenyl (PCB) to infant rhesus macaques (*Macaca mulatta*). *International Symposium on Pathobiology of Environmental Pollutants*, National Research Council, 339-345, 1979.
- Schantz, S. L., Barsotti, D. A. and Allen, J. R.: Toxicological effects produced in nonhuman primates chronically exposed to fifty parts per trillion 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). *Toxicol. Appl. Pharmacol.* 46:180, 1979 (Abstract).
- Allen, J. R., Lambrecht, L. K. and Barsotti, D. A.: Some general effects of polybrominated biphenyls in nonhuman primates. *J. Am. Vet. Med. Assoc.* 173 11:1485-1489, 1978.
- Lambrecht, L. K., Barsotti, D. A. and Allen, J. R.: Responses of nonhuman primates to a polybrominated mixture. *Environ. Health Perspec.* 23:139-147, 1978.
- Allen, J. R., Barsotti, D. A., Van Miller, J. P., Abrahamson, L. J. and Lalich, J. J.: Morphological changes in monkeys consuming a diet containing low levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Fd. Cosmet., Toxicol.* 15:401-410, 1977.

- Allen, J. R. and Barsotti, D. A.: Responses of infant primates to interuterine and neonatal exposure of polychlorinated biphenyls. American Chemical Society, Proceedings of 11th Great Lakes Regional Meeting, June, 1977 (Abstract).
- Allen, J. R., Barsotti, D. A. and Van Miller, J. P.: Reproductive dysfunction in nonhuman primates exposed to dioxins. Toxicol. Appl. Pharmacol. 41:179, 1977 (Abstract).
- Norback, D. H. and Barsotti, D. A.: Effects of polychlorinated biphenyls in nonhuman primates. Fed. Proc. 365:396, 1977 (Abstract).
- Barsotti, D. A., Marlar, R. J. and Allen, J. R.: Reproductive dysfunctions in rhesus monkeys exposed to low levels of polychlorinated biphenyls (Aroclor 1248). Fd. Cosmet. Toxicol. 14:99-103, 1976.
- Barsotti, D. A. and Allen, J. R.: The association of transplacental and mammary movement of PCBs with infant morbidity and mortality. Amer. J. Path. 82:21a, 1976 (Abstract).
- Allen, J. R. and Barsotti, D. A.: The effects of transplacental and mammary movement of PCBs on infant rhesus monkeys. Toxicology 6:331-340, 1976.
- Allen, J. R., Barsotti, D. A. and Carstens, L. A.: Residual effects of short term, low level exposure of nonhuman primates to polychlorinated biphenyls. Toxicol. Appl. Pharmacol. 30:440-451, 1974.

Dr. Ronald Corderio, M.D., is an internist practicing in Philadelphia, Pennsylvania. His curriculum vitae will be supplied.

Dr. Corderio will testify that he is currently engaged in the private practice of medicine as an internist. He will testify that he personally has examined and/or treated over five hundred Vietnam veterans for complaints related to Agent Orange. He will testify as to the type of interview he has conducted with each veteran, the type of tests that each veteran should have performed, and the clinical significance of positive or negative findings on each of those tests. He will also discuss how toxins, and specifically Agent Orange, can cause changes in each of the tests and what such changes portend for the individual.

Dr. Corderio will next discuss some of the available medical literature in both animals and humans to further validate his own work.

Dr. Corderio will then outline in detail the results obtained from his own extensive investigation into Agent Orange toxicity based upon his examination of more than five hundred veterans, and will present those conclusions which he feels are reasonably appropriate based upon an analysis of his investigative work.

With this material as background, Dr. Corderio will then proceed to present the test results which have been obtained for each court-approved representative veteran plaintiff. He will

interpret each of the test results in terms of those individual plaintiffs.

Finally, he will testify on generic causation and specific proximate causation in relation to each representative veteran plaintiff. He will also testify as to prognosis for each representative veteran plaintiff.

ARTHUR W. GALSTON, Ph.D.

Dr. Galston is Eaton Professor of Botany, Department of Biology, at Yale University. His Curriculum Vitae will be supplied.

Dr. Galston is a plant physiologist and has personally observed the effect of the spraying of Agent Orange on the Vietnam ecosystem, i.e. the devastation of the Vietnamese countryside. Dr. Galston has been in Vietnam on four occasions between 1971 and 1982, and will describe those observations while in Vietnam, with such pictorial evidence as is available.

Dr. Galston will testify to the potential and actual effects of phenoxy herbicides and their contaminants, both in Vietnam and elsewhere, including the United States and Sweden, and other places. The testimony will include the chemistry and the mechanisms of action of such chemicals on plant life.

In addition, Dr. Galston will testify to the fate of Agent Orange and other phenoxy herbicides and their contaminants, especially TCDD, in the environment generally and in Vietnam in particular. Dr. Galston will testify to the persistence of such chemicals on plants, in water, and in soil, such that exposure to the phenoxy herbicides and their contaminants, especially TCDD, by the veterans in sprayed areas in Vietnam is presumed.

The bases or grounds for Dr. Galston's testimony as to any facts and opinions expressed are a review of the scientific literature and his personal research and experience.

Dr. John Garofalo is a immunologist practicing in Philadelphia, Pennsylvania. His curriculum vitae will be supplied.

Dr. Garofalo will testify to the performance of certain tests on the veteran plaintiffs and their wives and children and to the interpretation of those test results. Specifically, he will be conducting phenotyping assay tests for, among others, B-lymphocytes, K cells, T-lymphocytes, T-helper cells, T-cytotoxic cells, and T-suppressor cells. The purpose of these tests is to determine antigen levels, antibody levels, and the presence of a viral defenses and immune surveillance systems, and to identify various types of cells that may be indicators of and/or precursors of malignancy. Not only will the tests determine the presence of such factors, but they will also include functional assays of each.

LENNART HARDELL, M.D.

Dr. Hardell is employed by the University Hospital in its Department of Oncology in Umeå, Sweden, where he specializes in internal medicine and oncology. His work includes diagnosis, treatment, and evaluation of possible causes of cancer, and education of medical students.

Dr. Hardell will testify to several epidemiological studies which he and colleagues have conducted in Sweden. This research includes investigations concerning the relationship between the risk for different types of cancer and exposure to phenoxy herbicides and chlorophenols. The research has been published in the medical and scientific literature.

These studies utilized the case-control study as the vehicle for investigation. Certain methodological aspects, such as selection of cases, selection of controls, assessment of exposure, and statistical methods, were considered; and then utilization was based upon thoroughly considered aspects of bias, all of which were well controlled.

Specifically, these studies, four in number, involved soft tissue sarcomas, malignant lymphomas, and colon cancer. Highly statistically significant risks of soft tissue sarcomas and malignant lymphoma were found, whereas no association was found for colon cancer. In point of fact, the negative finding for colon cancer strongly supports the statistical significance of the increased risk demonstrated for soft tissue sarcomas and malignant lymphomas, i.e. a presumed causal relationship between exposure to phenoxy herbicides and human cancer particularly of soft tissue sarcoma and malignant lymphoma.

Dr. Hardell has also seen in his clinical practice basal cell carcinoma of persons previously exposed to phenoxy herbicides, with no other known confounding variables.

With respect to those cases with soft tissue sarcoma, malignant lymphoma, and basal cell carcinomas, Dr. Hardell will testify that the presumed exposure to Agent Orange caused, in significant part, such neoplastic processes.

The bases for Dr. Hardell's testimony as to various facts and opinion include: educational background; professional training and experience; review of the applicable medical and scientific literature; personal research; and a review of the pertinent medical data of the relevant representative plaintiffs.

MAUREEN C. HATCH, Ph.D.

Dr. Hatch is Assistant Professor of Epidemiology at Columbia University, School of Public Health, in New York City. Her Curriculum Vitae will be supplied.

The subject matter about which Dr. Hatch will testify is reproductive toxicology and its specific applicability to miscarriages and congenital malformations (birth defects) in the wives and children of Vietnam veterans.

Dr. Hatch will testify at length to the data collected in Vietnam regarding untoward pregnancy outcomes. Dr. Hatch is one of two investigators who are to publish that portion of the International Symposium held in Ho Chi Minh City in January, 1983 having to do with reproductive toxicology as a result of exposure to Agent Orange and other phenoxy herbicide spraying in Vietnam.

The results of these data demonstrate a statistically significant increase in certain congenital malformations, e.g. cleft palate, limb deformities, and anencephaly, as a result of paternal mediated reproductive effects. The exposure of the fathers was to the spraying of Agent Orange in Vietnam. The mothers were not exposed.

These human data are coupled with positive, consistent animal data. For example, such studies where males were exposed indicate the following; the male gonads are a target site of 2,3,7,8-TCDD action; at the endocrinological level, there has been demonstrated a major effect, i.e., AHH receptor in male gonads; which very nicely provides a mechanistic linkage; and finally, abnormal biochemical and morphologic characteristics of the sperm have been likewise demonstrated.

ALASTAIR W.M. HAY, Ph.D.

Dr. Hay is a lecturer on Chemical Pathology, Department of Chemical Pathology, Old Medical School, University of Leeds, Leeds, England. His partial Curriculum Vitae is attached.

Dr. Hay will testify to a broad spectrum of matters related to Agent Orange, phenoxy herbicides, and their contaminants, including dioxins, especially 2,3,7,8-TCDD.

Dr. Hay will discuss in detail his knowledge of the various phenoxy herbicides and their contaminants, including but not limited to the various aspects of: chemistry; biochemistry; manufacture and/or production; fate in the environment, animals, and humans; modes of exposure, i.e. absorption, ingestion and inhalation, specifically by the veterans who served in Vietnam; toxicity; and the state of the medical and scientific literature at various times since at least 1957 forward.

The medical and scientific literature, attendance and participation in various symposia, review of various documents of certain defendants, personal research, and experience form the bases of whatever facts and opinions to which Dr. Hay will testify.

Dr. Hay's testimony regarding the medical and scientific literature will include an exposition of the definitions and explanations, and their applicability to the troops exposed in Vietnam, of the phenoxy herbicides and their contaminants, in the following areas: plant physiology; toxicology; neuro-toxicology. both neurological and psychological; epidemiology; immunology; mutagenicity; teratology; reproductive toxicology; and carcinogenicity.

More specifically, the phenoxy herbicides, including Agent Orange, 2,4-D and 2,4,5-T, and their contaminants, including dioxins, especially TCDD are highly toxic, neuro-toxic, immuno-suppressive, teratogenic, potentially mutagenic, and certainly carcinogenic. As a carcinogen, e.g. TCDD, it has no safe level and indeed any single exposure may prove to result in human cancer many years later; said in another way, there is no "no effect" level that can be established.

Dr. Hay will testify to examples of the grounds which support the above, including: knowledge of spraying Agent Orange, especially its effect on the Vietnamese countryside; the purpose and historical tracing of the animal studies; historical tracing of the human data, including the various industrial incidents since 1949; references to specific documents, such as the EPA Dioxin document (presently in Draft form); various cancer epidemiology; pertinent teratology epidemiology; various studies of the Vietnamese, especially in area of reproductive toxicology; and those reports of the symptoms and diagnoses of the U.S. Vietnam veterans.

Name: Alastair Watt Macintyre HAY
D.O.B.: 21 April 1947
Marital Status: Married
Children: 1 son (Tom)
Place of Birth: Glasgow, Scotland
Nationality: British
Degrees: B.Sc. (Hons), Chemistry IIA - London 1969
Ph.D., Biochemistry, London 1973
Home Address: School House,
Arthington Lane,
Arthington,
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Work Address: Department of Chemical Pathology,
Old Medical School,
University of Leeds,
Leeds LS2 9NL
England.
Place of Secondary Education: Gifford Technical High School,
Bulawayo,
Zimbabwe (formerly Rhodesia)
Present Appointment: University lecturer in Chemical Pathology
since April 1979 (University of Leeds)
Leeds, England.
Former Appointments: Research Fellow - Zoological Soc. of London
September 1972 - November 1977
Research Fellow - University of Leeds,
Department of Animal Physiology and Nutrition
December 1977 - March 1979

PUBLICATIONS

Books

- (i) Alastair Hay. The Chemical Scythe: Lessons of 2,4,5-T and Dioxin. Plenum Press. 265pp. August 1982
- (ii) Sean Murphy, Alastair Hay and Steven Rose. No Fire: No Thunder. The threat of chemical and biological warfare. Pluto Press. (To be published in January 1984). 135pp.

Scientific Papers

Some 50 scientific papers including:

- (i) Hay, A.W.M., Mawer, E.B., Hassan, A.G., Crawford, M.A., & Stevens, P.A. The role of essential fatty acids in vitamin D dependent calcium absorption in the intestine. Proc. of 5th Vitamin D Workshop. Williamsburg USA now in Vitamin D, Chemical, Biochemical and Clinical Endocrinology of Calcium

Metabolism. Walter de Gruyter. Berlin. 1982 pp309-311.

- (ii) Hay, Alastair. Vitamin D: Sunlight and precursors. Nature. 297, 364 (1982)
- (iii) Hay, A. Herbicides, Trichlorophenols and soft tissue sarcomas. Lancet I, 1240, (1982).
- (iv) Hay, A. It kills weeds, but what about people? New Scientist. 94, No.1314. pp158-161 (1982).
- (v) Hay, A., Murphy, S., Robinson, J.P., and S. Rose. The poison cloud hanging over Europe. New Scientist. 93, No.1296 pp630-635 (1982).
- (vi) Hay, Alastair. New Pathways for chlorinated dioxins. Nature, 294, 514-515 (1981).
- (vii) Hay, A. Experimental Toxicology and cytogenetics: an overview. In "Herbicides and War" to be published by Stockholm International Peace Research Institute. (1984) A. Westing, Ed.
- (viii) Hay, A. The Mutagenic properties of 2,3,7,8-Tetrachloro-dibenzo-p-dioxin in "Chlorinated Dioxins and Dibenzofurans in the Total Environment. Vol II" Edit. by Keith, L.H. et al to be published in 1984.

Other Publications

I have written some 90 odd articles for the News, News and Views and books review section of the scientific journal Nature since 1976.

Dr. Herbert Kaye, Ph.D., is a psychologist in the Department of Psychology at the State University of New York at Stonybrook, Long Island and a visiting Associate Professor in the Department of Psychiatry at New York University Medical Center. His curriculum vitae will be supplied.

Dr. Kaye will testify concerning the significance of a battery of quantitative neurophysiological tests called neurometrics will which be performed on the veteran, wife and children plaintiffs. The procedures were developed in part by Dr. Kaye in conjunction with medical and psychological researchers from this and other countries. He will testify that neurometrics, on which he has written extensively, is a sophisticated battery of electrical tests in use for about fifty years, which are highly efficient in determining cortical EEG and evoked responses.

Dr. Kay will explain the model used in the computerization against which the test results are compared and will explain how deviations from normal produce certain effects.

Dr. Kaye will also discuss the mechanism by which toxins produce these altered responses, and what effect those altered responses have upon the individual veterans at present, and the prognosis for any additional changes or deterioration in the future based upon an assumed bioaccumulation of the toxic materials in the system. In doing so, he will rely on his experience in diagnosing many Vietnam veterans exposed to Agent Orange.

RONALD H. KERMAN, Ph.D.

Dr. Kerman is Associate Professor, and Chief, Cellular Immunology, Clinical Immunology Laboratories, the University of Texas Medical School at Houston. His Curriculum Vitae is attached.

Dr. Kerman will testify that 2,3,7,8-TCDD in particular causes, among others, immuno-suppressive effects, as reported in the literature regarding the various animal species studies. Specifically, TCDD has been demonstrated to suppress T-cell mediated immunity in such species. This effect likewise has been demonstrated in humans by Bekesi, specifically an alteration of mature T-cells.

Dr. Kerman will testify that the special scientific discipline involved is immuno-toxicology which has been defined as "the undesirable effects of an inappropriate response of the immune system". The bases for the facts and opinions to which Dr. Kerman will testify include a review of the applicable medical and scientific literature, his educational and professional background, and his work in connection with the Texas Agent Orange Study.

Dr. Kerman will discuss the following in his testimony: the immune system, with its organic, cellular, and humoral components - most especially with regard to the latter, T-helper cells, B-cells, plasma cells and immunoglobulin production; immune response, both beneficial and harmful; the various experimental studies, particularly those demonstrating atrophy of the thymus, weight loss, depletion of lymphoid organs, lymphopenia, cutaneous type delayed hypersensitivity (skin thickness) and altered bacterial immunity.

Dr. Kerman will testify that on the basis of the above a person exposed to TCDD might have increased predisposition to increased infection and neoplasm (cancer).

CURRICULUM VITAE

Ronald H. Kerman, Ph.D.

DATE OF BIRTH: June 10, 1943

PLACE OF BIRTH: Chicago, Illinois

NATIONALITY: U.S. Citizen

SEX: Male

EDUCATION:

1965	University of Illinois, B.S. (with Honors)
1967	University of Illinois, M.S.
1969	University of Illinois, Ph.D. in Immunology

HONORS:

1965	Bachelor of Science with General Honors in the College
1967-1969	Recipient of Public Health Service Predoctoral Traineeship
1967	Phi Sigma National Biological Honorary
1969-1971	Recipient of Public Health Service Postdoctoral Traineeship
1970	Society of Sigma Xi

RESEARCH AND PROFESSIONAL EXPERIENCE:

1983-	Associate Professor Department of Pathology, and Chief, Cellular Immunology, Clinical Immunology Laboratories, The University of Texas Medical School at Houston
1981-	Associate Professor Department of Surgery, and Head, Histocompatibility and Immune Evaluation Laboratories, Division of Organ Transplantation, The University of Texas Medical School at Houston
1977-	Member, Program in Immunology, Graduate School of Biomedical Sciences, The University of Texas Health Science Center at Houston
1977-1980	Assistant Professor Department of Surgery, and Head, Histocompatibility and Immune Evaluation Laboratories, Division of Organ Transplantation, The University of Texas Medical School at Houston
1974-1977	Assistant Professor Department of Surgery, Loyola University Stritch School of Medicine, Maywood, Illinois
1973-1977	Research Immunologist Chief, Immunobiology Research Laboratory, Research Service, V. A. Hospital, Hines, Illinois
1972-1973	Assistant Professor Department of Microbiology, Jefferson Medical College
1969-1971	Postdoctoral Fellow, (Immunology) Children's Hospital of Philadelphia and The University of Pennsylvania School of Medicine

**PROFESSIONAL
SOCIETIES:**

The Transplantation Society (Editorial Board, Transplantation and Member, Symposium Committee)
American Association of Immunologists
American Association for Cancer Research
New York Academy of Sciences
American Society of Transplant Physicians (Member, and Vice Chairman, Scientific Studies Committee)
Society for Experimental Biology and Medicine
International Society for Heart Transplantation
American Association for the Advancement of Science
American Society for Histocompatibility and Immunogenetics (Chairman, Finance and Audit Committee, and Member, Laboratory Accreditation Committee)

**RESEARCH
INTERESTS:**

Immunologic response to allotransplantation and malignancy
Evaluation of immunocompetency

RESEARCH SUPPORT:

1974-1978	Co-principal Investigator: Bronchogenic Carcinoma: Immunologic Profile, Radio and Immunotherapy - V.A. Medical Research Grant No. MRIS-8121-08. \$213,000
1976-1979	Co-principal Investigator: Immunotherapy Adjuvant to Radiotherapy of Head and Neck Cancer - V.A. Medical Research Grant No. MRIS-8121-06. \$73,814
1976-1980	Co-principal Investigator: Factors Influencing Immunocompetence in Human Transplantation - V.A. Medical Research Grant No. MRIS-3068. \$68,770
1977-1978	Principal Investigator: Functional and Surface Receptor Differences of Human T-lymphocyte Subpopulations - General Research Support Funds, The University of Texas Medical School at Houston. \$5,000
1977-	Principal Investigator: The Role of HLA Typing in Renal Transplantation, ESRD Program, No. 450068. \$377,400 (last year)
1977-	Principal Investigator: Immune Monitoring for the Diagnosis of Renal Allograft Rejection, ESRD Program, No. 450068. \$544,800 (last year)
1983-1984	Principal Investigator: Immune Evaluation of Veterans Exposed to Agent Orange. Texas Veterans Agent Orange Assistance Program, IAC(83-84)1266. \$93,352

OTHER ACTIVITIES:

Special Consultant in Immunology to the Epidemiology and Disease Control Study Section, NIH
Consultant in Immunology and Histocompatibility Testing to the Department of Laboratory Medicine, M.D. Anderson Hospital and Tumor Institute
Editorial Board, Transplantation
Review of manuscripts for the journal Human Immunology
Review of manuscripts for the journal Transplantation
Review of manuscripts for the journal Heart Transplantation
Book reviewer for Journal of American Medical Association
Literature Reviewer for The American Association of Clinical Histocompatibility Testing -- AACHTion News

Grant Reviewer for the Kidney Foundation of Canada
Grant Reviewer in Transplantation Immunology for The
March of Dimes - Birth Defects Foundation
Outside Reviewer of Research Proposals in Immunology for
the Research and Development Committee, The Vet-
erans Administration Research Service
Invited Participant (as a testing laboratory) in The Third
American HLA Workshop
Invited Participant (as a testing laboratory) in The Eighth
International Histocompatibility Workshop "Relevance of
DR typing to renal allograft survival"
Invited Participant (as a testing laboratory) in The Inter-
national Transfusion and Transplantation Workshop
Invited Participant (as a testing laboratory) for the Ninth
International Histocompatibility Workshop
Invited Presenter at an NIH Workshop, "The Biological
Relevance of Immune Suppression as Induced by Genetic,
Therapeutic and Environmental Factors"
Invited Participant (as a testing laboratory) in the Inter-
national Collaborative Transplant Study
Laboratory Inspector for Clinical Laboratory Accreditation
in Histocompatibility for The American Society for His-
tocompatibility and Immunogenetics and The College of
American Pathologists
Chairman, Finance and Audit Committee for The American
Society for Histocompatibility and Immunogenetics
Member, Symposium and Affiliations Committee, The
Transplantation Society
Member and Vice-Chairman, Scientific Studies Committee,
American Society of Transplant Physicians
Member, Acquired Immune Deficiency Syndrome (AIDS)
Working Group for the Houston Area
Chairman, Organizing Committee and Host for The Fourth
International Immune Monitoring Symposium: Im-
munological Evaluation and Monitoring of the Transplant
Recipient (1983)
Member, Organizing Committee for the International Sym-
posium on Relevant Immunological Factors in Clinical
Kidney Transplantation, Heidelberg, West Germany, 1985

Member, UTMSH Admissions Interview Committee
Member, UTMSH Admissions Committee
Member, Medical Review Board, Organ Transplantation
Center, UTMSH
Member, Committee on Subject Selection for The University
of Texas System Agent Orange Study
Member, Steering Committee, Program in Immunology,
UT-GSBS
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UT-GSBS
Course Director, "Methods in Cellular Immunology," a Pro-
gram in Immunology Course, UT-GSBS

BIBLIOGRAPHY

Ronald H. Kerman, Ph.D.

Publications

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2. Kerman, R., Segre, D. and Myers, W.L.: The role of immune and natural specific antibodies in immunologic paralysis and immunity of mice to pneumococcal polysaccharide Type III. *J. Immunol.* 104:655, 1970.
3. Kerman, R. and Segre, D.: Anti-pneumococcal polysaccharide Type III hemolytic plaques in mice: Cellular response in immunity and immunologic paralysis. *J. Immunol.* 104:1262, 1970.
4. Kerman, R. and Harris, T.N.: Resistance to denaturation by periodate of a dialyzable histocompatibility antigen. *Proc. Soc. Exp. Biol. Med.* 141:179-183, 1972.
5. Kerman, R.H., Harris, T.N. and Harris, S.: Preparation of a dialyzable histocompatibility antigen from balb/c mice. *Proc. Natl. Acad. Sci.* 69:223-227, 1972.
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9. Stefani, S., Kerman, R. and Abbate, J.: Serial studies of immunocompetence of patients undergoing radiotherapy for malignancies of the head and neck. *Am. J. Roentgenol.* 126:880-886, 1976.
10. Kerman, R.H. and Geis, W.P.: Total and active T-cell kinetics in renal allograft recipients. *Surgery* 79:398-407, 1976.
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63. Kerman, R.H.: Editorial: Influence of HLA A, B and DR antigen matching in transfused cadaver renal transplant patients. *Cleveland Clinic Quarterly* 50:216-217, 1983.
64. Kerman, R.H., Flechner, S., Van Buren, C.T., Payne, W. and Kahan, B.D.: Immunological monitoring of renal allograft recipients treated with cyclosporine. *Transpl. Proc.* 16:2302-2305, 1983.

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68. Flechner, S.M., Van Buren, C.T., Kerman, R., and Kahan, B.D.: The effect of conversion from cyclosporine to azathioprine immunosuppression for intractable nephrotoxicity. *Transpl. Proc.*, 1983 (In press).
69. Flechner, S.M., Kerman, R.H., Van Buren, C., and Kahan, B.D.: Successful transplantation of cyclosporine treated haploidentical living related renal recipients without blood transfusions. *Transplantation*, 1984 (In press).
70. Kerman, R.H., Van Buren, C.T., Flechner, S.M., and Kahan, B.D.: Correlation of visual, ⁵¹Cr-release, and flow cytometry crossmatch results to graft survival. *Transpl. Proc.*, 1984 (In press).
71. Rogers, A.J., Kerman, R.H., and Kahan, B.D.: The pharmacokinetic and immunobiological activity of cyclosporine in man. *Transpl. Proc.*, 1984 (In press).
72. Van Buren, C.T., Flechner, S.M., Kerman, R.H., Vaughn, W., and Kahan, B.D.: Cyclosporine improves outcome in high risk cadaveric renal allograft recipients. *Transpl. Proc.* 1984 (In press).
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Abstracts and Presentations

1. Kerman, R., Clark, J. and Wheelock, E.F.: Mononuclear infiltrate into an air pouch: A new in vitro cell mediated immune assay. Fed. Proc. 32:973, Atlantic City, New Jersey, April 1973.
2. Wheelock, E.F., Kerman, R.H., Clark, J. and Toy, S.: Cell mediated immunity in dormant friend virus infections. Proc. Am. Assoc. Cancer Res. 14:68, Atlantic City, New Jersey, April 1973.
3. Stefani, S., Kerman, R. and Abbate, J.: Serial studies of immunocompetence in head and neck cancer patients undergoing radiotherapy. Abstract, American Radium Society Meeting, San Juan, Puerto Rico, May 1975.
4. Kerman, R., Stefani, S. and Geis, W.P.: Total and active T-cell dynamics in renal allograft recipients. Abstracts of the American Society Transplant Surgeons, Chicago, Illinois, May 1976.
5. Kerman, R., Stefani, S., Smith, R., Ezdinli, E. and Geis, W.P.: Immunological evaluation of patients with solid tumors and hematological malignancies. Presented at the 1975 Cancer Symposium, Neoplasm Immunity: Mechanism, Chicago, Illinois, September 1975.
6. Stefani, S., Kerman, R. and Abbate, J.: Immunological evaluation of patients with bronchogenic carcinoma. Presented at the American Society of Therapeutic Radiology, San Francisco, California, October 1975.
7. Stefani, S. and Kerman, R.: Determination and prognostic value of immunocompetence in patients with lung cancer treated by radiotherapy. Abstracts of the Third International Symposium on Detection and Prevention of Cancer, New York, April 1976.
8. Geis, W.P., Vaz, A.L. and Kerman, R.H.: Steroid sparing effect of ATG in high risk renal allograft survival. Presented at the American Society of Transplant Surgeons Meeting, Chicago, Illinois, May 1976.
9. Kerman, R.H., and Geis, W.P.: Prognostic significance of the active T-cell in renal allograft survival. Presented at the American Society Transplant Surgeons Meeting, Chicago, Illinois, May 1976.
10. Stefani, S. and Kerman, R.: BCG and radiotherapy in bronchogenic carcinoma: Preliminary report. Presented at the American Society of Therapeutic Radiology, Atlanta, Georgia, October 1976.
11. Kerman, R. and Geis, W.P.: T-RFC monitoring of CMI events in renal allograft recipients. Presented at the Sixth International Congress of the Transplantation Society Special Session Immunological Monitoring of Transplant Recipient, New York, August 1976.
12. Kerman, R. and Stefani, S.: Radio and immunotherapy of lung cancer: A preliminary report. Presented at the 1977 Chicago Symposium: Immunotherapy of Solid Tumors, Chicago Illinois, February 24-25, 1977.

13. Stefani, S. and Kerman, R.H.: Relevance of immunologic analysis for patients with inoperable lung cancer treated by radiotherapy. Presented at an NCI sponsored Symposium "The Second Conference on Lung Cancer Treatment," at Airlie House, Virginia, May 22-24, 1977.
14. Kerman, R.H., Ing, T.S., Hano, J.E. and Geis, W.P.: Prognostic significance of active T-RFC in renal allograft survival. Abstracts of First International Symposium on Immunological Monitoring of the Transplant Recipient. London, Ontario, June 8-10, 1977.
15. Kerman, R.H. and Geis, W.P.: T-RFC monitoring of CMI events in renal allograft recipients. Abstracts of First International Symposium on Immunological Monitoring of the Transplant Recipient. London, Ontario, June 8-10, 1977.
16. Ezdinli, E., Simonson, K., Icli, F. and Kerman, R.: Effects of single vs. multiple agent therapy on cell-mediated immunity. Proc. Amer. Assoc. Clin. Oncol. 18:355, Denver, Colorado, May 1977.
17. Geis, W.P., Iwatsuki, S., Molnar, Z., Giacchino, J.L., Kerman, R.H., Ing, T.S. and Hano, J.E.: Immunoblastic pseudo-lymphoma in renal allograft recipients. Presented at the Western Surgical Association, Las Vegas, Nevada, November 15, 1977.
18. Kerman, R.H., Roesler, H. and Kahan, B.D.: Specific stimulation of active T-Rosette forming cells by 3M KCl solubilized antigen. Fed. Proc., 1978. Presented at the FASEB-AAI Meeting, Atlanta, Georgia, June 1978.
19. Kerman, R.H., Floyd, M., Conner, W., McConnell, B.J., McConnell, R. and Kahan, B.D.: Correlation of active T-RFC and spontaneous blastogenesis with decreased renal allograft function. Abstracts of the American Association for Clinical Histocompatibility Testing, Boston, Massachusetts, June 1978.
20. Kerman, R.H., Roesler, H. and Kahan, B.D.: Increased active T-RFC with in vitro stimulation by soluble donor antigen. Abstracts of the Amer. Assoc. of Clin. Histocomp. Testing, Boston, Massachusetts, June 1978.
21. Kerman, R.H., Floyd, M., Conner, W., McConnell, R., McConnell, B.J., Van Buren, C.T. and Kahan, B.D.: Combined immunological and radionuclide techniques to monitor renal allograft rejection. Presented at the VII International Congress of The Transplantation Society, Rome, Italy, September 1978.
22. Kerman, R.H.: Invited speaker to a special workshop "Immunological Monitoring of the Transplant Patients", VII International Congress of The Transplantation Society, Rome, Italy, September 1978.
23. Kahan, B.D., Kerman, R. and McConnell, R.: Combination of immunological and radionuclide techniques diagnoses allograft rejection. Presented at the American College of Surgeons, San Francisco, California, October 1978.
24. Michelson, J., McConell, Kerman, R. and Kahan, B.: Association of acute rejection episodes in renal transplant patients with scored results of computer analyzed data. Presented at the Southwest Society of Nuclear Medicine Meeting, March 16, 1979, San Antonio, Texas.

25. Kerman, R.H., Macek, C. and Kahan, B.D.: Increase in 3 different E-rosette markers on human T cells following PHA activation. Fed. Proc. 38 (No. 3, Part II):1282. Presented at the Annual Meeting of The American Association of Immunologists, Dallas, Texas, April 1979.
26. Kerman, R.H.: Immunological considerations in renal transplantation. Clinical Oncology Grand Rounds, M.D. Anderson Hospital and Tumor Institute, September 1979.
27. Kerman, R.H. and Kahan, B.D.: Assessment of immune parameters of transplant recipients on immunosuppressive therapy. Presented at an NIH Workshop on "The Biological Relevance of Immune Suppression as Induced by Genetic Therapy and Environmental Factors," Williamsburg, Virginia, November 1979.
28. Invited participant in a working cadre for the NIH to develop a "Consensus On Immunotoxicology" for the National Toxicology Program, November 1979, Research Triangle Park, N.C., NIEHS, NIH.
29. Kerman, R.H.: Histocompatibility testing in transplantation. Pathology Grand Rounds, St. Luke's Hospital, January 1980.
30. Van Buren, C.T., Kerman, R.H. Van Buren, D. and Kahan, B.D.: Correlation of immune responsiveness with nutritional indices in chronic renal failure patients. Presented at the American Society for Parenteral and Enteral Nutrition, Annual Meeting, Chicago, Illinois, January - February 1980.
31. Kerman, R.H.: Immune monitoring of renal allograft recipients. Surgical Grand Rounds, University of Miami School of Medicine, March 1980.
32. Kerman, R.H.: Pre- and postoperative immune monitoring of allograft recipients. Medical Grand Rounds, Division of Dialysis and Transplantation, Children's Hospital of Los Angeles, April 1980.
33. Kerman, R.H. and Semchuk, R.: Delineation of a radioresistant T cell subpopulation. Fed. Proc. 39(3):945. Presented at the Annual Meeting of The American Association of Immunologists, Anaheim, California, April 1980.
34. Kerman, R.H.: Effect of heat on the ability of human T cells to express the active T and total T receptors. Fed. Proc. 39(3):1137. Presented at the Annual Meeting of The American Association of Immunologists, April 1980, Anaheim, California.
35. Kerman, R., Peddada, L. and Kahan, B.D.: Correlation of hyperacute rejection with LDA and CDA vs. ^{51}Cr -labeled donor T and B cell targets. Presented at The American Association for Clinical Histocompatibility Testing, St. Louis, Missouri, April 1980.
36. Kerman, R., Floyd, M., Van Buren, C.T. and Kahan, B.D.: Improved allograft survival of strong responder-high risk cadaver recipients with adjuvant immunosuppressive therapy. Presented at the Annual Meeting of The American Association for Clinical Histocompatibility Testing, April 1980.

37. Kerman, R., Conklin, R., Cahall, D. and Kahan, B.D.: Association of cytomegalovirus and renal allograft survival. Presented at the meeting of the American Association for Clinical Histocompatibility Testing, St. Louis, Missouri, April 1980.
38. Kerman, R., Floyd, M., Van Buren, C.T. and Kahan, B.D.: Delineation of donor specific and nonspecific pretransplant immunocompetence as a predictor for LRD allograft survival. Presented at the Meeting of The American Association of Clinical Histocompatibility Testing, St. Louis, Missouri, April 1980.
39. Kerman, R.H., Floyd, M., Van Buren, C.T. and Kahan, B.D.: Improved allograft survival of strong immune responder-high risk recipients with adjuvant immuno-suppressive therapy. Presented at the annual meeting of The American Society of Transplant Surgeons, Chicago, Illinois, May 1980.
40. Kerman, R.H., Floyd, M., Van Buren, C.T. and Kahan, B.D.: Correlation of nonspecific immune monitoring of renal allograft recipients with rejection and impaired renal function. Presented at the Annual Meeting of The American Society of Transplant Surgeons, Chicago, Illinois, May 1980.
41. Kerman, R., Floyd, M., Van Buren, C.T. and Kahan, B.D.: Prolonged allograft survival of strong pretransplant immune responders treated with ATG. Presented at the VIIIth International Congress of The Transplantation Society, Boston, Massachusetts, June 1980.
42. Kerman, R., Floyd, M., Van Buren, C.T. and Kahan, B.D.: Prediction of renal allograft survival based on pretransplant non-specific immunocompetence. Presented at The Second International Symposium on Immunological Monitoring of the Transplant Recipient, Leiden, The Netherlands, September 1980.
43. Kerman, R.H., Floyd, M., Van Buren, C.T., McConnell, B.J., McConnell, R. and Kahan, B.D.: Delineation of renal allograft rejection and impaired renal function by serial measurement of non-specific immune parameters. Presented at The Second International Symposium on Immunological Monitoring of the Transplant Recipient, Leiden, The Netherlands, September 1980.
44. Kerman, R.H. and Kahan, B.D.: Increased expression of the active T-RFC receptor as a measure of allosensitization following in vitro stimulation of recipient lymphocytes by soluble donor HLA antigens. Presented at The Second International Symposium on Immunological Monitoring of the Transplant Recipient, Leiden, The Netherlands, September 1980.
45. Kerman, R.H., Floyd, M., Van Buren, C.T. and Kahan, B.D.: Correlation of HLA A,B and DR typing to cadaveric and living related renal allograft survival. Presented at The Second International Symposium on Immunological Monitoring of the Transplant Recipient, Leiden, The Netherlands, September 1980.
46. Floyd, M., Kerman, R., Woo, J., Van Buren, C.T. and Kahan, B.D.: Relationships of beta-2-microglobulin metabolism, immune reactivity and renal allograft rejection. Presented at The Second International Symposium on Immunological Monitoring of the Transplant Recipient, Leiden, The Netherlands, September 1980.

47. Kerman, R.H.: Immune monitoring of renal allograft recipients. Surgical Grand Rounds, University of Chicago, June 1981.
48. Kerman, R.H., Van Buren, C.T., LeGrue, S.J. and Kahan, B.D.: Immunopharmacological monitoring of cadaveric renal allograft recipients receiving Cyclosporin A. Presented at the Annual Meeting of the American Society of Transplant Surgeons, Chicago, Illinois, June 1981.
49. Kerman, R.H., Conklin, R., Cahall, D., Van Buren, C.T. and Kahan, B.D.: CMV and renal allograft rejection. Presented at a Symposium on Host Defenses to Intracellular Pathogens, Franklin Plaza Hotel, Philadelphia, Pennsylvania, June 1981.
50. Schoenberg, L.P., Kahan, B.D. and Kerman, R.H.: The use of Cyclosporin A as immunosuppressive medication in renal transplantation. Presented at The National Kidney Foundation, Inc., Washington, D.C., November 1981. Amer. J. Kidney Diseases, Program for Clinical Dialysis and Transplantation Forum, p. 29.
51. Ettenger, R., Kerman, R., Arnett, J., Jordan, S., Warshaw, B., Harris, R., Wassner, S. and Fine, R.: Sensitization following donor-specific transfusions for live-related renal transplantation. American Society of Nephrology, Washington, D.C., November 1981.
52. Flechner, S., Boileau, M., Payne, W., Van Buren, C., Kerman, R. and Kahan, B.: The use of Cyclosporin A in strong immune responder, high risk renal transplant recipients. American Urological Association, Kansas City, Kansas, 1982.
53. Kerman, R., Van Buren, C., Payne, W., Flechner, S., Agostino, G., Conley, S., Brewer, E. and Kahan, B.: Influence of blood transfusions on immune responsiveness. Presented at The Transfusion and Transplantation Conference, Los Angeles, California, January - February 1982.
54. Agostino, G., Kahan, B.D. and Kerman, R.H.: Suppression of mixed leucocyte culture using mononuclear leukocytes from normals, uremics and allograft recipients. Presented at the Annual Meeting of The American Association of Immunologists, FASEB, New Orleans, Louisiana, April 1982.
55. Agostino, G.J., Kahan, B.D. and Kerman, R.H.: Measurement of suppressor cell status in potential allograft recipients. Presented at the Annual Meeting of The American Association of Clinical Histocompatibility Testing, San Francisco, California, April 1982.
56. Kerman, R.H.: Invited presenter at two workshops on 1) Immune monitoring of allograft recipients and 2) The effect of transfused blood and blood products on uremic hosts. Presented at the Annual Meeting of The North American Transplant Coordinators Organization, San Antonio, Texas, May 1982.
57. Kerman, R.H., Van Buren, C., Flechner, S., Agostino, G., Conley, S., Brewer, E. and Kahan, B.D.: The influence of pretransplant blood transfusions from random donors on immune parameters affecting cadaveric allograft survival. Presented at The Annual Meeting of The American Society of Transplant Surgeons, Chicago, Illinois, June 1982.

58. Agostino, G., Kahan, B.D. and Kerman, R.H.: Suppression of mixed leucocyte culture using leucocytes from normal individuals, uremic individuals, and allograft recipients. Presented at The Annual Meeting of The American Society of Transplant Surgeons, Chicago, Illinois, June 1982.
59. Kerman, R.H.: Invited presenter at a workshop on "Human T lymphocyte subpopulations: Their role in rejection and immunosuppression." Presented at the International Congress of The Transplantation Society, Brighton, England, August 1982.
60. Kerman, R.H.: Invited presenter at a workshop on "Mechanisms responsible for blood transfusion effects." Presented at The International Congress of The Transplantation Society, Brighton, England, August 1982.
61. Ettenger, R.B., Kerman, R., Jordan, S.C., Warshaw, B.L., Harris, R. and Fine, R.: Sensitization after donor-specific transfusions for live-related renal transplantation. Presented at The International Congress of The Transplantation Society, Brighton, England, August 1982.
62. Van Buren, C.T., Kerman, R.H., Agostino, G., Flechner, S. Payne, W. and Kahan, B.D.: Effect of cyclosporine on immunoregulatory cells of renal allograft recipients. Presented at The International Congress of The Transplantation Society, Brighton, England, August 1982.
63. Kerman, R.H., Van Buren, C.T., Payne, W., Flechner, S. and Kahan, B.D.: Monitoring T cell subsets and immune events in renal allograft recipients. Presented at The International Congress of The Transplantation Society, Brighton, England, August 1982.
64. Flechner, S., Kerman, R., Van Buren, C.T., Payne, W. and Kahan, B.D.: The use of cyclosporine and prednisone for high MLC haploidentical living related renal transplants. Presented at The International Congress of The Transplantation Society, Brighton, England, August 1982.
65. Agostino, G., Kahan, B.D. and Kerman, R.: Detection of nonspecific suppressor cells from normal individuals, uremic patients and allograft recipients. Presented at The International Congress of The Transplantation Society, Brighton, England, August 1982.
66. Kerman, R.H., Agostino, G., Van Buren, C.T., Payne, W., Flechner, S., Conley, S., Brewer, E. and Kahan, B.D.: Effect of blood transfusions on graft survival and immune responsiveness. Presented at The International Congress of The Transplantation Society, Brighton, England, August 1982.
67. Kahan, B.D., Kerman, R., Payne, W.D., Flechner, S. and Van Buren, C.T.: Immunopharmacologic studies of cyclosporine-treated renal allograft recipients. Fifth Tripartite Meeting, Society of University Surgeons, Salzburg, Austria, September 1982.

68. Kerman, R.H., Flechner, S., Van Buren, C.T., Payne, W., and Kahan, B.D.: Cyclosporine improves allograft survival in immunologically high-risk renal allograft recipients. Presented at the Third International Immunological Monitoring Symposium, Key Biscayne, Florida, November 1982.
69. Kerman, R.H., Van Buren, C.T., Payne, W., Flechner, S., and Kahan, B.D.: Detection of host presensitization to donor alloantigens utilizing a comprehensive immune crossmatch. Presented at the Third International Immunological Monitoring Symposium, Key Biscayne, Florida, November 1982.
70. Kerman, R.H., Payne, W., Van Buren, C.T., Flechner, S., and Kahan, B.D.: Immune monitoring of renal allograft recipients treated with cyclosporine or azathioprine using donor-specific and nonspecific assays as well as monoclonal T cell reagents. Presented at the Third International Immunological Monitoring Symposium, Key Biscayne, Florida, November 1982.
71. Kerman, R.H.: Invited plenary speaker at the First Annual Meeting of The American Society of Transplant Physicians, "Optimizing immunosuppression: Mode of action of cyclosporine." Chicago, December 1982.
72. Kerman, R.H., Van Buren, C.T., Payne, W., Flechner, S., and Kahan, B.D.: Cyclosporine improves allograft survival in immunologically high-risk renal allograft recipients. Presented at The Annual Meeting, National Kidney Foundation, Clinical Dialysis and Transplant Forum, Chicago, December 1982.
73. Kerman, R.H.: Role of immune evaluation in clinical medicine. Clinical Immunology Grand Rounds, The Children's Memorial Hospital, Chicago, Illinois, December 1982.
74. Kerman, R.H.: Immunologic effects of toxic materials. Presented at Toxicology - Clinical Update, University of Texas Medical Branch, Galveston, Texas, January 1983.
75. Kerman, R.H.: Cyclosporine improves allograft survival in immunologically high risk renal allograft recipients. Presented at Pathology Grand Rounds, University of Pittsburgh School of Medicine, February 1983.
76. Kerman, R.H.: Immune evaluation of renal failure patients and allograft recipients. Presented at Surgical Grand Rounds, St. Louis University Medical Center, St. Louis, Missouri, March 1983.
77. Kerman, R.H.: Immunological evaluation of hemophiliacs. Presented at a Symposium on Current Problems in the Management of Hemophiliac Complications, Houston, Texas, April 1983.
78. Flechner, S., Kerman, R.H., Van Buren, C.T., Payne, W., and Kahan, B.D.: Successful transplantation of high mixed lymphocyte culture haplo-identical living related donors using cyclosporine and prednisone. Presented at the Annual American Urological Association, Las Vegas, Nevada, April 1983.
79. Kerman, R.H., Flechner, S., Van Buren, C.T., Payne, W., and Kahan, B.D.: Immunological monitoring of renal allograft recipients treated with cyclosporine. Presented at The First International Congress on Cyclosporine, Houston, Texas, May 1983.

80. Van Buren, C., Kerman, R., Agostino, G., Flechner, S., Payne, W.D., and Kahan, B.: Effect of cyclosporine on immunoregulatory cells of renal allograft recipients. Presented at The First International Congress on Cyclosporine, Houston, Texas, May 1983.
81. Kahan, B.D., Van Buren, C., Flechner, S., Payne, W.D., and Kerman, R.: Improved outcome of 150 renal allografts in immunologically high risk recipients treated with cyclosporine. Presented at The First International Congress on Cyclosporine, Houston, Texas, May 1983.
82. Flechner, S.M., Van Buren, C., Kerman, R.H., and Kahan, B.D.: The nephrotoxicity of cyclosporine in renal transplantation. Presented at The First International Congress on Cyclosporine, Houston, Texas, May 1983.
83. Flechner, S.M., Van Buren, C.T., Kerman, R., and Kahan, B.D.: The effect of conversion from cyclosporine to azathioprine immunosuppression for intractable nephrotoxicity. Presented at The First International Congress on Cyclosporine, Houston, Texas, May 1983.
84. Kerman, R.H., Flechner, S., Van Buren, C.T., Payne, W., and Kahan, B.D.: Cyclosporine immunosuppression overcomes immunologic risk factors for recipients of cadaveric renal allografts. Presented at the Annual Meeting of The American Society of Transplant Physicians, Chicago, Illinois, June 1983.
85. Flechner, S.M., Kerman, R.H., Van Buren, C.T., and Kahan, B.D.: The high risk haploidentical living related recipient: Transplantation without blood transfusions and steroid withdrawal using cyclosporine. Presented at the Annual Meeting of The American Society of Transplant Physicians, Chicago, Illinois, June 1983.
86. Kerman, R.H.: Relationship of immunocompetence of hemophiliac patients and acquired immune deficiency syndrome (AIDS). Presented at the Gulf Coast Hemophilia Chapter Meeting, Houston, Texas, October 1983.
87. Kerman, R., Van Buren, C.T., Flechner, S., and Kahan, B.D.: Correlation of visual, ^{51}Cr -release and flow cytometry crossmatch results to graft survival. Presented at The Fourth International Symposium: Immune Monitoring of The Transplant Recipient, Houston, Texas, November 1983.
88. Rogers, A.J., Kerman, R.H., and Kahan, B.D.: The pharmacokinetic and immunobiological activity of cyclosporine in man. Presented at The Fourth International Symposium: Immune Monitoring of The Transplant Recipient, Houston, Texas, November 1983.
89. Kerman, R.H., Manner, C., Ford, K., and Hoots, K.: Comprehensive immune evaluation of 78 hemophiliacs. Presented at the New York Academy of Sciences Symposium on Acquired Immune Deficiency Syndrome, New York, New York, November 1983.
90. Kerman, R., Van Buren, C.T., Flechner, S.M., and Kahan, B.D.: DRW6 and DR3 phenotypes correlating with immune response. Presented at the Annual Meeting of The American Association for Clinical Histocompatibility Testing, Chicago, Illinois, November 1983.

91. Van Buren, C.T., Flechner, S.M., Kerman, R.H., Vaughn, W., and Kahan, B.D.: Cyclosporine improves outcome in high risk cadaveric renal allograft recipients. Presented at the First Meeting of The European Society for Organ Transplantation, Zurich, Switzerland, November 1983.
92. Kerman, R.H.: Cyclosporine immunosuppression for renal transplantation. Presented to Sandoz Pharmaceuticals, Inc., East Hanover, New Jersey, December 1983.
93. Kerman, R.H.: New horizons in transplantation: Influence of cyclosporine on renal transplantation. Invited presenter at the Western Dialysis and Transplantation Society, Park City, Utah, January 1984.
94. Sterling, R.P., Bradley, B.B., Khalil, K.G., Kerman, R.H., and Conklin, R.H.: Comparison of biopsy proven pneumocystis pneumonia in acquired immune deficiency syndrome (AIDS) patients versus renal allograft patients. Presented at The Society for Thoracic Surgeons, San Antonio, Texas, January 1984.
95. Rogers, A.J., Kerman, R.H., and Kahan, B.D.: Correlation of immunopharmacokinetic profiles of cyclosporine-treated allograft recipients and rejection. Presented at The Society for University Surgeons - Residents' Meeting, Chicago, Illinois, February 1984.

MARVIN S. LEGATOR, Ph.D.

Dr. Legator is Professor of Environmental Toxicology, University of Texas Medical School at Galveston. His Curriculum Vitae will be supplied.

The subject matter of Dr. Legator's testimony will include: the teratogenic and carcinogenic effects of TCDD, as well as its mutagenic potential; the multi-system effects of TCDD at extremely low concentrations; the demonstrable effects, both gross and more subtle, of TCDD on animals; the extrapolation of the animal studies to humans, that is, the inherent, intended predictive aspects of the animal data to man; and finally to his work as a geneticist with respect to reproductive toxicology, i.e. male (Vietnam Veterans) - mediated birth defects and certain untoward pregnancy outcomes.

Dr. Legator will testify to the extreme toxicity of dioxins, particularly 2,3,7,8-TCDD. Specifically, his testimony will indicate that TCDD is a complete carcinogen based upon certain animal studies, and that as a carcinogen, there is no safe level and does not have therefore a so-called no effect level. With respect to that, Dr. Legator will describe the extraordinary precautions which are taken, and the fears of the researchers, in connection with the laboratory use of TCDD.

In addition, Dr. Legator will testify to the reproductive toxicological effects, i.e. birth defects, and miscarriages of the children and wives of the exposed Vietnam veterans. The animal data in this regard are positive and consistent and provide a mechanistic linkage which confirms the Vietnamese epidemiological study of Hatch and others.

Specifically, therefore Dr. Legator will testify that the miscarriage

of Mrs. Dan G. Jordan and the congenital malformations of the children of Dan G. Jordan, as well as those of Kerry Ryan, daughter of Michael F. Ryan, were caused by the presumed exposure of representative plaintiffs Jordan and Ryan to phenoxy herbicides and dioxins - specifically 2,3,7,8-TCDD -- while serving in Vietnam.

The bases or grounds for such facts and opinions include Dr. Legator's: educational and professional experience; personal researches; review of the applicable medical and scientific literature; and a review of the medical records and/or data of the Jordan and Ryan families.

ALAN SCOTT LEVIN, M.D.

Dr. Levin is engaged in the practice of medicine in San Francisco, His Curriculum Vitae is attached.

Dr. Levin will testify that phenoxy herbicides and their contaminants, including dioxins, most especially 2,3,7,8-TCDD, cause an assortment of immunological responses, i.e. immuno-toxicity, which predispose persons exposed - by absorption and/or ingestion and/or inhalation - to such chemicals to a whole host of adverse health effects, such as: chloracne or other skin rashes; various neuro-toxic effects; reproductive effects; and neoplasm. In connection with the carcinogenic effect, Dr. Levin will state there is no safe level for this or any other carcinogen, and that a single exposure several years earlier can result in human cancer many years later.

The bases for such facts and opinions expressed herein by Dr. Levin include: review of the medical and scientific literature, including both animal and human data; his personal researches; his clinical experiences; and his personal knowledge of the defoliation of Vietnam by such phenoxy herbicides and dioxins, with such chemicals in the presence of the veterans and their presumed exposure thereby; and review of all pertinent medical data of the representative plaintiffs.

Dr. Levin will discuss the following in his testimony: the immune system, with its organic, cellular, and humoral components - most especially with regard to the latter, T-helper cells, B-cells, plasma cells and immunoglobulin production; immune response, both beneficial and harmful; the various experimental studies, particularly those demonstrating atrophy of the thymus, weight loss, depletion of lymphoid organs, lymphopenia, cutaneous type delayed hypersensitivity (skin thickness) and altered bacterial immunity.

In addition, Dr. Levin will discuss the following and their significance: immunology as molecular biology; chemical-induced immune dysregulation; T-cells (lymphocytes from thymus) acting as immune modulators, (for which again there is no "no effect" level); immune surveillance; the similarity of the immune, neurologic, and endocrine systems and their significance in the area of immuno-toxicity; the relationship of immune dysregulation caused by chemicals and carcinogenicity.

Dr. Levin will then testify to the causal relationship of the various Agent Orange/dioxin related adverse health effects of the representative plaintiffs, including: chloracne; neuro-toxic effects, both neurological and psychological; reproductive toxic effects, both miscarriages and birth defects; and such neoplastic processes as soft tissue sarcoma, as here a rhabdomyosarcoma, lymphocytic lymphoma and basal cell carcinoma.

12524

CURRICULUM VITAE

Alan Scott Levin, M.D.

Born: January 12, 1938. Chicago, Illinois.

High School: Austin, Chicago, Illinois

College: University of Illinois, Champaign-Urbana, Illinois
1956-1960 B.S. Chemistry in L.A. with Honors.

Graduate School: University of Illinois (Chicago Medical Center)
M.S. in Biochemistry, 1963.

Masters Thesis: Metabolism of Serum Albumin in Rats with Cirrhosis
of the Liver, 1963.

Medical School: University of Illinois (Chicago Medical Center)
M.D. 1964 Alpha Omega Alpha Honor Medical Society, 1963

Internship: Children's Hospital Medical Center, Boston, Mass.

Fellowships: Traineeship Grant, Harvard Medical School 1964
Research Assistant, Children's Hospital Boston, 1965.

USPHS Hematology Training Grant, University of California
San Francisco, Medical Center 1969-1971 (Pediatric and
General Immunology).

American Cancer Society Faculty Research Award, 1971-1974

Specialty Board
Certifications: 1. Certified Diplomate American Board of Allergy and
Immunology, 1975.

2. Certified Diplomate American Board of Pathology-Clinic.
Pathology, 1977.

3. Fellow in the American College of Emergency Physicians

4. Fellow College of American Pathologists.

5. Fellow American Society of Clinical Pathologists.

6. Member American Academy of Allergy.

7. Member American Association of Clinical Chemists.

Military: USN attached to USMC as Flight Surgeon 1966-1968
Viet Nam Campaign ribbons and unit citation, Navy and
Marine Corps Commendation, First through Fourth Air Medals
Bronze Star Medal with Combat "V", Silver Star Medal,
Honorable Discharge November 1969.

Marital Status: Married to Vera S. Byers, Ph.D., M.D.
No children.

Academic
Appointments:

Adjunct Instructor in Pediatrics
University of California
San Francisco Medical Center
1971 - 1972

Assistant Professor of Immunology
in Dermatology
University of California
San Francisco Medical Center
1972 - 1978

Adjunct Associate Professor of Immunology
University of California
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1978 -

Director of Laboratory of Immunology
University of California and Kaiser
Foundation Research Institute Joint
Program Project
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1971 - 1974

Director of Division of Immunology
Western Laboratories
2945 Webster Street
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1974 - 1977

Medical Director
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1977 - 1979

Medical Director
Levin Clinical Laboratories, Inc.
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Private Practice of Medicine
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1982 -

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19. Spitler, L.E., Levin, A.S., and Fudenberg, H.H.: Human Lymphocyte Transfer Factor in "Methods in Cancer Research", H. Busch (ed.) Acad. Press. 111 5th Ave., New York, N.Y., 59-106, 1973.
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13. Levin, A.S., Spitler, L.E., Wybran, J., and Fudenberg, H.H.: Treatment of Osteogenic Sarcoma with Tumor Specific Transfer Factor. Clin. Res. XX (3), 568, 1972.
14. Spitler, L.E., Levin, A.S., and Fudenberg, H.H.: Immunologic Evaluation of Patients with Micocutaneous Candidiasis and Results of Transfer Factor Therapy. Clin. Res. XX (3), 519, 1972.
15. Spitler, L.E., Levin, A.S., Blois, M.S., Epstein, W., Fudenberg, H.H., Hellstrom, I., and Hellstrom, K.E.: Lymphocyte Responses to Tumor Specific Antigens in Patients with Malignant Melanoma and Results of Transfer Factor Therapy. J. Clin. Invest.
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17. Fones, D.W., Mogerman, S.N., Spitler, L.E., Stites, D.P., Shinefield, H.R., Fudenberg, H.H., and Levin, A.S.: Graft Versus Host (GVH) in A Di George Patient: Probable Accelerated Induction of T Cell Competence. Clin. Res. XXI (2) 309.
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19. Carter, J.B., Ponce, B.E., Stites, D.P., Levin, A.S., German, D.F., and Fudenberg, H.H.: Spontaneous Thymidine - 2-¹⁴ C Incorporation by Unstimulated Normal Human Peripheral Lymphocytes In Vitro: Tissue Culture Conditions and Quantitative Measurements.
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21. Fones, D.W., Levin, A.S., Mogerman, S.M., Spitler, L. E., Stites, D.P., Shinefield, H.R., and Fudenberg, H.H.: Graft Versus Host Followed by Host Versus Graft: Evidence for Accelerated Induction of T-Cell Competence.
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34. Levin, A.S., and Baldwin, R.W.: Solid Phase Fluoroimmunoassay to Detect Serum Immune Complexes. 6th International Congress on Immunofluorescence, Vienna, Austria. 1978
35. Levin, A.S., McGovern, J.J., Jr., Miller, J.B., LeCam, L.L., and Lazaroni, J.: Non-Anaphylactic Food Allergies Mediated by Immune Complexes: Ann. Allergy, Abstract in Press. 1981

Dr. Peter Orris is an internist practicing in Chicago, Illinois. His curriculum vitae will be supplied.

Dr. Orris will testify as to the clinical aspects of the diseases in the representative plaintiff veterans. His testimony will be based upon a medical records review and an analysis of various test results that will have been performed upon the representative plaintiffs.

Dr. Orris will also testify on generic causation and specific proximate causation in relation to each representative veteran plaintiff. He will also testify as to prognosis for each representative veteran plaintiff

Marvin A. Schneiderman, Ph.D., of Bethesda, Maryland, is a statistician and epidemiologist who is the former Chief of Statistics and Epidemiology and the former Director for Science Policy of the National Cancer Institute and is currently a consultant. His curriculum vitae is attached.

Dr. Schneiderman will testify concerning mathematical models, statistics, and epidemiology in the area of cancer. He will first discuss the epidemiology of dioxins and their contaminants to human cancer insofar as it relates to soft tissue sarcomas, and particularly the EPA peer review group conclusions in regard thereto, stomach cancers and lymphomas. In that regard, he will discuss the relationship of exposure to the time the disease appears, the so-called latency period. He will also discuss the multiplication of base rates in the production of such cancer.

Next, Dr. Schneiderman will present a multi-stage model of cancer induction. He will discuss age relationships and the stage of cancer development as they are affected by dioxins and their contaminants or other materials. He will also present certain pertinent animal data and discuss it as a predictor for human experience. He will also testify that TCDD is more toxic than many other carcinogens, including being more carcinogenic by a factor of 4 or 5 than benzene, for example. He will also explain the concept of risk assessment and how judgments as to such are capable of being made with regard to humans. This will include discussion of a mathematical model for association of the multi-faceted presentation of symptoms and signs in the same veteran to exposure to Agent Orange as a causative factor.

He will also discuss the population incidences of these rare cancers, presenting a comparison of the onset ages for them in the general population with the ages of onset for the cancers observed in the Vietnam veterans.

He will also discuss the relationship of cancer induction to immune deficiencies or deficits. He will place special emphasis upon lymphomas and soft tissue sarcomas and explain how the experience with transplant patients validates his opinions in this regard.

Finally, he will discuss the question of a threshold in the induction of cancer. This will include testimony to the effect that there is no "safe" dose for a carcinogen and that a single exposure may cause cancer. He will also discuss the disease-producing behavior of generalized carcinogens, i.e., the chance of a single carcinogen leading to cancer at multiple sites.

MARVIN A. SCHNEIDERMAN

Dr. Schneiderman is a Clement Associates Senior Science Advisor with principal responsibilities in biostatistics, epidemiology, risk assessment, and health surveillance. He has more than 30 years of experience in cancer research and related subjects, and he is the author of more than 130 scientific papers in areas of biostatistics, epidemiology, risk assessment, and science and regulatory policy. During his career with the National Cancer Institute (NCI), he was, successively, Associate Chief of the Biometry Branch, Associate Director for Field Studies (Epidemiology) and Statistics, and Associate Director for Science Policy. In this last position, he was one of the principal advisors to the Director of the Institute. Dr. Schneiderman is a member of the adjunct faculty of the Georgetown University Graduate School, and Professor of Biostatistics at the Uniformed Services University of the Health Sciences. He has held teaching positions at the University of Pittsburgh Graduate School of Public Health and the University of Miami (Florida), as well as at the Georgetown University Medical School. He was also a Rockefeller Public Service Fellow at the London School of Hygiene and Tropical Medicine. He has served on a number of expert advisory committees and is or has been an associate editor of Cancer Research, Blood, Journal of the National Cancer Institute, Biometrics, Statistics in Medicine, American Journal of Industrial Medicine, and a number of other scientific journals.

DEGREES

Ph.D., Statistics, American University, Washington, D.C., 1961
M.S., Statistics, American University, Washington, D.C., 1953
B.S., Mathematics and Statistics, City College of New York, 1939

NON-DEGREE EDUCATION

Harvard University Graduate School of Business, 1945
Management sciences, economics, statistics
Ohio State University Graduate School, 1946-1947
Economics
London School of Hygiene and Tropical Medicine, 1959-1960
Epidemiology, medical research involving humans,
controlled trials, biostatistics

EMPLOYMENT HISTORY

1983-present	Senior Fellow, Environmental Law Institute, Washington, D.C.
1981-present	Professor (Division of Biometrics), Department of Preventive Medicine, USUHS, Bethesda, Md.
1980-present	Senior Science Advisor, Clement Associates
1975-present	Associate Professor, Graduate Faculty, Georgetown University
1980	Expert Consultant, Office of the Director, National Cancer Institute (NCI), National Institutes of Health (NIH)
1978-1980	Associate Director for Science Policy, Office of the Director, NCI
1970-1978	Associate Director NCI, Field Studies and Statistics Program, Division of Cancer Cause and Prevention, NCI
1967-1978	Adjunct Professor, Biostatistics, Graduate School of Public Health, University of Pittsburgh
1966-1975	Clinical Associate Professor, Medical Statistics, Georgetown University Medical School
1960-1970	Associate Chief, Biometry Branch, NCI
1960-1965	Professorial Lecturer, Georgetown University Medical School
1959-1960	Rockefeller Public Service Fellow, Statistical Research Unit of the British Medical Research Council, London School of Hygiene and Tropical Medicine
1955-1959	Mathematical Statistician and Acting Chief, Therapeutic Trials Section, NCI
1948-1955	Mathematical Statistician, Biometrics Section, NCI
1939-1948	Private Industry, Military Service (USAF), Other Federal government agencies

HONORS

Distinguished Lecturer, Lawrence Livermore Laboratories, University of California, 1982

American Conference of Government Industrial Hygienists, Symposium Speaker Award, June, 1982

Samuel Wilkes Public Lectureship, Princeton University, 1980

Keynote Lecturer, Society of Occupational and Environmental Health, 1979, North Carolina Public Health Association, 1980

Environmental Defense Fund, Public Interest Science Award, 1977

Distinguished Service Award, Department of Health, Education and Welfare (DHEW), 1974

Superior Service Award, DHEW, 1968

Rockefeller Public Service Fellow, London School of Hygiene and Tropical Medicine, 1959-1960

Phi Beta Kappa, 1939

SELECTED ADVISORY COMMITTEES

Committee on Toxicity Data Elements, National Academy of Sciences, 1981-present

Subcommittee on the Geochemical Environment in Relation to Health and Disease, NAS/NRC, 1980-present

Science Evaluation Board, National Health and Medical Research Council of Australia, 1980-present

American Cancer Society, Analysis and Projections Committee, 1976-1978, Institutional Grants Committee, 1980-present

Science Advisory Board, Howard University Cancer Center, 1979-present (External Review Committee)

Center for Science in the Public Interest, Board of Directors, 1983-present

Food Safety Council, Board of Directors, 1978-1982

Advisory Committee, Biomedical and Environmental Assessment Division, Brookhaven National Laboratory, 1978-present

Advisory Committee, International Cancer Research Data Bank (CIDAC), Franklin Institute, Philadelphia, 1981-present

Task Force on Heart Disease Epidemiology, National Heart, Lung, and Blood Institute, 1979-1980

Science Advisory Board, National Center for Toxicological Research, 1974-1979

Ad Hoc Subcommittee on Asbestos-Related Health Problems, Armed Forces Epidemiology Board, 1978-1979

International (American) Chairman, U.S./U.S.S.R. Working Group on the Epidemiology of Cancer, 1973-1979

Committee on Maritime Hazardous Materials, National Academy of Sciences, 1978

Committee to Coordinate Toxicology and Related Programs, DHEW, 1978

President's Biomedical Panel, 1975-1976

Consultative Panel on Hazards of Chemical Pesticides, National Academy of Sciences, 1974-1976

Chairman and Executive Secretary, Committee of Presidents of Statistical Societies, 1973-1976

Board of Directors, American Statistical Association, 1972-1974

International Council, International Biometric Society, 1971-1973

Immunology-Epidemiology Segment, Special Virus Cancer Program, NCI, 1969-1971

Advisory Panel on Carcinogenicity of Pesticides, Secretary's Commission on Pesticides and Their Relationship to Environmental Health, 1969-1970

Chairman, Subcommittee on Medical Biostatistics, American Therapeutic Society, 1967-1968

Subcommittee on Biologic Effects of Atomic Radiation, NAS/NRC, 1964-1965

SELECTED SOCIETIES

American Association for Cancer Research
American Society for Preventive Oncology (Founding Member)
American Statistical Association (Fellow)
Biometric Society (International)
International Epidemiological Association
Royal Statistical Society (Fellow)
Washington Statistical Society
American Association for the Advancement of Science (Fellow)
International Statistical Institute (Fellow)
Society for Occupational and Environmental Health

SELECTED PUBLICATIONS

- Schneiderman, M.A. Standard setting: Implications of sensitivity, and a search for an ethical base. In: Protection of the Sensitive Individual, Annals of the American Conference of Government Industrial Hygienists, 3:133-138 (1982)
- Schneiderman, M.A. A personal reminiscence (Austin Bradford Hill). Statistics in Medicine 1:307-308 (1982)
- Schneiderman, M.A. Discussion of "Some Aspects of Cancer Epidemiology" by Abraham Lilienfeld. Biometrics (Supplement) 38:161-165 (1982)
- Davis, D.L., Bridbord, K., and Schneiderman, M.A. Cancer prevention: Assessing cause, exposure, and recent trends in mortality for U.S. males, 1968-1978. Teratogenesis, Carcinogenesis and Mutagenesis. Pp. 105-135 (June 1982)
- Schneiderman, M.A. Trends in cancer mortality and incidence in the United States: Is the future clear or clouded? In Miké, V., ed. Statistics in Medical Research. John Wiley and Sons, New York. Pp. 71-107 (1982)
- Schneiderman, M.A. Description and reliability of trends in cancer incidence. In Magnus, K. Trends in Cancer Incidence. Hemisphere Publishing Corp., Washington, D.C. Pp. 1-2 (1982)
- Schneiderman, M.A. Cost-benefit, social values and the setting of occupational health standards. In Lee, J.S., and Rom, W.N., eds. Legal and Ethical Dilemmas in Occupational Health. Ann Arbor Science, Ann Arbor, Michigan. pp. 191-205 (1982)

- Peto, R., and Schneiderman, M., eds. Quantification of Occupational Cancer: Banbury Report No. 9. Cold Spring Harbor Laboratory, Cold Spring Harbor, New York (1981)
- Davis, D.L., Bridbord, K., and Schneiderman, M.A. Estimating cancer risks: Problems in methodology production trends. In Peto, R., and Schneiderman, M., eds. Quantification of Occupational Cancer: Banbury Report No. 9. Cold Spring Harbor Laboratory, Cold Spring Harbor, New York. Pp. 285-315 (1981)
- Schneiderman, M.A. Summary comments. In Crandall, R.W., and Lave, R., eds. The Scientific Basis of Health and Safety Regulation. The Brookings Institution, Washington, D.C. Pp. 297-299 (1981)
- Schneiderman, M.A. Regulation of carcinogens in an imprecise world. Ann. N.Y. Acad. Sci. 363:217-232 (1981)
- Schneiderman, M.A. Extrapolation from incomplete data to total or lifetime risks at low doses. Environ. Health Perspect. V. 42, Pp. 33-38 (December 1981)
- Schneiderman, M.A. Toxic Substances in Our Environment-Can we manage them so that they don't manage to harm us? Health Forum 81, The Coalition for Health and the Environment, Washington, D.C. (1981)
- Schneiderman, M.A. Epidemiology: What Can it Tell Us? Proceedings of the Conference on Environmental Risk, New Orleans, Louisiana, December 10, 1980. The Electric Power Research Institute, Palo Alto, California, EPRI EA-2064, Project 1316-6. Pp. 369 - 3-89 (October 1981)
- Schneiderman, M.A., Nisbet, I., and Brett, S.M. Assessment of Risks Posed by Low Levels of Asbestos in the General Environment. Berichte: Bundesgesundheitsamt. No. 4, 1981. Dietrich Reimer Verlag, Berlin. Pp. 3/1-3/28 (1981)
- Schneiderman, M.A., and Levin, D.L. Needs, problems and prospects in cancer epidemiology. In Levin, D.L., ed. Cancer Epidemiology in the U.S.A. and U.S.S.R. U.S. Department of Health and Human Services, PHS, Bethesda, Maryland. NIH Publication No. 80-2044 (1980)
- Schneiderman, M.A. The Relationship Between Diet, Occupation, the Environment and Cancer. Proceedings: US/Egypt Symposium on the Biomedical Effects of Technology Transfer, Cairo, Egypt (February 9-13, 1980) (In Press: Environmental Health Perspectives)

Schneiderman, M.A. Scientific Issues in a National Cancer Policy. Proceedings of the 4th Toxic Control Conference. Government Institutes, Inc., Washington, D.C. Pp. 95-107 (1980)

Schneiderman, M.A. The uncertain risks we run: Hazardous materials. In Schwin, R.C., and Albers, W.A., Jr., eds. Societal Risk Assessment. Plenum Press, New York. Pp. 19-41 (1980)

Schneiderman, M.A. What's Happening to Cancer in our Advanced Industrial Society? Have the Risks been Overstated? Keynote Address: Society for Occupational and Environmental Health, Washington, D.C. (In Press: Proceedings) (December 3-5, 1979)

Blokhin, N.N., and Schneiderman, M.A., eds. Epidemiology of Cancer in the USSR and USA. Meditsina, Moscow (Russian) (1979)

Schneiderman, M.A., DeCouflé, P., and Brown, C.C. Thresholds for environmental cancer: Biologic and statistical considerations. Ann. N.Y. Acad. Sci. 329:92-130 (1979)

Schneiderman, M.A. Alpha, beta manitonne--a new industrial material with unknown benefits and risks. In Carcinogenic Risks/Strategies for Intervention. International Agency for Research on Cancer (IARC), Lyon, France. IARC Sci. Publ. 25:237-239 (1979)

Schneiderman, M.A. The Links Between the Environment and Health. Proceedings: National Conference on the Environment and Health Care Costs, U.S. House of Representatives (August 15, 1978)

Biersteker, K., and Schneiderman, M.A. Epidemiologic Aspects of Drinking Water-Health Relationship. Proceedings of the Health Effects Committee of the NATO committee on challenges of Modern Society. Bonn, W. Germany (April 23-27, 1978)

Schneiderman, M.A., Mason, T.J., and Hoover, R. Cancer, geography, and geology--a problem for interdisciplinary cross-fertilization. In Geochemistry and the Environment. Vol. 3. National Academy of Sciences, Washington, D.C. (1978)

Schneiderman, M.A. Legislative possibilities to reduce the impact of cancer. Prev. Med. 7:424-438 (1978)

- Schneiderman, M.A. Water and epidemiology. In Russell, C.S., ed. Safe Drinking Water: Current and Future Problems. Proceedings of the National Conference on Resources for the Future. Pp. 111-148 (1978)
- Schneiderman, M.A. Extrapolating animal and microbiological tests to humans. In Coling, G., ed. Environmental Cancer (Causes, Victims, Solutions). Proceedings of a conference of the Urban Environment Coalition, Inc. Pp. 9-11 (1978)
- Schneiderman, M.A. Environmental Factors and Cancer Prevention. Marcel Dekker, New York (1978). (Third National Symposium on Detection and Prevention of Cancer, New York (April 26-30, 1976)
- Schneiderman, M.A. Risk assessment of the health effects of water chlorination. In Jolley, R.L., Gorchev, H., and Hamilton, D.H., eds. Water Chlorination--Environmental Impact and Health Effects. Ann Arbor Science Publications, Ann Arbor, Mich. Vol. 2, pp. 509-515 (1978)
- Schneiderman, M.A., and Brown, C.C. Estimating cancer risks to a population. Environ. Health Perspect. 22:115-124 (1978)
- Schneiderman, M.A. Eighty percent of cancer is related to the environment. Laryngoscope 88:1-16 (1978)
- Schneiderman, M.A. Time Trends in Cancer: United States, 1953-1973. Laryngoscope 88, Supp. 8:1-6 (1978)
- Fears, T.R., Scotto, J., and Schneiderman, M.A. Mathematical models of age and ultraviolet effects on the incidence of skin cancer among whites in the United States. Am. J. Epidemiol. 105:420-427 (1977)
- DeVesa, S.S., and Schneiderman, M.A. Increase in the number of cancer deaths in the United States. Am. J. Epidemiol. 106:1-5 (1977)
- Schneiderman, M.A. The numerate sciences--epidemiology and biometry. JNCI 59:633-644 (1977)
- Schneiderman, M.A., and Levin, D.L. Epidemiology of cancer and tobacco use: Trends and trend indicators. In Steinfield, J., Griffiths, W., Ball, K., and Taylor, R.M., eds. Smoking and Health: II. Health Consequences, Education, Cessation Activities, and Governmental Action. Proceedings of the Third World Conference on Smoking and Health, New York. Pp. 73-84 (1977)

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- Levin, D.L., and Schneiderman, M.A. Cancer. In Miller, S.S., ed. Symptoms. Thomas Y. Crowell, New York (1976)
- Fears, T.R., Scotto, J., and Schneiderman, M.A. Skin cancer, melanoma, and sunlight. Am. J. Public Health 66:461-464 (1976)
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- Schneiderman, M.A. Sources, resources, and tsouris. In Fraumeni, J.F., ed. Persons at High Risk of Cancer: An Approach to Cancer Etiology and Control. Academic Press, New York (1976)
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- Mantel, N., and Schneiderman, M.A. Estimating "safe" levels--a hazardous undertaking. Cancer Res. 35:1379-1386 (1975)
- Schneiderman, M.A., Mantel, N., and Brown, C.C. From mouse to man--or how to get from the laboratory to Park Avenue and 59th Street. Ann. N.Y. Acad. Sci. 246:237-248 (1975)
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- Schneiderman, M.A. Digestive system cancer among persons subjected to occupational inhalation of asbestos particles: A literature review with emphasis on dose response. Environ. Health Perspect. 9:307-311 (1974)
- Schneiderman, M.A. Safe dose? The problems of the statistician in the world of trans-science. J. Wash. Acad. Sci. 64:68-78 (1974)

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- Schneiderman, M.A. How to read the drug literature--or any other organized collection of numbers from experiments. *Mod. Med.* 37:92-96 (1969)
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- Schneiderman, M.A. Quantitative thinking in medicine--biostatistics. (Using numbers to mark the route from cause to effect and back.) In Cantor, P., ed. *Traumatic Medicine and Surgery for the Attorney*. Matthew Bender, New York. Pp. 419-477 (1969)
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Brecher, G., and Schneiderman, M.A. A time saving device for the counting of reticulocytes. Am. J. Clin. Pathol. 20:1074-1083 (1950)

Williamson, C.R., and Schneiderman, M.A. The use of mass x-ray survey films for heart disease case finding. Mass. Health J. 30:7-14 (1950)

Dr. Ellen Silbergeld, Ph.D., is an environmental scientist and toxicologist who is the Chief Toxicologist for the Environmental Defense Fund and a Research Scientist in the Reproductive Toxicology Laboratory of the National Institutes of Health in Bethesda, Maryland. Her curriculum vitae is attached.

Dr. Silbergeld will testify as to the scientific models for TCDD toxicity. She will emphasize the receptor model, its role in physiology, how to detect receptors and how to link receptors to function. She will discuss how receptors recognize TCDD by virtue of structural "fine-tuning". She will testify as to the existence of receptors in humans and in their various organs, together with the implications of their presence for TCDD potency. She will also discuss the extrapolations which are possible between animals and humans. She will further testify as to the mechanisms of toxicity including the sensitivity of the reproductive system, both endocrine and gonadal, to the receptor-mediated effects of TCDD. Finally, she will discuss the consequences of receptor interaction with TCDD insofar as that interaction produces results involving RNA-DNA, AHH induction, and heme synthesis regulation, among others.

In the field of neurotoxicity, she will discuss the experimental and clinical studies with particular emphasis upon dose-response mechanisms, acute versus chronic exposures and early versus long latency effects. She will also discuss the

biochemical and morphological effects of TCDD, the electrophysiology involved and the effects of TCDD on such things as cognition, mood, and affect.

She will also emphasize the basic mechanisms of toxicity on both the central and peripheral nervous systems, specifically dealing with the role of altered porphyrin synthesis on the nervous system. Three aspects of this problem will be discussed: First, the effects of decreased cellular energy supply on neuronal activity and viability; second, the effects of decreased heme synthesis on the integrity of myelin; and third, the neuroactive properties of certain porphyrin precursors.

CURRICULUM VITAE

Name: - Ellen Kovner Silbergeld

Date and Place of Birth: July 29, 1945, Washington, DC

Education:

1967 - A.B.	Vassar College
1972 - Ph.D.	Johns Hopkins University

Chronology of Employment:

1967	Instructor, California International Summer Program, Uppsala Sweden
1968-70	Secretary and Program Officer, National Academy of Sciences, National Research Council, Washington, DC
1969-71	"Nader's Raiders", Center for the Study of Responsive Law, Washington, DC
1972-75	Postdoctoral Fellow in Environmental Medicine and Neurosciences, Johns Hopkins University, Baltimore, Maryland
1975	Assistant Professor, Department of Environmental Medicine, School of Hygiene and Public Health, Johns Hopkins University
1975-79	Staff Fellow and Head, Unit on Behavioral Neuropharmacology, Experimental Therapeutics Branch, NINCDS, NIH
1979-81	Chief, Section on Neurotoxicology, NINCDS, NIH
1982	Chief Toxics Scientist, Environmental Defense Fund, Washington, DC
	Guest Scientist, Reproductive Toxicology Section, Pregnancy Research Branch, NICHD, NIH

Other Professional Appointments:

Consultant,	NSF Energy Program, 1974-1975
Member,	Nutrition Foundation National Committee on Food Additives and Hyperkinesis, 1975-1980
Member,	USDHEW-FDA Committee to Coordinate Toxicology and Related Programs, 1977-1981
Member,	US Delegation of the Joint US-USSR Health Agreement on Environmental Health, 1977-78
Member,	Society for Neuroscience Committee on Social Issues, 1978 -
Member,	OECD Chemicals Program Ad Hoc Expert Review Committees on Reproductive Toxicity and Neurotoxicity, 1982 -

Member, US Delegation to OECD Expert Meetings on Existing Chemicals, 1983 -
 Member, Hazardous Waste Task Force and Hazardous Waste Facilities Siting Board, State of Maryland, 1983
 - -
 Member, Governor's Blue Ribbon Panel on Binghamton, NY, State Office Building, 1982 -
 Member, Executive Committee, Science Advisory Board, US EPA, 1983 -
 Member, Board on Toxicology and Environmental Health Hazards, National Academy of Sciences, 1983 -
 Member, Public Policy Committee, American Society for Neurochemistry, 1983 -

Professional Society Memberships:

American Public Health Association
 Society for Occupational and Environmental Health
 Society for Neuroscience
 Association of Women in Science
 American Association for the Advancement of Science
 International Brain Research Organization
 American Society for Neurochemistry
 American Society for Pharmacology and Experimental Therapeutics
 Engineering Society of Baltimore

Other Activities

Secretary-Treasurer, Society for Occupational & Environmental Health, 1983-
 Editorial Board: Neurobehavioral Toxicology, 1979-
 American Journal of Industrial Medicine, 1980-
 Neurotoxicology, 1981-
 Environmental Research, 1983-
 Hazardous Waste, 1983 -
 Participant, NIH Consensus conferences, 1979 and 1982
 Expert consultant on lead poisoning, U.S. Secret Service, 1979-81
 Chairperson, Society for Occupational and Environmental Health Special Committee on El Paso Lead Poisoning, 1977-1979
 Preceptor, NIGMS Pharmacology-Toxicology Research Associateship Program, 1977-1981
 Graduate board examiner, University of Pittsburgh and University of Toronto
 Lecturer, continuing medical education courses in environmental medicine (Johns Hopkins) and occupational medicine (NIOSH)

Elected councillor, NIMH-NINCDS Assembly of Scientists,
 1979-1981
 Elected representative, NINCDS EEO Committee, 1977-1980
 Co-organizer, Women in Neuroscience
 Member, Solowey Lectureship selection committee, NIH,
 1980-1981
 Environmental Health Consultant, Oil, Chemical and Atomic
 Workers Union, AFL-CIO, Washington, D.C., 1970
 Reviewer, EPA documents on lead, manganese,
 mercury, dioxin, risk assessment, and exposure, 1981-
 Ad Hoc Member, Occupational Safety and Health Study Section,
 NIOSH, 1983-
 Member, NIMH Committee on Frontiers of Neuroscience, 1983-
 Grants reviewer, National Foundation - March of Dimes;
 National Science Foundation; Nutrition Foundation;
 Thrasher Foundation; Hereditary Diseases Foundation, NIH
 Manuscript reviewer, Life Sciences, Biochemical
Pharmacology, Environmental Journal Pharmacology, Science,
Neurotoxicology, Neurobehavioral Toxicology Teratology,
Pharmacology Biochemical Behavior, Procs. Society
Experimental Biological Medicine, Experimental Neurology,
 etc.

Honors and Awards:

Graduated summa cum laude, 1967
 elected to Phi Beta Kappa, 1967
 undergraduate academic scholarship, 1963-1965
 Woodrow Wilson National Foundation Fellow, 1967-1968
 Leverhulme and Fulbright Fellowships to University of
 London, 1967
 National Science Foundation Graduate Traineeship, 1968-1972
 Public Health Service Research Fellowship to Woods Hole,
 1970
 Rockefeller Foundation predoctoral research fellowship,
 1971-1972
 NIH postdoctoral fellowship in environmental health
 sciences, 1972-1972
 Joseph P. Kennedy, Jr. Fellowship in neurosciences,
 1974-1975
 Pharmaceutical Manufacturers Association Foundation Research
 Starter Award, 1974-1975
 National Academy of Sciences Exchange Fellow to Yugoslavia,
 1976
 George Miller lectureship in environmental studies,
 University of Illinois, 1984

Professional Interests:

Neuropharmacology & Toxicology
 Environmental Risk Assessment

BIBLIOGRAPHY

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A. SCIENTIFIC PUBLICATIONS

1. Silbergeld, E.K.: Dieldrin: Effects of chronic sublethal exposure on adaptation to thermal stress in a freshwater fish. *Environ. Sci. Technol.* 7:846-849, 1973.
2. Silbergeld, E. K.: and Goldberg, A.M.: A lead-induced behavior disorder. *Life Sci.* 13(9):1275-1283, 1973.
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6. Silbergeld, E. K. and Goldberg, A.M.: Lead induced behavioral dysfunction: An animal model of hyperactivity. *Exp. Neurol.* 42:146-157, 1974.
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29. Hruska, R.E. and Silbergeld, E.K.: Abnormal locomotion in rats after bilateral intrastriatal injection of kainic acid. Life Sciences 25:181-193, 1979.
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Mattison, D.R., and Silbergeld, E.K.: Occupational risks to reproduction. In Osofsky, H. (ed) Advances in Gynecology and Obstetrics, Baltimore, Williams & Wilkins.

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Silbergeld, E.K.: Review of occupational health studies on PCBs. In Kuiper, H. (ed) PCBs, Marcel Dekker, in press.

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Mattison, D.R., and Silbergeld, E.K.: Reproductive toxicity of TCDD. In Lowrance, W. (ed) Dioxins, Rockefeller University Press.

IN PREPARATION:

Silbergeld, E.K., and Mattison, D.R.: Effects of three polycyclic aromatic hydrocarbons on fertility in female mice: A lifetime study of the effects of single-dose treatment.

Silbergeld, E.K.: A Textbook in Neurotoxicology.

B. ABSTRACTS

1. Silbergeld, E. K.: Effects of lead on neuromuscular functions: In vitro evidence for site of action at the presynaptic level. Fed. Proc. 32:275, 1973.
2. Silbergeld, E. K. and Goldberg, A. M.: Lead poisoning: an animal model of hyperactivity. Pharmacologist 15:143, 1973.
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8. Silbergeld, E. K. and Miller, L. P.: Lead intoxication: changes in seizure threshold and gamma-aminobutyric acid function. Neurology 4(27):405, 1977.
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elemental neurotoxin and manipulations of mitochondrial Ca⁺⁺. Neurosci. Abst. III:1235, 1977.

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REVIEWS -

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Silbergeld, E.K.: "Hazardous Waste in American" for Quarterly Review of Biology, in press

Silbergeld, E.K.: "Nutrition and Brain Function" for Trends in Neurosciences, in press

OTHER

Silbergeld, E.K.: "US Lead Program Vital" (editorial) Clin. Chem. News, February, 1983, page 4

Silbergeld, E.K.: "Where do we go from here?", in Legator, M.S. (ed) Community Health Studies: A Guide for Citizens, Johns Hopkins Press, Baltimore, MD, in press

Silbergeld, E.K.: "Health Effects" in Environmental Defense Fund, Dumpsite Cleanups: A Guide to the Superfund Program, Washington, DC, 1983

Silbergeld, E.K., and Highland, J.: "Ghost Dumps" (letter) Science, 216:462, 1982

Silbergeld, E.K.: "Cancer Policy: Has the Dust Settled?" Environmental Forum, 2:25-29, 1983

Hall, K.L., and Silbergeld, E.K.: "Reappraising Epidemiology" Harvard Environmental Law Review, 7:441-448, 1983

Dr. Raymond Singer, Ph.D., is a neurotoxicologist and neuropsychologist practicing at Occupational Health Consulting, Inc., of New York, New York. Dr. Singer's curriculum vitae is attached.

Dr. Singer will prepare reports concerning each of the veteran plaintiffs. These reports will be based upon personal interviews and review of appropriate test findings performed by himself and/or by others. The personal interview will consist of a thorough account of the veteran's background and current and historic symptoms. It will also detail the educational and occupational background of each veteran. Various neuropsychologic tests will be given and discussed with particular reference to whether any deficits or changes noted are due to the results of any toxic chemical exposures. Neurophysiologic tests will also be given or reviewed and interpreted, with particular emphasis placed upon nerve conduction velocity findings, and the results will be set out and discussed, with particular reference to whether the findings are related to toxic chemical exposures. To the extent warranted, Dr. Singer will relate any findings to Agent Orange exposure.

Dr. Singer will also testify to the effects of toxic chemical exposures as they have been studied in a number of research efforts in both animals and humans. He will discuss the findings reported in various populations exposed to toxic chemicals

and particularly to TCDD through the mechanism of industrial accidents. He will also discuss the findings concerning demyelination of the fatty sheaths surrounding the nerves and the "dying-back" neuropathy which has been associated with toxic chemical exposures.

Dr. Singer will also discuss the results of his own work in relation to occupational exposures to TCDD, and will explain how his results are consistent with those obtained from tests performed on the veterans here, and how those results are consistent with causation by phenoxy herbicides and their contaminants.

RESUME

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EDUCATION AND DEGREES

Ph.D.	Washington State University	1978	Psychology
M.S.	Washington State University	1975	Psychology
B.A.	University of Rochester	1972	Psychology

PROFESSIONAL ORGANIZATIONS

Certified Psychologist, New York State Board of Psychology
Member, American Psychological Association
Member, National Academy of Neuropsychologists
Member, Society for Occupational and Environmental Health
Member, American Public Health Association
Associate Member, College of Toxicology

PROFESSIONAL EXPERIENCE

1983 - Adjunct Instructor, Mount Sinai School of Medicine
Department of Community Medicine, New York City

1983 - Consultant, New York State Department of Social
Services, Office of Disability Determinations

1982 - President, Occupational Health Consulting, Inc.

1982 - Clinical Psychologist, Private Practice, New York City

1982 - Reviewer, The American Journal of Industrial Medicine

1981 - 1982 Fellow, Mount Sinai School of Medicine, Department
Community Medicine, Environmental Sciences
Laboratories, New York City

1979 - 1981 NIH Post-Doctoral Fellow in Environmental Epidemiology,
Mount Sinai Medical School of Medicine,
New York City

1978 - 1979 NIH Post-Doctoral Fellow in Biological Psychiatry,
Millhauser Laboratories, New York University
Medical Center, New York City

1978 - 1979 Clinical Psychology Intern, Park East Psychological
Associates, New York City

1972 - 1978 Teaching and Research Assistant, Department of
Psychology, Washington State University,
Pullman, Washington

PUBLICATION AND PAPERS

Singer, Raymond. Peripheral nervous system assessment in the evaluation of toxic chemical exposure. Paper to be presented at the 12th Annual Meeting of the International Neuropsychological Society, Houston, February, 1984.

Singer, Raymond. Neural indicators of phenoxy herbicide exposure. Paper presented at the 1983 Annual Meeting of The Society for Occupational and Environmental Health, Washington (D.C.), December, 1983.

Singer, R., Valciukas, J., and Lilis, R. Lead exposure and nerve conduction velocity: The differential time course of sensory and motor nerve effects. Neurotoxicology, 4, 2, 193-202, 1983. Presented at the XI Triennial World Congress of Pathology, Jerusalem (Israel), September, 1981.

Singer, R., Moses, M., Valciukas, J., Lilis, R., and Selikoff, I.J. Nerve conduction velocity studies of workers employed in the manufacture of phenoxy herbicides. Environmental Research, 29, 297-311, 1982. Presented at the XX International Congress of Occupational Health, Cairo (Egypt), September, 1981.

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- Valciukas, J., Lilis, R., Singer, R., et al. Neurobehavioral studies of painters. Presented at the International Symposium on Occupational Health Hazards Encountered in Surface Coating, Handling of Paints in the Construction Industry, Stockholm (Sweden), October, 1979. Manuscript submitted, Archives of Environmental Health.
- Singer, R. The role of the psychologist in the prevention of myopia. Paper presented at the annual meeting of the American Psychological Association, New York, New York, September, 1979.
- Singer, R. The Camphill approach to the education of the retarded person. Symposium presented at the annual meeting of the American Psychological Association, New York, New York, September, 1979.
- Singer, R. The behavioral etiology of myopia. Paper presented at the annual meeting of the Eastern Psychological Association, Philadelphia, Pennsylvania, May, 1979.
- Singer, R. The relationship between visual refractive error and interests, values, personality, academic performance, and reading. Doctoral dissertation, Washington State University, 1978.
- Singer, R., Young, F., and Rokeach, M. Values as predictors of visual refractive error (in Barrow Eskimos). Paper presented at the Western Psychological Association Convention, Seattle, Washington, April, 1977.
- Singer, R. Can myopia be prevented? Invited address - Presented to the Washington State University Chapter of Sigma XI, February, 1976.
- Singer, R. The association of personality and myopia. Papers presented at the Western Psychological Association Convention, Sacramento, California, April, 1975.
- Young, F., Singer, R., and Foster, D. The psychological differentiation of male myopes and non-myopes. American Journal of Optometry, October, 52, 10, 679-686, 1975.

THEODOR D. STERLING, Ph.D.

Dr. Sterling is Professor in the Faculty of Interdisciplinary Studies and Department of Computing Science, Simon Fraser University, Vancouver, British Columbia, Canada. His Curriculum Vitae is attached.

Dr. Sterling is a mathematician, statistician, and epidemiologist; as well, Dr. Sterling is intimately familiar with existing data and analyses concerning the effects of phenoxy herbicides and impurities, e.g. 2,3,7,8-TCDD, contained therein. Dr. Sterling has devoted much of his teaching and research to the collection and analysis of data and their use for scientific inference.

Dr. Sterling will testify that there exists a considerable body of medical and scientific evidence which demonstrates that the preparations of 2,4,5-T and 2,4-D are toxic, teratogenic, and carcinogenic. Further, there is no credible scientific evidence of a no effect level; said another way, as a carcinogen, there is no safe level and therefore a single exposure years ago may be responsible for human cancer which develops today.

In addition, Dr. Sterling will testify that there is ample evidence that exposure to 2,4,5-T is teratogenic in humans when the mother is exposed, and convincing evidence is now extant that the outcome of pregnancy is influenced by exposure to the father alone.

Most especially, Dr. Sterling will testify of the incidence of subjective symptoms and/or medical records documenting such symptoms. These symptoms are those which have been compiled by the National Center for Health Statistics, and will be compared, to the extent available, to those symptoms of the Vietnam veterans, particularly those of the representative plaintiffs.

The purpose will be to ascertain the incidence of such symptoms in the general population so as to analyze statistically the symptoms of the plaintiffs. The product of such overall incidence will be calculated to examine the possibility or likelihood of such a constellation of Agent Orange/dioxin related symptom complex to occur in a random fashion.

The bases or grounds for the facts and opinions of Dr. Sterling's testimony are: educational and professional background; publications regarding the subject phenoxy herbicides; review of the applicable medical and scientific literature; attendance and participation in various symposia dealing with the scientific issues in question; training as a mathematician, statistician, and epidemiologist; and training and experience in the computer sciences.

12579

CURRICULUM VITAE

Theodor D. Sterling

EDUCATION

B.A. (CUM LAUDE), 1949, M.A., 1952, University of Chicago;
Ph.D., 1955, Tulane University.

PROFESSIONAL AFFILIATIONS

Present: Professor, The Faculty of Interdisciplinary Studies and Department of Computing Science, Simon Fraser University.

Previous: Visiting Professor, Department of Statistics, Princeton University, (78). Chairman, Department of Computing Science, Simon Fraser University, (72-77). Professor in the Department of Applied Mathematics and Computer Science, Washington University, St. Louis, Missouri (66-72). Also Joint appointment as Professor in the Department of Sociology (66-68), and Visiting Professor in Computers and Humanities, Hebrew Union College, Cincinnati, Ohio (68-70). Professor of Biostatistics and Director of the Computing Center, College of Medicine, University of Cincinnati, Ohio (58-66). Previously instructed in the Department of Statistics, Michigan State University and Department of Mathematics, University of Alabama.

PROFESSIONAL ACTIVITIES

ACM Committee on Scientific Freedom and Human Rights; President of the Computer Science Association of Canada (75-80); Chairman, Ombudsman Committee, Canadian Information Processing Society (73-80); Chairman, President of Biological Information Processing Organization (64-65); Chairman, CIPS Special Interest Groups, Humanization of Information Systems (73-80); Chairman, SIGCAS Committee of Information and Public Policy (72-); President of Missouri Chapter, American Association of Workers for the Blind (70-72); Member of the Panel for Biology, Management, and Social Sciences of the Mathematics Association of America (62-67); Chairman, Committee on Professional Activities of the Blind of the Association for Computing Machinery (63-71); Chairman, Ad Hoc Committee on Accreditation, Association for Computing Machinery (66-67); Committee on Radiation Dosimetry, American Association of Physicists in Medicine (66-69); National Lecturer for Association for Computing Machinery (72-3, 75-6).

EDITORIAL ACTIVITIES:

Associate Editor - Canadian Journal of Statistics (73-78); Editorial Board - International Journal of Biomedical Computing (69-); Computers and Applied Mathematics (73-), Humanist in Canada (73-).

GOVERNMENT AND OTHER SERVICES:

(Consultant/adviser, now and previous): (In Canada) - Canadian Standards Board; Environment Canada, The Royal Commission (B.C.); Consumers Association of Canada; Society for Professional and Environmental Control. (In U.S.) - NIH; PHS; EPA; FTC; SRA; U.S. National Academy of Science, National Research Council; American Lung Association; Natural Resource Board (Wisconsin); Environmental Defense Fund, MECCA (Minnesota); Citizens Against Toxic Sprays (Oregon). (In Kuwait) - Ministry of Health.

PROFESSIONAL SOCIETIES:

Can. Inf. Proc. Soc.; Can. Comp. Sci. Assoc.; Assoc. Comp. Machinery; Amer. Math. Assoc.; Math. Soc.; Inst. Math. Stat.; Amer. Stat. Assoc.; Biometric Soc.; N.Y. Acad. Sci.; Amer. Assoc. Phys. Med.; Assoc. Res. Ophthalmology.

HONORS AND AWARDS:

Fellow, Amer. Assoc. for Advancement of Science; Fellow, Amer. College of Epidemiology; Fellow, Amer. Stat. Assoc.; Fellow, Can. Com. of Scientists and Scholars; Sigma Xi; Pi Nu Epsilon, Morrison Cressy Award in National Science; University Research Professor (1980-1981).

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Theodor D. Sterling

Books

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Articles

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Trap. In A. Ralston and E. Reilly, Jr., (ed.) Encyclopedia of Computer Science and Engineering (second edition). Van Nostrand Reinhold Company, New York. pp. 1534-1535.

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- o Statistical Problems in Multi-Variate (Etiological) Surveys. Canadian Journal of Statistics, 7(2): 205-215.

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- o What Happens When Major Errors Are Discovered Long After An Important Report Has Been Published?, Invited talk to the Annual Meeting of the American Statistic Association, Washington, D.C., August, 1979.

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Natural Language Compilers and Interpreters in Radiation Treatment Planning or Nous Parlons Anglais Better Than Jede Andere Sprache. In V. Rosenow (ed), Computers in Radiation Therapy: Proceedings of the Sixth International Congress on the Use of Computers in Radiation Therapy, University of Goettingen, Goettingen, FRG.

1977

Computers in Developing Nations: A Cautionary Tale. Communications of the ACM. December, 20(12): 971-972.

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1974

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1973

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1972

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A Versatile System for Three-Dimensional Radiation Dose Computation and Display, RTP. Computer Programs in Biomedicine. Vol 2: 178-192. (J. Weinkam, senior author.)

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1971

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Bio-Statistician/Mathematician-

This witness will be identified in the near future. At that time a curriculum vitae will be supplied.

This witness will describe the mathematical/statistical model which will be used in the presentation of the figures to which the witness will testify. The theory subserving the testimony is that the multi-faceted presentation of symptoms and signs and test results in the same veteran makes a random composition of such an array extremely unlikely in view of the relative in-frequency of each facet of the array. As such, this testimony will be used in the generic and specific proximate causation areas.

- AGENT ORANGE TESTIMONY DAY 8
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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

FILED
IN CLERK'S OFFICE
U. S. DISTRICT COURT E.D. N.Y.

JAN 31 1984

TIME A.M.

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In re

MDL 381

(All Cases)

"Agent Orange"

Product Liability Litigation

SPECIAL MASTER'S
RECOMMENDATION RE
APPLICATION OF
PHYSICIAN/PATIENT
PRIVILEGE TO MEDICAL
AND WORKERS'
COMPENSATION RECORDS
OF DOW EMPLOYEES

Plaintiffs, Vietnam veterans and members of their families claim that they suffered injuries as a result of the veterans' exposure to herbicides manufactured by the defendant chemical companies and supplied by them to the United States government for use in the Vietnam War. The case has been certified as a class action for all liability and compensatory damage issues pursuant to Rule 23(b)(3) of the Federal Rules of Civil Procedure and for determination of punitive damage issues pursuant to Rule 23(b) 1 (B). See In re "Agent Orange" Product Liability Litigation, P.T.O. 72, ---F. Supp.---(E.D.N.Y. Dec. 16, 1983), writ of mandamus denied, No. 83-3065, Slip Op. (2d Cir. January 9, 1984).

Pursuant to the discovery rules of the Federal Rules of Civil Procedure, plaintiffs are seeking from defendant-Dow Chemical Company ("Dow") the medical and workers' compensation

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records of its employees who have made claims against Dow arising out of alleged industrial exposure to phenoxy herbicides from 1953 to 1970. Dow argues that these records are privileged by reason of a Michigan statute which prohibits physicians from disclosing information acquired in attending any patient. Dow further bolsters its argument by reference to Michigan Public Health Code §333.5611 which requires employers to file written reports of occupational disease claims made by employees and which expressly denotes such reports "non-public" and exempt from disclosure. See MCL, Public Health Code §333.5611. Both sides have extensively briefed the issues including which law should apply to a resolution of this dispute. After careful consideration, it is the Special Master's recommendation that Dow produce, under an appropriate protective order, the requested records to the plaintiffs, with the names, addresses and information identifying individual employees redacted. The following memorandum sets forth the reasons for the Special Master's conclusion.

Introduction

Rule 26(b) of the Federal Rules of Civil Procedure provides for the discovery of any matter, not privileged, which is relevant to the subject matter of the litigation. While the court always has discretion to limit discovery, see Fed. R. Civ. P. Rule 26(c); Apicella v. McNeil Laboratories, Inc., 66

FRD 78, 82 (E.D.N.Y. 1975), generally, if the item being sought is relevant to the subject matter of the litigation and not privileged, it is discoverable. Relevancy for discovery purposes is treated more flexibly than under the Federal Rules of Evidence, Rule 401*/ and includes anything that appears "reasonably calculated to lead to the discovery of admissible evidence". Fed. R. Civ. P. Rule 26(b)(1). Clearly, the records sought by plaintiffs here are relevant for discovery purposes, and may themselves constitute admissible evidence. Plaintiffs seek those medical and workers' compensation records of Dow employees who claimed to have suffered injuries by reason of industrial exposure to phenoxy herbicides from 1953 to 1970. Such records may show that phenoxy herbicides cause certain types of injuries; they may also show what Dow knew concerning the product it manufactured for the government, which may help plaintiffs to refute defendants' government contract defense.**/ However, if such records are

*Rule 401 of the Federal Rules of Evidence defines relevant evidence as "evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable...than it would be without the evidence".

**The government contract defense has been described by Judge Pratt as having three elements. To prevail on the defense, a defendant must show: 1) that the government made the specifications for "Agent Orange", 2) that the product manufactured by a defendant complied with these specifications in all material respects and 3) that the government knew as much as or more than the defendant about the hazards to people that accompanied use of the product. In re "Agent Orange" Product Liability Litigation, 534 F.Supp.1046, 1055 (E.D.N.Y. 1982)

privileged they are outside the scope of Rule 26 and are not discoverable. Thus, the issue here is whether Dow's employee medical and workers' compensation records are protected from disclosure by reason of the physician/patient privilege.

I. Rule 501 of the Federal Rules of Evidence

Rule 501 of the Federal Rules of Evidence deals with the subject of privilege and provides that:

Except as otherwise required by the Constitution of the United States or provided by Act of Congress or in rules prescribed by the Supreme Court pursuant to statutory authority, the privilege of a witness, person, government, State or political subdivision thereof shall be governed by the principles of the common law as they may be interpreted by the courts of the United States in the light of reason and experience. However, in civil actions and proceedings, with respect to an element of a claim or defense as to which State law supplies the rule of decision, the privilege of a witness, person, government, State or political subdivision thereof shall be determined in accordance with State law.

The Rule, especially its second sentence, attempts to establish a relationship between federal courts and state law-making bodies. Saltzburg, Federal Rules of Evidence Manual, at 229 (3d ed. 1982); See Berger, "Privilege, Presumptions and Competency of Witnesses in Federal Court: A Federal Choice-of-Laws Rule", 42 Brooklyn L.Rev. 417, 436 (1976). However, commentators to the Rule, as well as courts applying it have not always agreed on what it means. See Saltzburg, Federal Rules of Evidence Manual at 229.

One approach to construing Rule 501 calls for a federal court sitting in diversity to apply the forum state's law on privilege. See, e.g., Samuelson v. Susen, 576 F.2d 546; Super Tire Engineering Co. v. Bandag, Inc., 562 F.Supp. 439, 440 (E.D.Pa. 1983). This result is hardly startling since, under the principles of Erie, state law would normally be expected to supply the rule of decision in a diversity case. See Pollitt v. Mobay Chemical Co., 95 F.R.D. 101, 104 (S.D.Ohio 1982); 2 Weinstein's Evidence §501[02] at 501-21; Berger, supra, at 448. If the privilege rules of more than the one state were involved, e.g., where the communication sought to be protected was made in a state other than the forum, the federal court would look to the choice-of-law rules of the forum state to determine which state's substantive law would be used for resolution of the privilege question. See Klaxon Co. v. Stentor Elect. Mfg. Co., 313 U.S. 487, 61 S.Ct. 1020 (1941); see, e.g., Mazzella v. Philadelphia Newspapers, Inc., 479 F.Supp. 523 (E.D.N.Y. 1979).

At least one commentator, however, has argued that Rule 501 directs the federal courts to apply a federal choice-of-law rule in cases where state law supplies the rule of decision and more than one state's privilege law is implicated. Berger, "Privilege, Presumptions and Competency of Witnesses in Federal Court: A Federal Choice-of-Laws Rule", 42

Brooklyn L. Rev. 417 (1976). Cf. Mitsui & Co. (U.S.A.) Inc. v. Puerto Rico Water Resources Authority, 79 F.R.D. 72 (D.P.R. 1978)(District court in Puerto Rico applied an interest analysis test to determine whether the Puerto Rico accountant-client privilege should be used to protect information sought in depositions of accountants in New York, which does not recognize the privilege). See also, Apicella v. McNeil Laboratories, Inc., 66 F.R.D. 78 (E.D.N.Y. 1975).

In Apicella, a products liability case based on diversity jurisdiction, the court refused to permit disclosure of a newsman's sources even though the forum state did not recognize the privilege. The court balanced relevancy of and need for the material sought against the state's policy regarding protection of news sources and federal constitutional interests. It held that even though the forum state had no privilege for newsmen, the parties' request for the journalist's sources should be denied in view of other factors weighing in favor of protection of those sources, such as the adverse effect disclosure would have on First Amendment rights, the ability of the journalist to obtain information from his sources in the future and the fact that the parties had not demonstrated need for the material. Although Apicella was a diversity case, the court did not slavishly follow the state

law which, it would appear, would have resulted in disclosure; instead it fashioned a balance test to determine whether the material would be protected from disclosure by a privilege.

Utilizing a balance test in this case, it seems clear that Dow's employee medical and workers' compensation records are not protected from disclosure. The need for the requested material far outweighs any interest in absolutely protecting these records from disclosure, especially where the names, addresses and other identifying information concerning individual employees are redacted.

Even under the first approach, however, this result would hold because, it is submitted, federal common law will govern the instant privilege question, and under federal common law, as will be shown below, no physician-patient privilege exists. Although jurisdiction in this case is founded upon diversity, the recent learned and provocative opinion on choice of law of the newly-assigned trial judge, Chief Judge Jack B. Weinstein, suggests that, rather than applying its own law, each state would look to federal common law or national consensus law to supply the rule of decision at least with respect to the product liability, government contract defense and punitive damage issues. See Preliminary Memorandum on Conflicts of Law, P.T.O. 87, dated January 12, 1984 at 5,6 ("PTO 87").

In its very detailed analysis, the Court distinguished between federal law applying by its own force, for example, when jurisdiction is founded upon the existence of a federal question, and federal substantive law applying because a state chooses to apply it. See PTO 87 at 8-10. As an example of the latter, the Court noted that in deciding what state policy and law ought to be, a state often looks at federal law; drawing upon federal decisions, statutes and executive orders, a state might incorporate federal substantive law into its own substantive law. Id. at 9.

In examining the question of what law should apply in this multidistrict litigation, Judge Weinstein looked at the choice-of-law rules of the states in which the transferor courts sit. See PTO 87 at 2-3, citing Klaxon v. Stentor Electric Mfg. Co., 313 U.S. 487, 61 S.Ct. 1020 (1941) and Van Dusen v. Barrack, 376 U.S. 612; 84 S.Ct. 805 (1964). He concluded that, regardless of which choice-of-law methodology was used, each state, "because of its inability to identify and select any other state's law to be applied as the rule of decision, would seek to divine what the national rule of decision with respect to product liability law would be so that such law would appropriately reflect the national and international characteristics of this case". PTO 87 at 33.

The Dow employee records which plaintiffs have requested relate to the products liability and the government contract defense issues, see supra at 3. As to both, Judge Weinstein has tentatively determined federal common law or national consensus law applies. Cf. In re "Agent Orange" Product Liability Litigation, No. 83-3065, Slip Op. at 1091 n.2, (2d Cir. January 9, 1984). (The Second Circuit noted that although there is no federal question here, it has not yet been determined what law might apply to which issues and implied that federal law might apply to certain issues, such as the government contract defense). Pursuant to Rule 501, then, for purposes of resolving the instant privilege problem, it appears that, since state law does not supply the rule of decision with respect to those issues, the court should look to federal common law to determine whether Dow employee medical and workers' compensation records are protected from disclosure by a physician-patient privilege. See Scott v. McDonald, 70 F.R.D. 568, 571 (N.D.Ga. 1976).

II. The Balance Test.

At common law no physician-patient privilege existed. However, Rule 501 directs federal courts to apply "the principles of common law as they may be interpreted...in light of reason and experience". F.R.E. Rule 501 (emphasis added).

Rather than attempting to set one rule by which privilege questions should be determined in all cases, Rule 501 permits a more flexible, case-by-case approach. See Lora v. Board of Education of the City of New York, 74 F.R.D. 565, 578 (E.D.N.Y. 1977) where Judge Weinstein recognized that, in developing privileges on a case-by-case basis, "'reason and experience' dictate a balancing of the public and private interests involved". Id. See also, United States v. King, 73 F.R.D. 103, 105 (E.D.N.Y. 1976).

In Lora, this court formulated a balance test to determine whether a psychiatrist-patient privilege would apply to diagnostic and referral records used by the Board of Education in its procedures for placing children in schools for emotionally disturbed children. The "most constant" factor in the balancing equation is the "need for full development of the facts in federal litigation in order that the paramount interest in fair administration of justice be served". Lora v. Board of Education, 74 F.R.D. at 578. The court also identified other public interest factors such as the public's interest in civil rights cases generally and in particular the public's interest in the effects on society of discrimination in remedial schools. Id. at 579.

Private interests, such as an individual's "justifiable privilege expectations", must be considered too. See Lora v. Board of Education, 74 F.R.D. at 579. In Lora this court isolated four factors designed to narrow, as much as possible, potential intrusion into the privacy of the students whose records were being sought: "First, is the identification of the individuals required for effective use of the data? Second, is the invasion of privacy and risk of psychological harm being limited to the narrowest possible extent? Third, will the data be supplied only to qualified personnel under strict controls over confidentiality? Fourth, is the data necessary or simply desirable?" Id.

Finally, even though state law may not supply the rule of decision, a federal court may look at state law to determine what the state's law is with respect to the privilege in question. See, e.g., Lora v. Board of Education, 74 F.R.D. at 576; United States v. King, 73 F.R.D. at 105: "A strong policy of comity between the state and federal sovereignties impels federal courts to recognize state privileges where this can be accomplished at no substantial cost to federal substantive and procedural policy".

Recommendation

As indicated above, the Special Master recommends that Dow's employee medical and workers' compensation records which

arise out of alleged claims of industrial exposure to phenoxy herbicides from 1953 to 1970 be produced to plaintiffs with the names, addresses and other such identifying information redacted.

"'The public...has a right to every man's evidence' except for those persons protected by a constitutional, common-law, or statutory privilege." Branzburg v. Hayes, 408 U.S. 665, 688, 92 S.Ct. 2646 (1972) (citation omitted). As no physician-patient privilege exists in federal common law, one should be reluctant to recommend this court to adopt one in this case. See In re Doe, 97 F.R.D. 640, 645-46 (S.D.N.Y. 1983), affirmed 711 F.2d 1187 (2d Cir. 1983) where the court ordered production of a psychiatrist's patients' records because, after an in camera examination, it found that the records contained only information which would be found in records of a non-psychiatrist physician, and, there being no physician-patient privilege in federal common law, such records were not protected from disclosure. In addition, the physician-patient privilege has been often criticized by leading authorities. See McCormick, Evidence, §105 at 228 (Cleary 2d.ed. 1972). It is worth noting, too, that the Advisory Committee to the Federal Rules of Evidence included rules defining nine specific privileges in the original Article

V of the Federal Rules of Evidence, however, the Committee rejected the physician-patient privilege, adopting, instead, a narrow privilege for psychiatrist-patient communications. See, Salzburg, Federal Rules of Evidence Manual, Rule 501 at 231 (3d Ed. 1982). See also, In re Doe, 97 F.R.D. at 644-46.

As was stated in Lora v. Board of Education, 74 F.R.D. at 578, the most constant factor in the balancing test is "the need for full development of the facts in federal litigation". Also, as in Lora, there are other public interest factors in this case weighing in favor of disclosure of Dow employee medical and workers' compensation records. The need to have all relevant information before the court is heightened here where the public has a particular interest in the resolution of claims which involve United States servicemen alleging serious injuries as a result of a product manufactured in the United States by every major chemical manufacturer and used by the government during a war which has not yet ceased to provoke controversy.

Dow argues that the medical and workers' compensation records of present and former Dow workers should not be produced just because their employer has been sued in federal court. Dow maintains that Dow employees, having no interest or involvement in this litigation, stand nothing to gain but "an invasion of their privacy". Memorandum of Dow Chemical

Company, dated December 30, 1983, at 7-8. However, Dow also indicates in its papers its willingness to supply the information sought by plaintiffs. Id. at 6-7. Rather than having Dow extract the data, however, it seems preferable that the records themselves be provided. Dow's employees' privacy will be protected by blocking out the names, addresses and any other identifying information on the individual records and files. See E.E.O.C. v. University of Notre Dame Du Lac, 715 F.2d 331, 338 (7th Cir. 1983). See also, Marrese v. American Academy of Orthopaedic Surgeons, 52 U.S.L.W. 2399 (7th Cir. January 3, 1984)(en banc). Further, the material should be disclosed under a protective order which will limit the use of the records solely for purposes of this lawsuit.

While the general purpose of the physician-patient privilege is to encourage a patient in need of medical assistance to communicate freely with his or her doctor, this policy will not be impaired in the instant case where the records to be produced retain their confidentiality, inasmuch as all identifying information will be redacted.

Plaintiffs have shown a compelling need for this data. The information contained in these records may be of great importance in determining whether, when and to what

extent Dow knew that its product might cause harm to human health. Accordingly, it is my recommendation that these records, redacted as indicated, be produced forthwith, under the terms of a protective order as described above.

Dated: New York, New York
January 31, 1984

Respectfully submitted,


SOL SCHREIBER
Special Master

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

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IN RE :
 :
 "AGENT ORANGE" :
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 PRODUCT LIABILITY LITIGATION :
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MDL No. 381
(All Cases)

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MEMORANDUM OF DEFENDANT
MONSANTO COMPANY IN
SUPPORT OF ITS MOTION
FOR A PROTECTIVE ORDER

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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----X
IN RE : MDL No. 381
"AGENT ORANGE" : (All Cases)
PRODUCT LIABILITY LITIGATION :
-----X

MEMORANDUM OF DEFENDANT MONSANTO COMPANY
IN SUPPORT OF ITS MOTION
FOR A PROTECTIVE ORDER

Defendant Monsanto Company ("Monsanto") submits this memorandum in support of its motion, pursuant to Fed. R. Civ. P. 26(c), for an order barring plaintiffs from deposing the twenty present or former Monsanto employees named in plaintiffs' most recent "preliminary list" of so-called "priority witnesses," dated February 13, 1984.

With trial only eleven weeks away, to permit these twenty additional depositions would be to impose on Monsanto a heavy and unjustifiable burden -- unjustifiable because plaintiffs have had two years to take the depositions they now so belatedly request. This Court should not allow plaintiffs' deliberate delay to prejudice Monsanto.

Relevant Procedural History

To put plaintiffs' eleventh-hour request in its proper light, a concise account of the course of discovery in this case is required. In Pretrial Order No. 26 the Court ordered

first-wave discovery on the then undefined government contract defense. See 506 F. Supp. 762, 797, 799 (E.D.N.Y. 1980). In January, 1981 plaintiffs served interrogatories on defendants. In February, 1981 Monsanto, pursuant to Fed. R. Civ. P. 33(c), produced documents responsive to those interrogatories which pertained to the government contract defense as interpreted by defendants.

In Pretrial Order No. 33 the Court explicitly defined the elements of the government contract defense. See 534 F. Supp. 1046, 1055 (E.D.N.Y. 1982). The Court's definition made relevant the issue of each defendant's knowledge of the human health hazards, if any, that accompanied the use of Agent Orange -- an issue that remains the focus of plaintiffs' theory of defendants' liability. See, e.g., Pretrial Order No. 51, 565 F. Supp. 1263, 1276 (E.D.N.Y. 1983) ("Plaintiffs undoubtedly will strongly emphasize a negligent failure to warn as a basis for liability."). The Court also ordered "intensive discovery" on the now defined government contract defense. 534 F. Supp. at 1058.

On July 9, 1982 Monsanto served supplemental answers to plaintiffs' interrogatories. See Exhibit A hereto. In addition to producing documents relevant to the government contract defense, Monsanto identified -- by name, address, and relevant job title -- 76 present or former Monsanto employees with relevant knowledge. Thus for over nineteen months plaintiffs have known the identities and whereabouts of 76 persons from Monsanto with knowledge about the critical issues

in this case, e.g., the formation of dioxin in the 2,4,5-T production process; the identification, detection, and measurement of dioxin; the toxicity of dioxin; and the means of avoiding or minimizing the presence of dioxin in 2,4,5-T.

What have plaintiffs done with this information? During the nine-month period preceding the Court's announcement on May 12, 1983 adjourning the trial scheduled for June 27, plaintiffs deposed only six of the 76 persons identified by Monsanto. During the five-month period after the adjournment, plaintiffs deposed no one presently or formerly employed by Monsanto.

In September, 1983 Special Master Schreiber established a deposition schedule for the rest of the year pursuant to which plaintiffs, during three of every four weeks, would each week take the depositions of three of each defendant's present or former employees. During each such three-week period, defendants would not be permitted to depose anyone. The Special Master clearly stated the purpose of this schedule: "to give the plaintiffs catch up time." See Tr. of Hearing on September 7, 1983 at 6470-74, 6476-78, 6483-84 (Exhibit B hereto).

The Court affirmed this schedule, noting that "plaintiffs' failure thus far to undertake a regular program of depositions makes appropriate the program directed by the special master." Pretrial Order No. 59 at 3 (September 15, 1983). This program, pursuant to which plaintiffs were

permitted to take 27 Monsanto depositions by year's end, was slated to begin October 3, 1983. See Pretrial Order No. 59 at 7; Tr. of Hearing on September 15, 1983 at 6561.

Plaintiffs' counsel, however, who had known about the "catch up" deposition program since early September, delayed three weeks in sending counsel for Monsanto a witness list. See letter dated September 27, 1983 from David J. Dean to John Sabetta (Exhibit C hereto). That list contained the names of seven present and thirteen former employees. After witnesses were located and arrangements made, the deposition program finally began on October 17, 1983.

In October, six Monsanto depositions were taken. In November six were taken; two more had been scheduled but were adjourned by Special Master Schreiber at the request of plaintiffs' counsel and over Monsanto's objection. In December two depositions were taken. In January three were taken; thus far in February one has been taken, and one witness has been re-deposed.

Thus during the four and a half months since the Court-approved deposition "catch up" program began, plaintiffs have deposed eighteen Monsanto witnesses.

On February 9, 1984 plaintiffs submitted a deposition witness list containing 203 names, 98 of which were purported present or former employees of defendants, including seven from Monsanto. See Plaintiffs' Response to Paragraph No. 7 of the

Magistrate's Pretrial Order No. 1 (Exhibit D hereto), at 3. In their submission plaintiffs assured the Court that the number of depositions they actually planned to take would "of necessity be but a fraction" -- less than half, perhaps even less than a quarter -- of the number listed. In this regard plaintiffs undertook to submit a second list of "priority witnesses" from the first list. Id. at 1-2.

Plaintiffs' counsel reiterated these assurances at the hearing before Magistrate Scheindlin on February 9. See Tr. at 9200 ("But I am sure that these [lists] will be pared down. I know ours will."), 9211, 9215 (Exhibit E hereto).

Plaintiffs' "priority list" was received by counsel for Monsanto on February 15. The list contains 111 names, 60 of which are purported present or former employees of defendants. See letter dated February 13, 1984 from Schlegel & Trafelet, Ltd. to Hon. Shira Scheindlin (Exhibit F hereto). The extent of plaintiffs' prioritization of each defendant's employees is as follows:

	<u>Number on First List</u>	<u>Number on "Priority" List</u>
Diamond	14	6
Dow	40	15
Hercules	9	5
Monsanto	7	22*
T-H	22	6
Thompson	6	6
Uniroyal	0	0

* Of these 22 names, one, Louis Schwartz, was never a Monsanto employee, and another, L.C. Weger (identified incorrectly by plaintiffs as E. Weger), is deceased.

12605

With respect to Monsanto employees, plaintiffs have plainly not prioritized -- they have multiplied, more than tripling the number of depositions they seek to take. During the past two years of discovery in this case, plaintiffs have taken 28 Monsanto depositions. They now propose to take 22 more during the month of March.

ARGUMENT

THIS COURT SHOULD REJECT PLAINTIFFS'
BELATED REQUEST FOR TWENTY MORE
MONSANTO DEPOSITIONS AS UNJUSTIFIABLE
AND HIGHLY PREJUDICIAL

The original complaint in this case was filed over five years ago. There has been intensive discovery during the past two years. The Court has made plain its firm intention that the trial will begin May 7, eleven weeks away. Because this litigation is so big, so complex, and so important, there is much to do before trial and little time in which to do it.

Plaintiffs want to force Monsanto to spend a good deal of this precious time preparing for and defending twenty depositions they could have taken many months ago. Eleven of the twenty names on plaintiffs' "priority list" were specifically identified by Monsanto over nineteen months ago as persons having knowledge relevant to the core issues of liability in this case. All names on the list have been identified in relevant documents produced by Monsanto as long as three years ago.

Plaintiffs have deposed twenty-five present or former Monsanto employees during the past two years. That they have not deposed a greater number is not an accident but rather a litigation decision. Plaintiffs' counsel have often proclaimed their readiness for trial without need for any further discovery of defendants. See, e.g., Ex. B at 6468.

Plaintiffs' deliberate inattention to deposition discovery of defendants did, however, concern Special Master Schreiber. As a result he required plaintiffs to take depositions and prohibited defendants from taking depositions during 75% of the last three months of 1983. The Special Master, in announcing this deposition "catch up" program, and the Court, in approving it, were careful to consider whether it would prejudice defendants' preparation for trial. Because the program was slated to end well in advance of the then unfixed trial date, both concluded that no such prejudice would result. See Ex. B at 6473-74, 6478, 6483-84; Pretrial Order No. 59 at 5.

Plaintiffs in large part availed themselves of this unusual opportunity to "catch up". At the beginning of the three-month period they had taken only eight Monsanto depositions; during that period they took fourteen more. Since the beginning of 1984, however, plaintiffs have shown little interest or initiative in taking more Monsanto depositions, with the notable exception of Dr. R. Emmet Kelly, whom they

12607

regard as very important and have been permitted to depose on three separate occasions. Otherwise, they have apparently again decided to concentrate their trial preparation efforts elsewhere.

On February 9 plaintiffs served a deposition witness list containing the names of seven purported present or former Monsanto employees. Monsanto objected only to the deposition of two of the seven on the ground that plaintiffs had already deposed them. See letter dated February 15, 1984 from John C. Sabetta to Stephen J. Schlegel (Exhibit G hereto).

When plaintiffs last week served their so-called "priority list" of deposition witnesses, the number of Monsanto employees they wish to depose suddenly tripled. Moreover, because only one name appears on both lists, the first list has turned out to be a sham. In light of plaintiffs' counsel's repeated assurances to this Court -- both in writing and at the hearing before Magistrate Scheindlin on February 9 -- that they would pare down and prioritize their deposition requests, the conclusion is inescapable that their conduct with regard to Monsanto has worked a fraud on Monsanto and on the Court.

Indeed, plaintiffs' new list is a creature of litigation tactics, not legitimate need. It is difficult to imagine a stratagem more disruptive of Monsanto's preparation for trial than an eleventh-hour odyssey of nationwide deposition defense. If plaintiffs really thought they needed

twenty more Monsanto depositions, they would have taken them during the past two years. They chose not to take them. That was a litigation decision, an exercise of their counsel's discretion. Now they want to take them. This is a litigation ploy that the Court should not enforce.

Judge Weinstein on prior occasions has, in light of the rapidly approaching trial, drastically reduced the number of depositions requested by the parties. For example, last November defendants requested 61 depositions of government causation experts. The Court, citing the "enormous amount of work" to be done in the time remaining before trial, limited the number to ten. See Tr. of Hearing on November 21, 1983 at 65-67, 72-75, 77-78 (Exhibit H hereto). Similarly, last week plaintiffs proposed to take the depositions of scores of government contract officers. Judge Weinstein reserved decision on whether to allow any such depositions and made it clear that he would in any event permit only a few. See Tr. of Hearing on February 15, 1983 at 39-40, 45 (Exhibit I hereto).

The Court recognizes there is no time on the eve of trial for a large number of depositions -- all of which could have been taken months ago. The "catch up" program has ended, and there is no time for another. Moreover, based on our preliminary review, many of the twenty Monsanto witnesses plaintiffs now seek to depose have knowledge that, if relevant, is at best merely cumulative of that of the twenty-five Monsanto witnesses whom plaintiffs have already deposed. In

such circumstances, the Court should recognize plaintiffs' omnibus request for twenty more Monsanto depositions as the mere device that it is.

Because plaintiffs' deliberately belated request is completely unjustifiable and very prejudicial to Monsanto's preparation for the now imminent trial, it should be denied in its entirety. At the very least, plaintiffs should be required to explain to the Court's satisfaction, for each of the twenty Monsanto witnesses, why he was not noticed for deposition last year or before, what information plaintiffs expect to obtain from him, and why they have not been able to obtain that information from their extensive discovery of Monsanto over the past three years.

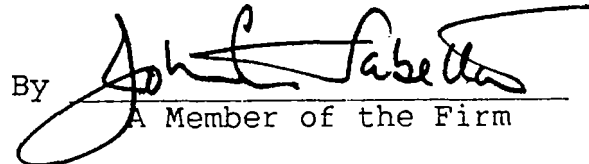
CONCLUSION

For the reasons stated above, Monsanto's motion for a protective order should be granted.

Dated: New York, New York
February 21, 1984

Respectfully submitted,

TOWNLEY & UPDIKE

By 
A Member of the Firm

Attorneys for the Defendant
Monsanto Company

405 Lexington Avenue
New York, New York 10174
(212) 682-4567

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

BOUND FILE

-----X

IN RE : MDL No. 381

"AGENT ORANGE" :

PRODUCT LIABILITY LITIGATION :

-----X

SUPPLEMENTAL ANSWERS OF DEFENDANT
MONSANTO COMPANY TO PLAINTIFFS'
INTERROGATORIES TO DEFENDANTS
(FIRST WAVE)

TOWNLEY & UPDIKE

CHRYSLER BUILDING
405 LEXINGTON AVENUE
NEW YORK, N. Y. 10174

TELEPHONE
(212) 682-4567

12611

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----X

IN RE	:	MDL No. 381
"AGENT ORANGE"	:	SUPPLEMENTAL ANSWERS OF
		DEFENDANT MONSANTO COMPANY
PRODUCT LIABILITY LITIGATION	:	TO PLAINTIFFS' INTERROGATORIES
		<u>TO DEFENDANTS (FIRST WAVE)</u>

-----X

Monsanto Company ("Monsanto"), in accordance with Pretrial Order No. 33 and Monsanto's February 11, 1981 Answers to Plaintiffs' "Interrogatories to Defendants (First Wave)," dated January, 1981 ("Plaintiffs' Interrogatories"), provides the following supplemental answers to Plaintiffs' Interrogatories. The supplemental answers consist of (1) lists of the names of present and past Monsanto employees who held managerial or supervisory positions prior to January 1, 1971, possess pertinent information, and are believed to be living; and (2) 13 schedules of additional Monsanto documents containing information responsive to one or more of the interrogatories. Each such Monsanto document is identified by a nine-digit number. Because of the overlapping nature of some of the interrogatories, some of the document schedules are responsive to more than one interrogatory.

In an Appendix annexed hereto, the names of all Monsanto employees identified in response to the interrogatories are listed alphabetically, together with, for each, his relevant job title or titles held prior to January 1, 1971 and,

if he is not presently employed by Monsanto, his last known address.

The documents identified herein have been segregated according to the 13 schedules and are available for inspection and copying at the offices of Monsanto's attorneys, Townley & Updike, upon reasonable notice.

ANSWERS

INTERROGATORY NUMBER 2

Provide a table of organization of the answering Defendant Company setting forth the following:

Interrogatory 2A

A. The name and location of each division of the defendant responsible for or which participated in the design, production and sale to the United States Government of the herbicide known as Agent Orange for use in Southeast Asia including Vietnam during the period 1960 through 1971.

Supplemental Answer to Interrogatory 2A

See attached Schedules 1 and 3.

Interrogatory 2B

B. The name, address, telephone number, title and duties of every person employed by, under contract with or otherwise related to each Defendant who was responsible for, participated in or familiar with any of the following:

Interrogatory 2B(i)

(i) Negotiations and contract with the United States Government for the sale of the Agent Orange herbicide for use in Southeast Asia including Vietnam during the period 1960 through 1971, including, but not limited to all persons identified in or familiar with the matters stated in Defendants' Motions for Summary Judgment in this case and the documents referred to therein.

12614

Supplemental Answer to Interrogatory 2B(i)

Robert Baynard
John Bush
James Connaughton
Donald Fischer
G. H. Griffin
P. N. Hoffman
William J. McCarville
Dan Middleton
Robert Rumer
Cecil H. Russell
Milt Smid
C. P. Zorsch

Interrogatory 2B(ii)

(ii) Design of the Agent Orange herbicide which was
the subject of the government contract.

Supplemental Answer to Interrogatory 2B(ii)

Donald Cayard
Tom Greenman
Fred Matthews
Donald Mayer
William J. McCarville
Dan Middleton
Robert Rumer
Cecil H. Russell
D. B. Sharp

12615

Interrogatory 2B(iii)

(iii) The production of the Agent Orange herbicide
which was the subject of the government contract.

Supplemental Answer to Interrogatory 2B(iii)

Rick Atkinson

Philip B. Balderson

Edmund Bauer

Tom Boch

John Boehm

Carl Bohl

Donald Cayard

James Connaughton

Eugene Cutwright

Eugene Dotson

Fred Edmonds

Donald Fischer

H. Maxwell Galloway

Tom Greenman

Robert M. Hamlett

Paul Heisler

Frank J. Helmer

F. J. Holzapfel

Peter Howell

Hal Kirtley

William A. Kuhn

Arthur Leisy

12616

Darwin E. Lewis
Charles F. Luecke
Fred Matthews
Donald Mayer
William J. McCarville
Dan Middleton
John Mullendore
Roy Payne
Homer Payton
J. T. Pebworth
Darrell Rainey
Vernon L. Rhodes
Robert Rumer
Cecil H. Russell
Herbert Sachs
Carl Schumacher
Robert Sido
Ronald R. Smith
Robert Soden
James Springgate
Ed Stewart
Frank E. Take, Jr.
Henry F. Trail
William Udell
H. E. Webb, Jr.
Robert Webber

12617

Toby White
Hill Williams
Robert Yoder
C. P. Zorsch

Interrogatory 2B(iv)

(iv) The state of the art and technology during the period of time when Defendants were under contract with the United States Government to supply the Agent Orange herbicide with respect to the formulation, design, manufacturing, method or process and production of the Agent Orange herbicide.

Supplemental Answer to Interrogatory 2B(iv)

See Supplemental Answers to Interrogatories Numbers 2B(ii), (iii) and (vii).

Interrogatory 2B(v)

(v) The risks of dioxin contamination associated with the design and production of the Agent Orange herbicide, the methods of dioxin control reduction or elimination and the costs thereof.

Supplemental Answer to Interrogatory 2B(v)

P. G. Arvan
Rick Atkinson
Philip B. Balderson
Carl Bohl
Owen E. Dolin

12618

Jack D. Early
Peter Howell
R. Emmet Kelly
Darwin E. Lewis
William J. McCarville
John Mullendore
Roy Payne
Vernon L. Rhodes
Frederick L. Rupel
Cecil H. Russell
D. B. Sharp
A. J. Speziale
J. A. Stephans
William Udell
Elmer Wheeler

Interrogatory 2B(vi)

(vi) Warning to the United States Government, if any,
with regard to the matters stated in the preceding item (v).

Supplemental Answer to Interrogatory 2B(vi)

Monsanto presently knows of no representative who was responsible for, participated in or was familiar with warnings to the United States government with regard to the risks of dioxin contamination associated with Agent Orange, or the methods of dioxin control. However, R. Emmet Kelly communicated with government representatives concerning health

12619

effects to workers exposed to 2,4,5-T and its precursors, and John Mullendore communicated with government representatives concerning the dioxin content of chlorinated phenols.

Interrogatory 2B(vii)

(vii) The manufacturing process proposed to be utilized or utilized in the production of Agent Orange.

Supplemental Answer to Interrogatory 2B(vii)

Rick Atkinson
Philip B. Balderson
D. E. Baldus
Edmund Bauer
Tom R. Boch
John Boehm
Carl Bohl
Donald Cayard
James Connaughton
Eugene Cutwright
Owen E. Dolin
Eugene Dotson
Fred Edmonds
H. Maxwell Galloway
Jack Garrett
Tom Greenman
Robert M. Hamlett
L. P. Harich

H. C. Heineman
Paul Heisler
Frank J. Helmer
Peter Howell
Darwin E. Lewis
Charles F. Luecke
D. Lynch
Fred Matthews
Donald Mayer
William J. McCarville
Dan Middleton
John Mullendore
R. L. Null
Roy Payne
Homer Payton
J. T. Pebworth
Wayne Phillips
Vernon L. Rhodes
James N. Roark
Robert Rumer
Frederick L. Rupel
Cecil H. Russell
Herbert Sachs
V. N. Schrodtt
D. B. Sharp

Ronald R. Smith

A. J. Speziale

J. A. Stephans

Ed Stewart

Frank E. Take, Jr.

Marrine A. Terpstra

William Udell

H. E. Webb, Jr.

Robert Webber

Toby White

Robert Yoder

INTERROGATORY NUMBER 3

Identify by name and last known address, and if retired so state and supply the last known address of each and every person, scientific, medical, or otherwise, retained by or known to this defendant or known by this defendant to have been retained by or known to any of the other defendants who has studied, evaluated, or reported or directly or indirectly communicated any findings referable to whatever effects were so found upon animals or human beings resulting from exposure, directly or indirectly, in the formulation, design, manufacture and production of phenoxy herbicides such as 2,4,5-Trichlorophenoxy Aliphatics containing but not limited to the synthetic organic chemical 2,3,7,8-Tetrachlor Dibenzo p-dioxin (TCDD or "Dioxin") and other herbicides containing Polychlorinated

12622

Dibenzo-p-dioxins (PCDDs) and Polychlorinated Dibenzo furans (PCDFs) including the ultimate users of those expected to be exposed to same.

Supplemental Answer to Interrogatory 3

See attached Schedule 7.

INTERROGATORY NUMBER 4 (FIRST)

Provide a table or organization as to the United States Government showing:

Interrogatory 4A (First)

A. The division or units of such division of the United States Government with whom Defendants contracted to supply the Agent Orange herbicide to be used in Southeast Asia including Vietnam during the period 1960 through 1971.

Supplemental Answer to Interrogatory 4A (First)

See attached Schedule 1.

Interrogatory 4B (First)

B. The name, address, telephone number, title and duties of every person employed by, under contract with or otherwise related to said division or units of the United States Government with whom the Defendants, or any of their agents, servants, or employees dealt in connection with the negotiations and contract for the supply of the Agent Orange herbicide, including the design and production of such herbicide.

Supplemental Answer to Interrogatory 4B (First)

See attached Schedule 1.

Interrogatory 4C (First)

C. The name, address, telephone number, title and duties of every person employed by said division and units whom Defendants claim were knowledgeable with respect to the following:

Interrogatory 4C(i) (First)

(i) The state of the art and technology at the time the Defendants were under contract with the United States Government to supply the Agent Orange herbicide with respect to the design and method of process of production including manufacturing process of the Agent Orange herbicide.

Supplemental Answer to Interrogatory 4C(i) (First)

See attached Schedule 3.

Interrogatory 4C(ii) (First)

(ii) The risks of dioxin contamination associated with the design and production of the Agent Orange herbicide, the methods of dioxin control, reduction or elimination and the costs thereof.

Supplemental Answer to Interrogatory 4C(ii) (First)

See attached Schedule 4.

12624

Interrogatory 4C(iii) (First)

(iii) Warning to the United States Government, if any, with regard to the matters stated in the preceding item (ii).

Supplemental Answer to Interrogatory 4C(iii) (First)

Monsanto is presently unable to identify any such person.

Interrogatory 4C(iv) (First)

(iv) The process utilized or proposed to be utilized by defendant to manufacture Agent Orange.

Supplemental Answer to Interrogatory 4C(iv) (First)

See attached Schedule 3.

INTERROGATORY NUMBER 4 (SECOND)

Identify all documents, their location and the name, title, address and telephone number of the custodian in possession or control of, or known to the Defendants which relate to the items 1 through 3 supra, including:

Interrogatory 4A (Second)

A. Any and all research, analyses, tests, testing procedures relative to the manufacture, advertising, sale, promotion, and marketing of phenoxy herbicides such as 2,4,5-Trichlorophenoxy Aliphatics containing but not limited to the synthetic organic chemical 2,3,7,8-Tetracholor Dibenzo p-dioxin (TCDD or "Dioxin") and other herbicides containing Polychlorinated Dibenzo-p-dioxins (PCDDs) and Polychlorinated Dibenzo furans (PCDFs), hereinafter simply "Phenoxy herbicides."

12825

Supplemental Answer to Interrogatory 4A (Second)

See attached Schedule 6.

Interrogatory 4B (Second)

B. Analysis, studies, experiments, results of such experiments, including but not limited to the recommendations concerning the results of experiments relative to the formulation, production, manufacture, sale, marketing, promotion, and advertising of phenoxy herbicides.

Supplemental Answer to Interrogatory 4B (Second)

See attached Schedule 6.

Interrogatory 4C (Second)

C. Anyone acting by or on behalf of this defendant or known to be acting by or on behalf of any of the other defendants relative to the research, testing, analysis, evaluation, and recommendations relative to the manufacture, sale, distribution, advertising, and promotion of phenoxy herbicides.

Supplemental Answer to Interrogatory 4C (Second)

See attached Schedule 6.

Interrogatory 4D (Second)

D. Effects of exposure of whatever nature and under whatever circumstances or conditions to phenoxy herbicides.

Supplemental Answer to Interrogatory 4D (Second)

See attached Schedule 7.

12326

Interrogatory 4E (Second)

E. The dates, places and times of measuring and testing exposure in animals (identify by animal) of phenoxy herbicides.

Supplemental Answer to Interrogatory 4E (Second)

See attached Schedule 8.

Interrogatory 4F (Second)

F. The dates, times, places, and results of exposure to humans in whatever form of phenoxy herbicides.

Supplemental Answer to Interrogatory 4F (Second)

See attached Schedule 9.

Interrogatory 4G (Second)

G. Any studies conducted by this defendant or known by this defendant to have been conducted by any of the other defendants or by anyone or by any independent organization retained by this defendant or known by this defendant to have been retained by other defendants with respect to the effects, if any, upon the employees of this defendant or the employees of other defendants known to this defendant or their spouses and children who were in any manner, shape, or form associated with or exposed to the manufacture, production and shipment of phenoxy herbicides.

Supplemental Answer to Interrogatory 4G (Second)

See attached Schedule 10.

Interrogatory 4H (Second)

H. Any and all accidents in the production and manufacturing, shipping, and distribution of phenoxy herbicides including the results of any inquiry by this defendant or known by this defendant to have been made by other defendants or any inquiry by any public or private agency relative to such accident or accidents.

Supplemental Answer to Interrogatory 4H (Second)

See attached Schedule 11.

Interrogatory 4I (Second)

I. Identify and set forth the process utilized for the manufacture of phenoxy herbicides.

Supplemental Answer to Interrogatory 4I (Second)

See attached Schedule 3.

Interrogatory 4J (Second)

J. If the process in response to the above was changed from time to time, identify and set forth each and every process and the dates of changes, if any, to date.

Supplemental Answer to Interrogatory 4J (Second)

See attached Schedule 3.

Interrogatory 4K (Second)

K. The existence of Dioxin in the manufacture and production of phenoxy herbicides.

Supplemental Answer to Interrogatory 4K (Second)

See attached Schedule 4.

Interrogatory 4L (Second)

L. Warranties, representations, and assurances, made by this defendant or known by this defendant to have been made by other defendants to the United States Government in respect of phenoxy herbicides.

Supplemental Answer to Interrogatory 4L (Second)

See attached Schedule 2.

Interrogatory 4M (Second)

M. The company's knowledge of the existence of Dioxin in the production, manufacture, distribution, sale, marketing, and promotion of phenoxy herbicides.

Supplemental Answer to Interrogatory 4M (Second)

See attached Schedule 4.

Interrogatory 4N (Second)

N. Warranties, representations, assurances, and/or promises made by this defendant or known to this defendant to have been made by other defendants to the United States Government relative to the existence or non-existence of Dioxin in phenoxy herbicides.

Supplemental Answer to Interrogatory 4N (Second)

Monsanto has no such documents.

Interrogatory 4O (Second)

O. Negotiations between this defendant or known by this defendant to have been undertaken by or on behalf of the

other defendants between this and/or the other defendants and the United States Government with respect to the existence of Dioxin in the manufacture, production, marketing, promotion, sale, advertising, and distribution, on [sic] phenoxy herbicides.

Supplemental Answer to Interrogatory 40 (Second)

See attached Schedule 2.

Interrogatory 4P (Second)

P. The manufacturing process from beginning to end in the production of phenoxy herbicides.

Supplemental Answer to Interrogatory 4P (Second)

See attached Schedule 3.

Interrogatory 4Q (Second)

Q. All documents which refer or relate, directly or indirectly, to any action, investigation, analysis, study, report, or statements by or on behalf of the company or received by the company or known by this company in respect of the other defendants relating to incidents of medical signs, symptoms, and conditions claimed, suggested, or suspected of being related to exposure in any form to phenoxy herbicides from in or about 1945 to date including but not limited to activities of any treatment organization, study organization and its groups.

Supplemental Answer to Interrogatory 4Q (Second)

See attached Schedule 7.

Interrogatory 4R (Second)

R. All documents which refer or relate, directly or indirectly, to claims filed against this defendant in any local, State or Federal Court, agency, board, or any other entity established to hear such claims for medical conditions claimed to have resulted or be connected directly or indirectly to the formulation, design, production and manufacture of phenoxy herbicides.

Supplemental Answer to Interrogatory 4R (Second)

See attached Schedule 13.

Interrogatory 4S (Second)

S. All documents relative to studies of the effects of phenoxy herbicides when used in Southeast Asia including Vietnam including the dates, times, and places and amounts of use and conditions including but not limited to meteorological conditions for use and any and all instructions, directions, suggestions, indications, and contraindications relative to the use of phenoxy herbicides in Southeast Asia from 1960 to 1971.

Supplemental Answer to Interrogatory 4S (Second)

See attached Schedule 12.

Interrogatory 4T (Second)

T. Any and all such documents relating to any private organizations, conferences, foundations, which have conducted any studies, experiments, evaluations, or analyses

either independently or by and on behalf of the answering defendant or known to have been conducted by or on behalf of the other defendants with respect to the effects, if any, of exposure to phenoxy herbicides on animals and humans and the conclusions and recommendations drawn therefrom and the actions, if any, taken in respect thereto by this defendant or known by this defendant to have been taken by other defendants.

Supplemental Answer to Interrogatory 4T (Second)

See attached Schedule 5.

Interrogatory 4U (Second)

U. The funding by this defendant or known by this defendant to have been funded by any or all of the other defendants of any organizations commissioned, encouraged, suffered, and/or directed to undertake studies relative to the medical, genetic, and systematic effects and any other medical effects upon animals and humans exposed by whatever means under whatever conditions and circumstances to phenoxy herbicides.

Supplemental Answer to Interrogatory 4U (Second)

See attached Schedule 5.

INTERROGATORY NUMBER 5

Provide an index to and summary of each of said documents and provide and indicate their means of identification such as file number, case, etc.

Supplemental Answer to Interrogatory 5

See attached Schedules.

12832

INTERROGATORY NUMBER 6

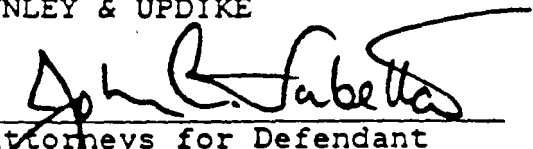
Identify the name, title, address and telephone number of those persons employed by or under contract with, or otherwise related to the Defendants, who were authors of said documents and those persons who are familiar with such documents.

Supplemental Answer to Interrogatory 6

See attached Schedules.

Dated: New York, New York
July 9, 1982

TOWNLEY & UPDIKE

By 

Attorneys for Defendant
Monsanto Company
405 Lexington Avenue
New York, New York 10174
(212) 682-4567

TO: SEE ATTACHED SERVICE LIST

12633

APPENDIX

P.G. ARVAN
Director of Marketing, Agricultural Division
420 North Maple
Greenwich, CT 06348

RICK ATKINSON
Process Research Chemist

Monsanto

PHILIP B. BALDERSON
Chemist, Nitro

Monsanto

D.E. BALDUS
Research Chemist, Agricultural Division

Monsanto

EDMUND BAUER
General Manager, Agricultural Division

Monsanto

ROBERT BAYNARD
Product Supervisor, New York

231 Jeffrey Lane
Newtown Square, PA 19073

TOM R. BOCH
Production Supervisor, Nitro

Monsanto

JOHN BOEHM
Engineer, W.G. Krummrich

Monsanto

CARL BOHL
Industrial Hygienist

Monsanto

JOHN BUSH
Manager and Director of Governmental Marketing, Washington, D.C.

2232 North Military Road
Arlington, VA 22207

DONALD CAYARD
Manager of Guest Operations, Agricultural Products Company

Monsanto

JAMES CONNAUGHTON
Manufacturing Superintendent, Agricultural Division
Nitro and Krummrich

9905 Roundstone Trace
Louisville, KY 40223

EUGENE CUTWRIGHT
Guest Manufacturing Superintendent, Nitro

1474 Maplewood Dr.
Macon, GA 31210

OWEN E. DOLIN
Research Supervisor, Nitro

Monsanto

12635

EUGENE DOTSON
Operations Supervisor, Nitro

Foote Mineral Company
Gover Road
Kingsmountain, NC 28086

JACK D. EARLY
Director of Technical Services, Agricultural Division and
EnviroChem, Washington, D.C.

8024 Lakenheath Way
Potomac, MD 20854

FRED EDMONDS
Foreman, W.G. Krummrich

Monsanto

DONALD FISCHER
Manager of Proprietary Pesticides, Director of Agricultural
Chemicals

Monsanto

H. MAXWELL GALLOWAY
Engineer, Technical Services Department

Monsanto

JACK GARRETT
Manager, Industrial Hygiene & Pollution Abatement

Monsanto

TOM GREENMAN
Superintendent, Technical Services Department

Monsanto

G.H. GRIFFIN
Legal Department, St. Louis

Monsanto

ROBERT M. HAMLETT
Manufacturing Supervisor, W.G. Krummrich

24 Queensbrook
St. Louis, MO 63132

L.P. HARICH
Production Supervisor, Nitro

Monsanto

H.C. HEINEMAN
Production Superintendent, W.G. Krummrich

Monsanto

PAUL HEISLER
General Manufacturing Superintendent, W.G. Krummrich

Monsanto

FRANK J. HELMER
Engineering Services and Process Engineering Superintendent,
Nitro

Monsanto

P.N. HOFFMAN
Product Manager for Agricultural Chemicals, Agricultural
Division

1202 Lakeshore Dr. North
Barrington, IL 60010

F.J. HOLZAPFEL
Director of Engineering, Queeny

12124 St. Clement
St. Louis, MO 63131

PETER HOWELL
Engineer, Nitro

Monsanto

R. Emmet KELLY
Director, Medical Department

665 S. Skinker
St. Louis, MO 63105

HAL KIRTLEY
Shipping Superintendent, Nitro

835 Hughes Drive
St. Albans, WV 25177

WILLIAM A. KUHN
Superintendent, W.G. Krummrich

11915 Paradise Lane
St. Louis, MO 63131

ARTHUR LEISY
Guest Superintendent, W.G. Krummrich

3609 Tibet Drive
Gulf Breeze, FL 32561

DARWIN E. LEWIS
Engineering Supervisor and Assistant Technical Services
Superintendent

3235 Bainburry Ct.
St. Louis, MO 63129

CHARLES F. LUECKE
Assistant Director of Manufacturing, Agricultural Division

Monsanto

D. LYNCH
Senior Research Chemist and Research Specialist in process
development and improvement, Queeny and W.G. Krummrich

Monsanto

FRED MATTHEWS
Production and Operating Supervisor, W.G. Krummrich

Monsanto

DONALD MAYER
Production Coordinator, W.G. Krummrich

Monsanto

WILLIAM J. MCCARVILLE
Director of Product Sales, Agricultural Division

Monsanto

DAN MIDDLETON
Production Supervisor, W.G. Krummrich

Monsanto

JOHN MULLENDORE
Engineering and Technical Services Superintendent, W.G.
Krummrich

1020 Grove
Evanston, IL 60201

R.L. NULL
Technical Services Department Engineer, Area Maintenance
Supervisor and Technical Production Superintendent, Nitro

Monsanto

ROY PAYNE
Head Operator and Building Foreman, Nitro

Monsanto

HOMER PAYTON
Director of Manufacturing, St. Louis

1753 Haggin Grove Way
Carmichael, CA 95608

J.T. PEBWORTH
Operating Supervisor, Nitro .

Ethyl Asia Pacific Company
1 Science Centre Rd.
06-05 Unity House
Singapore, 2260

WAYNE PHILLIPS
Process Chemist and Manufacturing Supervisor, Nitro

Monsanto

12640

DARRELL RAINEY
Foreman, W.G. Krummrich

1070 Georgia Avenue
Englewood, FL 33533

VERNON L. RHODES
Production Supervisor, Nitro

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JAMES N. ROARK
Chief Analytical Chemist, Nitro

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Vice-President and General Manager, Agricultural Division

2620 Quail Hill
Pittsburgh, PA 15241

FREDERICK L. RUPEL
Supervisor of Product Quality, St. Louis

Monsanto

CECIL H. RUSSELL
Director of Product Quality

46 Wingfield
St. Louis, MO 63122

HERBERT SACHS
Manufacturing Superintendent, W.G. Krummrich

4322 Stone Crest
St. Joseph, MO 64505

12841

V.N. SCHRODT
Senior Research Engineer

Monsanto

CARL SCHUMACHER
Operation Supervisor, Administrative Services and Production
Scheduling Planning, Agricultural Division

Monsanto

D.B. SHARP
Research Director, St. Louis

Monsanto

ROBERT SIDO
Labelling Manager, St. Louis

Monsanto

MILT SMID
Materials Handling and Packaging Engineering Specialist, W.G.
Krummrich

Monsanto

RONALD R. SMITH
Head Operator, Nitro

Monsanto

ROBERT SODEN
Plant Manager, W.G. Krummrich

Monsanto

12642

A.J. SPEZIALE
Director of Research, Agricultural Division

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Redwood City, CA 94061

JAMES SPRINGGATE
Plant Manager, Nitro

13060 E. Sunset Drive
Los Altos Hills, CA 94022

J.A. STEPHANS
Director of Research

Monsanto

ED STEWART
Senior Engineer, W.G. Krummrich

Monsanto

FRANK E. TAKE, JR.
Manufacturing Superintendent, Nitro

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Ballwin, MO 63011

MARRINE A. TERPSTRA
Research Group Leader, St. Louis

515 Andrews
St. Louis, MO 63122

12643

HENRY F. TRAIL
Engineering Manager, St. Louis

Box 239, Watson Hill
Freedom, NH 03836

WILLIAM UDELL
Research Chemist, Agricultural Division

Monsanto

H.E. WEBB, JR.
Safety Director, Nitro

1141 New Hope Road
Spring Hill, FL 33512

ROBERT WEBBER
Assistant Director of Engineering, Agricultural Division

Monsanto

ELMER WHEELER
Industrial Hygienist, St. Louis

110 Cool Springs Dr.
Camden, SC 29020

TOBY WHITE
Plant Engineer, Technical Services Department, Nitro

5015 Town Centre Dr.
St. Louis, MO 63128

HILL WILLIAMS
Engineering, Queeny

Monsanto

ROBERT YODER
Senior Engineer, St. Louis

Monsanto

C.P. ZORSCH
Product Supervisor, Agricultural Division

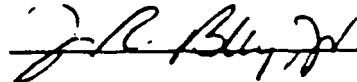
Rt. 2 Box 30
Pacific, MO 63069

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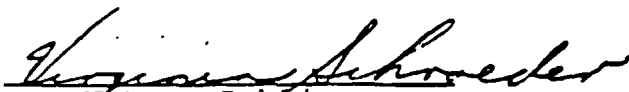
VERIFICATION

STATE OF MISSOURI)
) ss.:
COUNTY OF ST. LOUIS)

J. R. Bley, Jr., being duly sworn, deposes and says that he is an assistant secretary of defendant Monsanto Company, a corporation; that he has read the foregoing Supplemental Answers of Defendant Monsanto Company to Plaintiffs' Interrogatories to Defendants (First Wave) and is familiar with the contents thereof; that deponent is without personal knowledge of the matters stated in the foregoing Supplemental Answers, and is informed and believes that no officer or employee of Monsanto Company has personal knowledge of all such matters; that the foregoing Supplemental Answers have been assembled by authorized employees and counsel of Monsanto Company, who have informed deponent that the foregoing Supplemental Answers are true; and that to the best of deponent's knowledge those Supplemental Answers are true.


J. R. Bley, Jr.

Sworn to before me this
7th day of July, 1982


Notary Public
VIRGINIA SCHROEDER
NOTARY PUBLIC, STATE OF MISSOURI
MY COMMISSION EXPIRES 8/23/88

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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

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In re: :
"AGENT ORANGE" : MDL No. 381
Product Liability Litigation :
----- X

United States Courthouse
Uniondale, Long Island
New York

September 7, 1983
1:30 o'clock P.M.

B E F O R E :

HONORABLE SOL SCHREIBER, Special Master

HENRY SHAPIRO
HARRY RAPAPORT
Official Court Reporters

1
2 A P P E A R A N C E S :
3

4 YANNAcone & YANNAcone, ESQS.
5 Post Office Drawer 109
6 Patchogue, New York 11772

7 BY: VICTOR J. YANNAcone, ESQ.
8
9

10 Plaintiffs' Management Committee:
11 IRVING LIKE, ESQ.
12
13
14
15

16 ASHCRAFT & GEREL, ESQS.
17 2000 L Street, N. W.
18 Washington, D. C. 20038

19 BY: ROBERT A. TAYLOR, JR., ESQ.
20
21
22
23

24 continued...
25

A P P E A R A N C E S : (continued)

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Attorneys for Defendant Dow Chemical
100 Garden City Plaza
Garden City, New York 11530

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MARJORIE MINTZER, ESQ.
STANLEY PIERCE, ESQ.
ROBIN STALBOW, ESQ.

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Attorneys for Defendant Diamond Shamrock
One Wall Street
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BY: WENDELL B. ALCORN, JR., ESQ.
MICHAEL M. GORDON, ESQ.
JEANNE P. BOLGER, ESQ.

TOWNLEY & UPDIKE, ESQS.
Attorneys for Defendant Monsanto Company
405 Lexington Avenue
New York, New York 10017

BY: PHILIP PAKULA, ESQ.
JOHN C. SABETTA, ESQ.
JAMES E. TYRRELL, ESQ.

12649

continued...

A P P E A R A N C E S : (continued)

CLARK, GAGLIARDI & MILLER, ESQS.
Attorneys for Defendant T. H. Agriculture &
Nutrition Co., Inc.
The Inns of Court
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White Plains, New York 10607

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JOHN J. BURKE, ESQ.

KELLEY, DRYE & WARREN, ESQS.
Attorneys for Defendant Hercules, Inc.
101 Park Avenue
New York, New York 10178

BY: PATRICIA TUOHEY, ESQ.

ARTHUR, DRY & KALISH, P.C.
Attorneys for Defendant UniRoyal
1230 Avenue of the Americas
New York, New York 10020

BY: THOMAS A. BECK, ESQ.
MARILYN NEIMAN, ESQ.

continued...

12650

A P P E A R A N C E S : (continued)

SHEA, GOULD, ESQS.
Attorneys for Defendant UniRoyal
330 Madison Avenue
New York, New York 10017

BY: RICHARD GOLDSTEIN, ESQ.

BUDD, LARNER, KENT, GROSS, PICILLO & ROSENBAUM, ESQS.
Attorneys for Defendant Thompson Chemicals
33 Washington Street
Newark, New Jersey 07102

BY: EDWIN R. MATTHEWS, ESQ.
DAVID GROSS, ESQ.

UNITED STATES OF AMERICA
Civil Division, Department of Justice
521 12th Street, Northwest
Room 822
Washington, D. C. 20530

BY: ARVIN MASKIN, ESQ.

continued...

12651

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3 A P P E A R A N C E S : (continued)
4
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6 ALSO PRESENT:

7 JOY BEANE, ESQ.
8 Assistant to Special Master
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2 time to complete it. There were a number of
3 problems that have arisen and there were some
4 additional documents and counsel saw fit in good
5 faith to continue the discovery.

6 However, I do believe that it is necessary
7 to give the plaintiffs some opportunity to conduct
8 some deposition discovery. And I recognized that
9 earlier in the proceedings plaintiffs have
10 indicated that they were ready to go to trial
11 and that they did not need any other discovery
12 on the government contract defense, but with the
13 summary judgments and with the enlargement of the
14 case taken into account the issue of general
15 causation, I did not view the earlier statements
16 by the plaintiffs that they had completed
17 discovery as meaning that they could not
18 continue to make that discovery now.

19 My guess is that they must have conducted
20 to date maybe five or ten depositions of all
21 defendants on government contract defense and,
22 frankly, while I recognize counsel for the
23 defense continually raise that issue, I find it
24 holds no merit that we have waived.

25 It should be also noted that a number of

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2 MR. RIVKIN: I have no problem with that.

3 The other problem I have, for clarification,
4 sir, is you are saying we cannot conduct
5 depositions other than affirmatively more than
6 one week a month?

7 SPECIAL MASTER: Yes.

8 MR. RIVKIN: Is there a reason for that?

9 SPECIAL MASTER: Yes.

10 The reason is you conducted fifteen months
11 of depositions.

12 MR. RIVKIN: Not one week on liability or
13 causation.

14 SPECIAL MASTER: You will get into it.

15 At this stage I want to give the plaintiffs
16 catch up time. We have only been taking defendants'
17 depositions of government witnesses.

18 MR. RIVKIN: I am throwing these out
19 not necessarily --

20 SPECIAL MASTER: Incidentally, I don't
21 what the discovery is on misuse and causation yet
22 as far as the defendants, because I have given
23 them additional time to prepare their briefs
24 on that.

25 MR. PAKULA: That's misuse.

12654

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2 it.

3 SPECIAL MASTER: Not any longer. It is
4 already past September 1st now. September 1st
5 was the new horizon, so to speak. We were going
6 to take another approach.

7 MR. RIVKIN: Then I take it you will
8 entertain document requests from the Government?

9 SPECIAL MASTER: By all means.
10 I would prefer to get that as soon as possible.
11 But not only on the issue of causation.

12 MR. RIVKIN: Liability also?

13 SPECIAL MASTER: The issue of misuse.

14 MR. RIVKIN: Very definitely, yes, sir.

15 MR. PAKULA: A question, sir.

16 SPECIAL MASTER: Yes.

17 MR. PAKULA: On the fourth week, what are
18 the limits, if any, on how many depositions
19 the defendants can take on each of those weeks?
20 You may have said that.

21 SPECIAL MASTER: No, I didn't. But I
22 would think somewhere in the area of three or
23 four.

24 MR. PAKULA: Three or four depositions?

25 SPECIAL MASTER: Yes.

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MR. PAKULA: A week?

SPECIAL MASTER: Yes.

MS. MINTZER: A week?

SPECIAL MASTER: Yes.

MR. RIVKIN: There are twelve to fifteen, sir,
going --

SPECIAL MASTER: Yes. I want the plaintiffs
to have a little catch up time. You have had
160 depositions. We are not going to trial
in October or November.

MR. SILBERMAN: What is the first date
of depositions?

SPECIAL MASTER: September 22nd.

MR. SILBERMAN: That's a Thursday?

SPECIAL MASTER: No, it is not.

MR. SILBERMAN: Then you have the wrong date.

SPECIAL MASTER: The 26th, I'm sorry.

MR. SILBERMAN: All right.

SPECIAL MASTER: Now, one further addition.

If counsel cannot agree on witnesses for the
first few weeks, I expect to meet with them next
week and resolve the disputes.

MS. MINTZER: Special Master, may I ask
a question on PSAC witnesses? Where will they

DAVID JOHN DEAN
ANTHONY J. FALANGA
JOSEPH COVELLO
NORMAN ROSE

Dean, Falanga & Rose

COUNSELLORS AT LAW

(516) 248-9888
(516) 741-4411
(212) 343-4114

JOSEPH M. REYNOLDS
MONROE FINK

ONE OLD COUNTRY ROAD • CARLE PLACE, NEW YORK 11514

September 27, 1983

BY HAND

Townly & Updike, Esqs.
405 Lexington Avenue
New York, New York

Re: Agent Orange Product Liability Litigation
MDL # 381

Attention: John Sabetta, Esq.

Dear John:

The following is a partial list of those past and present
Monsanto employees whom we now wish to depose:

Past:

Robert Rumer
A. J. Speziale
Frank E. Take, Jr.
Elmer Wheeler
Peter G. Arvan
Paul N. Hoffman
R. Emmett Kelly, M.D.

Present:

Vernon L. Rhodes
D. B. Sharp
J. A. Stephans
Owen E. Dolin

Unknown:

James Springgate
Jack D. Early
J. L. Sims
John Mason
George Kempson
J. C. Strum
Eugene Cutright
L. E. Dotson
L. T. Webber

With professional respect, we remain,

Very truly yours,

DEAN, FALANGA & ROSE



DAVID J. DEAN

DJD:at

12657

In re *

"AGENT ORANGE" * MDL No. 381

Product Liability Litigation * Judge Jack B. Weinstein

The undersigned, Stephen J. Schlegel, member of the Plaintiffs' Management Committee, submits the following names of witnesses which the Plaintiffs may wish to be deposed in conformity with Paragraph No. 7 of the Magistrate's Pretrial Order No. 1.

The undersigned received the Magistrate's Pretrial Order No. 1 on Tuesday, February 7, 1984. The list which follows is the result of compiling the names of witnesses and/or departments and organizations who either have not been previously deposed at all or who have not been deposed on causation issues. It contains approximately 200 prospective witnesses.

Although Plaintiffs wish, in conformity with the Order, to be able to supplement this list with additional witnesses as they become known, Plaintiffs also wish to advise the Magistrate that they believe that discovery will only of necessity be but a fraction of the total number shown hereafter. The undersigned estimates that deposition discovery should not exceed one-half and perhaps will not

12058

exceed any more than one-quarter of the total number of witnesses listed. We request 7 to 10 days additional time to provide the Magistrate with a list of priority witnesses from this number. The Magistrate should know that the first nine witnesses listed are shown in conformity with the Court's prior wishes regarding the names of up to ten Government causation witnesses the Plaintiffs wish to depose. It is not anticipated that any reduction in the number of those witnesses' depositions will be effectuated.

Plaintiffs acknowledge that by their calculations there are approximately sixty normal working days available for the purpose of taking depositions between the time of this submission and the commencement of trial. They also submit to this Court that they have previously demonstrated their ability to engage in a multiple-track deposition schedule. They represent to this Court that they continue to be able to appear at multiple depositions in a variety of locales on the same day and in successive days and that they have the ability to complete the discovery they need to be ready for trial on May 7, 1984.

The names of witnesses are as follows:

Debdas Mukerjee, EPA - D.C.

Philip J. Landrigan, CDC, NIOSH

Janet Springer, EPA - D.C.

Vernon N. Houk, CDC - Atl.

James Mason, CDC - Atl.

Dr. Diane Courtney, EPA - D.C.

Peter Infante, NIOSH - D.C.

Umberto Saffiotti, NCI - D.C.

Donald Barnes, EPA - D.C.

MONSANTO WITNESSES

I. Contracting officers - Richmond, Virginia:

Edward E. Adams	Jesse Gershberg
W. B. Bells	George Kline
William Blumenauer	Frank Lemak
John Blish	Francis O. Panneton
George Collins	L. P. Seitz
Val K. Gaertner	R. D. Thompson

II. Monsanto inspectors - St. Louis region:

Ten Eyck	Roy Meyers
R. D. Fisher	N. Wirz
Mc McCalley	R. Wright

III. Monsanto employees:

Robert E. Baynard	
S. S. Daniels	Tom K. Smith
W. J. McCarvelle	John S. Sullivan
Lapin O. Scott	Charles Zorsch

IV. Miscellaneous witnesses:

Johnston Chemical Laboratories, Des Moines, Iowa
Dr. Oettel

12660

UNIROYAL, INC. WITNESSES

I. Government witnesses - Defense General Supply
Center - Richmond, Virginia:

William Fenner

H. G. Fredericks

William Kidd

II. Defense Contract Administration Service Office:

F. H. Placet (Process inspector)

A. Matasauage - Industrial Specialist

M. Dojny - Quality Assurance Rep. (Chemical inspector)

A. W. Glenn - Preservation Packing Specialist

J. F. O'Connor - Transportation officer

Harold A. Lloy - Administration Contracting officer

W. Maloney - Transportation officer

Wayne Vandervendor - Specialist for Technical Orange
Orange Herbicides.

HERCULES' WITNESSES

I. Hercules' employees:

J. G. Copeland

C. L. Dunn

J. R. Fisher

Thomas R. Hunt

Rafael H. Huston

A. E. Sidwell

A. L. Treisback

H. E. Wilder

R. T. Yates

II. Defense Personnel Supply Center - Contracting officers: Government witnesses

Thomas P. Dalby

Jacob L. Bolton

Ellis Cash

J. R. Mallet

J. M. Kirgis

L. K. Woolfolk

J. E. Pallard

Donald Elmore

W. Schuback

L. A. Pardee

J. G. Charlton

E. D. Baumgartner

P. R. Little

L. E. Faist

III. Miscellaneous witnesses:

Dr. L. L. Danielsson, NACA

Otis Fancher, Industrial Biotests Laboratories

G. Holsing, Hazelton Laboratories

J. Klingman, NACA

HERCULES' WITNESSES - CONT.

III. Miscellaneous witnesses:

Paul Mayfield, NACA

Charles E. Minarick, U.S. Army - Chemicals Biologics

William Lee Popham - U.S.D.A.

Mitcher Zavon - University of Cincinnati

IV. Depositions Duces Tecum of the Custodian of Records
of the following facilities:

NACA - National Agricultural Chemicals Association,
Washington, D.C.

Bionetics Research Laboratories, Bethesda, Maryland

Hazleton Laboratories, Falls Church, Virginia

Industrial Biotests Laboratories, Illinois

Jacksonville Arkansas Laboratories

T-H AGRICULTURE & NUTRITION CO.
WITNESSES

I. Government witnesses:

Edward E. Adams, St. Louis, Missouri
A. A. Block, Kansas City, Missouri
James E. Bowers, St. Louis, Missouri
Charles Dilley, Kansas City, Missouri
A. A. Pello, Kansas City, Missouri
L. W. Stenzel, Kansas City, Missouri
Frank W. Kleman, St. Louis, Missouri
Joseph W. Fowler, Kansas City, Missouri
A. Y. Kistner, Kansas City, Missouri
K. M. LeFever, Kansas City, Missouri

II. Employees:

R. E. Ballinger	John Ferris	Gary Linderman
Bob Brooks	Bob Greer	Sam Long
George Carmack	Jack Hallen	Bob Mayer
Dale Carpenter	John Hughes	Bob Perry
L. S. DeAtley	Bill Kates	Harold Page
Mr. Damaunas	Dr. Charles Lewis	Chet Roberts
Bill Schirley	Bill Sulzen	Tom Terlly
Art Wilson		

12064

THOMPSON- CHEMICAL COMPANY
WITNESSES

I. Employees:

John Mayer
Leo Crivello
D. Halleck
Cecil McGill
James Reagan
F. Vargas

II. Government witnesses:

Director Commander, DCSR - St. Louis, Missouri
Director of Procurement and Production - Defense
General Supply Center - Richmond, Virginia

III. Miscellaneous witnesses:

Kosciusko Medical Clinic - St. Louis, Missouri
Dr. Earnest Velasco
Dr. A. J. Reichas
Dr. Raymond Simpson'
American Mutual Liability Insurance Company
St. Louis, Missouri
Custodian of Records - Division of Worker's Compensation
Dept. of Labor and Industrial Relations
Jefferson City, Missouri - Local office, St. Louis, MO.
Mr. Jack Randall

12665

DIAMOND-SHAMROCK WITNESSES

I. Diamond-Shamrock employees:

J. O. King

Lex Creamer

Howard E. Edison

S. B. Honour

David J. Ponter

Cy Perkins

J. J. Lusardi

Melvin Hochberg

R. F. Lindeman

John J. Brennan

Peter Celli

William Goodloe

Harry E. Klepp

Milton Rosenfeld

II. Government witnesses:

M. Isele, DCAS - contracting officer

J. K. Murphy, Chief - Contracts branch

E. R. Sabala, DCAS - contracting officer

R. J. Schlesinger - Transportation officer

I. Wolin, DCAS - Cleveland, Ohio

12666

DIAMOND-SHAMROCK WITNESSES - CONT.

II. Government witnesses (Cont.)

Inspector, DCASRO - Contracting officer
Schenectady Army Depot
Petroleum Division
Schenectady, New York

Chief DSASD - Newark
240 Route 22
Springfield, New Jersey 07081

Commander, DCASR
Contracting officer
1367 E. 6th
Cleveland, Ohio

DOW WITNESSES

I. Dow employees:

George E. Lynn

Paul Orrefice

Ray Holmes

R. D. Wilcox

Ross Mulholland

Larry G. Silverstein

H. R. Hoyle

Julius Johnson

V. K. Rowe

Patricia Keeler

G. Goergen

Chester Otis

S. E. Sadek

F. H. Riley

R. N. Smiley

L. B. Grant

C. O. Hutchenrenther

F. C. Amstutz

D. E. Pletcher

W. L. Corbin

D. D. Irish

J. C. Tucker

J. W. Harris

E. C. Staehling

K. Y. Hansen

R. C. Hoff

W. J. McCoy

K. C. Barrons

Joseph Temple

Earl Farnham

Wade VanValkenberg

Roy Van Horn

Fred Chase

Harold DeLong

C. A. Highhill

J. L. Spalding

Dr. Keith Barrons, retired
142 W. Bay Cove
Holmes Beach, FL

K. Y. Hanson, retired
Ocala, FL

Sam Birkman

John Barber

12068

DOW WITNESSES (CONT.)

II. Government witnesses:

Inspection Commander, DSACR
Detroit, Michigan

George C. Slagle, Jr. - Contract Administrator

August Barbarine

J. L. Brinser, Middleton, PA

Welton Bills - Defense General Supply Center

John Boyce - Defense General Supply Center

Brigadier General John D. Hines

Edward R. Killam

R. G. Knott - DSACR Inspector

C. E. Raub - Middletown, PA

Hon. Richard M. Nixon - Former President of the United States

John Baldeschweiler (continuation of deposition)

The aforesaid list is submitted in accordance with the terms of the Magistrate's Pretrial Order No. 1 and is subject to the representations and requests contained in the preamble first above written.

Respectfully,


On behalf of the Plaintiffs'
Management Committee.

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----X

In re: :

"AGENT ORANGE" : MDL No. 381

PRODUCT LIABILITY LITIGATION :

-----X

United States Courthouse
Brooklyn, New York

February 9, 1984
3:00 o'clock p.m.

B e f o r e :

HONORABLE SHIRA SCHEINDLIN, Magistrate

HENRY SHAPIRO
JOSEPH BARBELLA
SHELDON SILVERMAN
OFFICIAL COURT REPORTERS

12670

1
2 PLAINTIFFS' MANAGEMENT COMMITTEE

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BY: THOMAS A. BECK, ESO.
MARILYN NEIMAN, ESO.
Of Counsel

1 MR. DEAN: While we are on the topic, can we just
2 go into it a little further.

3 THE COURT: Sure.

4 MR. DEAN: Your Honor has outlined one hopeful
5 ground. And that's five days.

6 THE COURT: From the day after they are served
7 with a notice, yes.

8 MR. DEAN: But I am still troubled by -- and when
9 I see the unlimited nature of the proposed deposition,
10 and, your Honor --

11 THE COURT: On both sides.

12 MR. DEAN: Your Honor understands and considers
13 if this is done and we are here -- that we may not
14 be allowed and then we would have to apply for other
15 names. Other names, you know, that would be an
16 inevitable result of a request. But I am sure that
17 these will be pared down. I know ours will. And I
18 must be forthright with your Honor and tell you that
19 there are more names here than we are going to call.
20 We are just fearful of not using the one or two that --

21 THE COURT: We could get a duplicate set of books
22 if you will give me the real list.

23 MR. DEAN: There isn't any real list. Every one
24 of the names that we have submitted are valid names.
25 But what we are saying --

1 the treating physicians. We were very clear. We heard
2 you say that you have the right to add to these.
3 We expect they may have to do so. But the treating
4 physician -- this is the list that we have. We have
5 taken them all. We may pair that one down, but the
6 rest are absolutely --

7 THE COURT: I am glad you brought me back. I
8 hadn't known in the past that there had been a preferred
9 and not preferred list. I suggested the same thing.
10 I like the idea. I would ask that the plaintiff do
11 that without any fear or risk of notice or preclusion.
12 But just to give the notice of who the must do list
13 is and then --

14 MR. SCHLEGEL: We have our own preamble to that.
15 It's within seven to ten days.

16 THE COURT: Great. Within seven to ten days.
17 Is that acceptable to the defendants.

18 MR. SCHLEGEL: We refer to it as a priority list.

19 THE COURT: Great. The second list, you will
20 get them.

21 MR. SCHLEGEL: Yes.

22 THE COURT: Great.

23 MS. MINTZER: And the cutoff date as of now for
24 the deposition of the defendant's witnesses is
25 March 30th.

12675

1 counsel will in fact on five day's notice present any
2 one of these people who is available to go to two or
3 three tracks just on the one defendant.

4 THE COURT: Sure.

5 MR. SCHLEGEL: I can take 90 in March alone.

6 THE COURT: Well --

7 MR. SCHLEGEL: I can do that.

8 THE COURT: It's not a boast. He may have to
9 take 90 in March alone. I think that is a reality.

10 Well, is there any possibility to get us that
11 priority list? But if you could, and since we are
12 having --

13 MR. SCHLEGEL: I am going to have it for the
14 meeting on the 15th.

15 THE COURT: That's the most we can ask.

16 MS. MINTZER: If we could have it before the
17 meeting, then we can deal with it at the meeting. I
18 can't argue about a list of 35, and apparently it is
19 a meaningful list --

20 THE COURT: No. You know it's 35. You can find
21 out who they are when he comes in with the priority
22 list. Then you can do it on the spot. You will have
23 the big list to work with.

12876

24 MR. SCHLEGEL: I think you have one thing that
25 is apparent as to what we did and what they did. They

1 are giving an essential list, but they are telling
2 you that I've got the right to take 200 more. I am
3 giving 200 more and even maybe a couple of more as
4 an inclusion and saying I want to cut it down to a
5 quarter or to a half of that. It's just a difference
6 of approach.

7 THE COURT: Okay. I appreciate that, Mr. Schlegel.
8 And I hope that you are wrong about the defendants.

9 Is there any thought you are going to have 200
10 more or are you talking about a small addition where
11 needed?

12 MR. SCHLEGEL: I am just suggesting --

13 MR. KROHLEY: I haven't reviewed this list from
14 top to bottom. I am familiar with most of the names
15 on it. I think one thing you have to bear in mind
16 is that we were really beginning to try six cases.
17 Six cases which have just been identified not that
18 long ago. We are getting into complicated medical
19 and scientific issues. Ordinarily you have use to
20 do what we are trying to do in a period of months.

21 THE COURT: I know that.

22 MR. KROHLEY: We are serious and I am afraid that
23 the --

24 THE COURT: But my question is, I said you could
25 make additions. Dow expects them to be fast or just

Recvd by Fed Exp. 2/15/84
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JET

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IVAR R. AZERIS
STEVEN P. POLICK
JAMES A. ROMANYAK

February 13, 1984

Honorable Shira Schneindlin
Magistrate & Special Master
United States District Court
Eastern District of New York
225 Cadman Plaza East
Brooklyn, New York 11201

Re: In re "Agent Orange" Product
Liability Litigation - MDL No. 381

Dear Magistrate Scheindlin:

In conformity with the representation made by the
Plaintiffs to you at the hearing held on February 9, 1984,
we are tendering the following as our preliminary list of
our priority witnesses.

Plaintiffs wish to depose:

Debdas Mukerjee, EPA - D.C.

Philip J. Landrigan, CDC, NIOSH

Janet Springer, EPA - D.C.

Vernon N. Houk, CDC - Atl.

James Mason, CDC - Atl.

Dr. Diane Courtney, EPA - D.C.

Peter Infante, NIOSH, D.C.

Umberto Saffiotti, NCI - D.C.

Donald Barnes, EPA - D.C.

12678

DIAMOND-SHAMROCK WITNESSES

I. Diamond-Shamrock employees:

David J. Porter

S. B. Honour

J. O. King

Melvin Hochberg

Howard E. Edison

Lex Creamer (Would like to depose, but unable to locate)

II. Government witnesses:

M. Isele, DCAS - Contracting officer

J. K. Murphy, Chief - Contracts branch

E. R. Sabala, DCAS - Contracing officer

I. Wolin, DCAS - Cleveland, Ohio

DCASR - Commander
Contracting officer
1367 E. 6th
Cleveland, Ohio

DOW CHEMICAL COMPANY

I. Employees:

George E. Lynn

Julius Johnson

H. R. Hoyle

Ross Mulholland

Larry G. Silverstein

Ray Holmes

R. D. Wilcox

V. K. Rowe

G. Goergen

Paul Orrefice

Sam Birkman

John Barber

Joseph G. Temple, Jr.

Etcyl H. Blair

David L. Rooke

HERCULES' WITNESSES

I. First priority list:

C. L. Dunn

T. Eagon

A. E. Sidwell

A. L. Triesback

H. E. Wilder

II. Second priority list:

J. G. Copeland

Rafael H. Huston

Charles E. Minarick, U.S. Army - Biochemical

Custodian of Records of NACA - National Agriculture
Chemicals Association, Washington, D.C.

Custodian of Records of Bionetics Research
Laboratories, Bethesda, Maryland

III. Third priority list:

Otis Fancher, Industrial Biotests Laboratories

Custodian of Records of Industrial Biotests
Laboratories, Illinois

R. T. Yates

Custodian of Records of Hazleton Laboratories,
Falls Church, Virginia

HERCULES' WITNESSES - cont.

IV. Defense Personnel Supply Center - Contracting officers:
Government witnesses

Donald Elmore

Thomas P. Dalby

Jacob L. Bolton

Ellis Cash

MONSANTO WITNESSES

I. Charles Luecke
John Mullendore
Carl Bohl
Phillip Balderson
Homer Payton
Frederick L. Rupel
Ronald R. Smith
R. L. Payne
Tom K. Smith
Richard Wallace, M.D.
Nel Putzel
Louis Schwartz
Robert R. Rumer (Recall)
U. L. Sims

R. L. Null
Toby White
Howard Minkler
E. Weger
Nick Machacrola
Paul Ekberg
Jim Starrett
Bruce Ely

MONSANTO WITNESSES - cont.

II. Contracting officers - Richmond, Virginia:

John Blish

George Collins

Jesse Gershberg

III. Monsanto inspectors - St. Louis region:

Ten Eyck

R. D. Fisher

M. McCalley

Roy Meyers

N. Wirz

R. Wright

12084

THOMPSON CHEMICAL COMPANY
WITNESSES

I. Employees:

John Mayer

Leo Crivello

D. Halleck

Cecil McGill

James Reagan

F. Vargas

II. Government witnesses:

DCSR, Director Commander - St. Louis, Missouri

III. Miscellaneous witnesses:

Dr. Earnest Velasco
Kosciusko Medical Clinic
St. Louis, Missouri

American Mutual Liability Insurance Company
St. Louis, Missouri

UNIROYAL, INC. WITNESSES

I. Defense Contract Administration Service Office:

F. H. Placet (Process inspector)

A. Matasauage - Industrial Specialist

M. Dojny - Quality Assurance Rep. (Chemical inspector)

A. W. Glenn - Preservation Packing Specialist

Harold A. Lloy - Administration Contracting officer

Wayne Vandervendor - Specialist for Technical Orange
Herbicides

12686

T-H AGRICULTURE & NUTRITION CO.
WITNESSES

I. T-H Agriculture & Nutrition Co. employees:

L. S. DeAtley

Bill Sulzen

Art Wilson

Dr. Charles Lewis

Bob Mayer

Jack Hallen

II. Government witnesses:

Edward E. Adams - St. Louis, Missouri

A. A. Block - Kansas City, Missouri

James E. Bowers - St. Louis, Missouri

Charles Dilley - Kansas City, Missouri

Frank W. Kleman - St. Louis, Missouri

Joseph W. Fowler - Kansas City, Missouri

Respectfully submitted,

On behalf of the Plaintiffs'
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** - Delivery by
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Delivered regular mail
to everyone else.

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225 Cadman Plaza East
Brooklyn, New York 11201

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February 15, 1984

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RE: "Agent Orange" Product Liability Litigation

Dear Mr. Schlegel:

I write to state the objections of defendant Monsanto Company ("Monsanto") to Plaintiffs' Response to Paragraph No. 7 of the Magistrate's Pretrial Order No. 1, which was served at the hearing before Magistrate Scheindlin on February 9, 1984. Monsanto recognizes that plaintiffs have requested additional time in which to submit a prioritized list of potential deposition witnesses. See Plaintiffs' Response at 1-2. Accordingly, Monsanto reserves its right to make further objections, if appropriate, when such a list is submitted.

Monsanto objects to the depositions of William J. McCarville and Charles P. Zorsch on the ground that both have already been deposed by plaintiffs in this litigation. McCarville was deposed on February 11, 1983; Zorsch, on May 3, 1983.

Plaintiffs have demonstrated no special need for redepositing them on the eve of trial. Nor have plaintiffs offered any explanation for their long delay -- about a year and about nine and a half months, respectively -- in noticing the redepositions of Messrs. McCarville and Zorsch. Because the defense of these unjustified redepositions would prejudice

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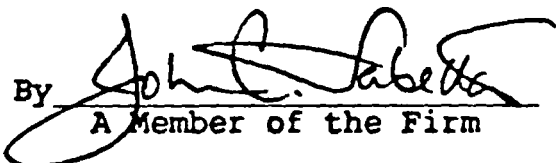
TOWNLEY & UPDIKE

Monsanto's preparation for the rapidly approaching trial, plaintiffs' inexcusable delay should not be condoned by the Court.

With respect to the deposition of Lapin O. Scott, Monsanto has thus far not found any information in its files on such an individual. Thus at this time it appears that no such person was ever an employee of Monsanto.

Sincerely,

TOWNLEY & UPDIKE

By 
A Member of the Firm

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cc (by courier): attached service list
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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----X

IN RE: :

"AGENT ORANGE" : MDL NO. 381

PRODUCT LIABILITY LITIGATION :

-----X

United States Courthouse
Brooklyn, New York

November 21, 1983
1:00 P.M.

B e f o r e :

HONORABLE JACK B. WEINSTEIN, CHIEF U.S.D.J.

James E. Rudolph
Deputy Clerk
United States District Court
Eastern District of New York
100 South Street
Brooklyn, New York 11201
Tel. 718-224-2000

12693

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6 JOY BEANE, ESQ.
7 Assistant to Special Master
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26 BY: THOMAS A. BECK, ESQ.,
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13 In House Counsel - Monsanto

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1 Appearances (Continued)

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22

23 ASHCRAFT & GEREL, ESQS.
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25 Washington, D. C. 20038

BY: ROBERT A. TAYLOR, JR., ESQ.
of Counsel

1 and over the rapids without destruction.

2 MR. GROSS: I am over the rapids now. I am now
3 over the waterfall.

4 I would respectfully request the same certification
5 by this court to take to the Second Circuit as done
6 by Hercules.

7 THE COURT: Denied.

8 MR. GROSS: Thank you.

9 THE COURT: For the same reasons.

10 Diamond Shamrock?

11 MR. ALCORN: Wendell Alcorn, a member of the
12 Cadwalader, Wickersham & Taft representing Diamond
13 Shamrock Chemicals Company.

14 To my knowledge, the motion to change the name
15 of the party is unopposed.

16 THE COURT: Nobody being heard in opposition,
17 would you submit an order within forty-eight hours?

18 MR. ALCORN: Yes, your Honor.

19 THE COURT: Granted.

20 Item 4, appeal from the recommendation of the
21 Special Master on Government causation witnesses.

22 MR. MASKIN: Your Honor, Arvin Maskin on behalf
23 of the United States.

24 The United States begins with its recognition of
25 one truth in this case; and that is, this trial is going

1 to go forward on My 7th.

2 We would also add that the interests of accelerating
3 discovery of identifying all information for which there
4 is a genuine need of minimizing discovery disputes
5 and of accomodating the United States' legitimate
6 interests in discovery are not mutually exclusive.

7 The United States has demonstrated, at least in
8 the context of the deliberative process, privilege
9 issues and state secrets privilege issues, that care-
10 fully considered procedures resolving privilege
11 disputes do work and our experience has been that they
12 worked in the past.

13 Virtually none of the 18 witness who have been
14 identified by the parties could be considered fact
15 witnesses.

16 THE COURT: Would be considered what?

17 MR. MASKIN: Could be considered fact witnesses.
18 Each and every one of those witnesses are described
19 as "expert."

20 THE COURT: Let me suggest this to you and get
21 your reaction to it.

22 We have to move ahead quickly. They are not going
23 to have a lot of time to depose these people.

24 I do not know whether they are going to come
25 forward with other lists, but I would suggest that each

1 side have ten. If they overlap, that is fine. And
2 that they be limited to one or two days deposition as
3 to anything they want to take. Let's say two days.
4 Fact, opinion, anything. One day for the party who
5 wants the witness and the other -- most of the other
6 day for the opposing party and then just a little
7 rebuttal.

8 I understand your point. You cannot have these
9 experts constantly annoyed with this, but let's see
10 if we keep it to a bare minimum, let them ask them
11 anything they want to. If they want to waste their
12 day asking them about things they don't need, that's
13 up to them.

14 Then I would suggest, too, that if -- before the
15 witness testifies or gives his deposition, that they
16 tell the witness what they are going to use in the way
17 of documents so the witness doesn't come in cold.

18 That is it.

19 MR. MASKIN: May I respond?

20 THE COURT: Yes.

21 MR. MASKIN: Your Honor, the procedures that we
22 suggested while at first glance seem cumbersome I
23 envision that with respect to the same number of people
24 you have suggested, the information that we requested
25 could be in our hands by this Friday. Government could

1 case, your Honor, and it's worked absolutely fine.

2 If there is a problem that's asked at the time,
3 the Special Master can rule as to whether that question
4 makes any sense.

5 To set up --

6 THE COURT: Excuse me. I do not care whether it
7 makes sense or not. I do not need the Master to tell
8 me whether it makes sense.

9 If you want to ask a question that does not make
10 sense, my ruling now is, ask it.

11 The witness will be entitled to say, I cannot
12 answer it or I will be delighted to answer that senseless
13 question.

14 That is all. I do not want you coming in here
15 making applications to the Master when we have five
16 months to prepare a complicated trial.

17 You want ten witnesses? Give them ten witnesses.

18 MS. MINTZER: Let me clarify that, please.

19 The Special Master requested an initial list
20 of ten witnesses, which is what we have provided. That
21 is by no means our complete list.

22 THE COURT: I am telling you, it is your complete
23 list. You can take ten and they will take ten.

24 I am not going to have the Government denuded of
25 witnesses. If after four years you do not know who

1 the best ten people are in the Government, then you are
2 not prepared.

3 MS. MINTZER: Your Honor, this is very, very
4 important and please let me address that issue.

5 For one thing, I believe today my office received
6 and all offices received the names of the plaintiffs
7 that are actually going to be litigated, the cases that
8 will be litigated so up until this date we haven't
9 even known the particular medical issues that will be
10 at issue.

11 Number two, and that's exceedingly important,
12 the Government --

13 THE COURT: I understand.

14 I myself think you may want to delay a little while
15 in putting in those names.

16 (Continued on next page.)
17
18
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25

1 MS. MINTZER: We have already submitted ten,
2 but the --

3 THE COURT: You can withdraw them.

4 MS. MINTZER: I understand that.

5 The other point that I want to make, is very
6 important here, is the Government's papers admit that
7 the Government -- Congress has expended vast sums of
8 money on causation and energy and knowledge is amassed
9 within the Government today on the very issues that
10 this Judge and the jury in this case will decide.

11 I think it is incredibly unfair to the jury and
12 to the Court not to have that testimony before the
13 Court.

14 THE COURT: You can have all the reports. They
15 are giving you every report that was made.

16 Any report that is finished before the trial,
17 you can have that, too.

18 You can have ten experts free, plus all the experts
19 you have.

20 MS. MINTZER: I submit to your Honor that this --

21 THE COURT: I am not going to be drowning in
22 experts.

23 MS. MINTZER: I understand that, but at this point
24 in the litigation, when we are just beginning causation
25 discovery, when we don't know yet what issues we face --

1 THE COURT: Hold off. Do not give them a full
2 ten names.

3 MS. MINTZER: May I request that you please not
4 be so firm on that number ten? I just doesn't make
5 sense. It is an arbitrary number, your Honor.

6 THE COURT: Yes. You are going to find that we
7 will be arbitrary time after time here because that
8 is the way it goes.

9 MS. MINTZER: There may well be ten different
10 injuries that are being focused upon here. There may
11 well be far more than that number of causation witnesses
12 required.

13 THE COURT: If you need more, you will go to
14 the Special Mastern. My inclination would be to give
15 you ten each.

16 If I were in your position, I wouldn't use my
17 whole ten.

18 MS. MINTZER: I am not sure that the -- you might
19 want to rethink that.

20 Can I just ask you one question? I am not clear
21 on your ruling with regard to Page 34.

22 THE COURT: Yes.

23 MS. MINTZER: It is my understanding that the
24 information that the Government is requesting on
25 Page 34 you are suggesting that we do supply that, but

1 THE SPECIAL MASTER: Your Honor, if I may be heard
2 for a moment?

3 I have carefully studies the submissions of the
4 defendants. As you know, they submitted 61 names. I
5 reviewed those both by their comments and my own research
6 and I tend to suggest to your Honor, without being
7 impolite, that a number of somewhere between 15 and
8 20, and the time is sufficient, would give the defendant
9 appropriate attack upon or --

10 THE COURT: 15 or 20 for each?

11 THE SPECIAL MASTER: No, no. the plaintiffs
12 have indicated that they only have eight.

13 THE COURT: They may want --

14 THE SPECIAL MASTER: Even 15 or 20, your Honor,
15 we can easily get it in. I give --

16 MR. DEAN: Respectfully, may we --

17 THE COURT: Excuse me.

18 I just want to point out to you, that 20 plus
19 even ten is 30 witnesses. That's 30 solid days of
20 depositions.

21 There are five months. You've got to depose all
22 of the plaintiffs. You probably -- that are going to
23 be tested. You will probably have to depose their
24 doctors. You are going to have to -- there is an
25 enormous amount of work.

1 THE SPECIAL MASTER: Different teams. There will
2 not be one deposition team.

3 MR. DEAN: May I rise respectfully to uphold the
4 desire of the Special Master, whom I have the highest
5 regard for and who mandates we have often followed.
6 Always followed, how is that?

7 We will certainly abide by your Honor's direction
8 with him and we ask the defendants do the same.

9 THE COURT: All right. I will rule, in view of
10 my special respect for the Special Master, I will rule
11 ten on each side with the Master having the authority
12 subject to an appeal to me to add an extra five on each
13 side.

14 MR. PAKULA: I tried to rise, I did rise but I
15 didn't get a chance to speak before your Honor ruled.

16 Right now we are looking at a list of 46 proposed
17 named plaintiffs, which we just received, which they
18 say they will reduce at some time in the future.

19 THE COURT: We are going to have to get to that.
20 We must get to that and get to it fast because that
21 is step number one.

22 Until they give us those names, we are not going
23 to be able to proceed.

24 I underst nd your problem.

25 MR. PAKULA: Second point, and I think Ms. Mintzer

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF NEW YORK

-----X

In re: :

"AGENT ORANGE" : MDL No. 381

PRODUCT LIABILITY LITIGATION :

_____X

United States Courthouse
Brooklyn, New York

February 15, 1984
2:00 o'clock p.m.

B e f o r e :

HONORABLE JACK B. WEINSTEIN, Chief U.S.D.J.

HENRY SHAPIRO
ILENE GINSBERG
SHELDON SILVERMAN
OFFICIAL COURT REPORTERS

EASTERN DISTRICT COURT REPORTERS

UNITED STATES DISTRICT COURT
225 CADMAN PLAZA EAST
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12707

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BY: ARVIN MASKIN, ESQ.
GRETCHIN LEAH WITT, ESQ.
Special Attorneys

Also present:

HONORABLE SHIRA SCHEINDLIN, Magistrate

SOL SCHREIBER, ESQ., Special Master

JOY BEAN, Assistant to Special Master

NANCY PETRILLO, Clerk of Court

5
1
2 But I take it that ultimately they are going to
3 contest it if they don't concede it --

4 MR. MASKIN: Your Honor, I am not sure --

5 THE COURT: (Continuing) -- because if they
6 concede it, you may be able to, almost as a matter of
7 summary judgment, have a third-party judgment against
8 them for any judgment the plaintiffs get against you.

9 That is the posture of the case, as I understand
10 it.

11 Now, if that is an open issue as to the third
12 party, then it is an issue in the case.

13 MR. KROHLEY: Apart from whether it is an open
14 issue in the case or not and whether it needs to be
15 decided again or not, there is a practical dimension
16 to this, too.

17 We spent four, four and a half years on the
18 Government contract defense prior to trial in June.

19 That -- At least that aspect of the case, in terms
20 of the first two elements, and the third element was
21 discussed into at substantial length and hundreds of
22 depositions were taken.

23 If we now go back and try to go back to issues
24 one and two in the Government contract defense and
25 depose 40, 50, 60 additional witnesses in the time

6

1

remaining --

2

THE COURT: I am going to instruct the Magistrate to put it on the back burner and cut it way, way down.

3

A couple of witnesses are all you are going to get.

4

I am not going to, a month and a half before trial, allow a whole big discovery. There is not enough energy left in all the plaintiffs' and defendants' bars in the country for that. We have to be realistic.

5

6

7

8

9

But the issue is between the defendants and the third-party plaintiffs.

10

11

12

13

MR. GROSS: I think Mr. Maskin was about to say that the Government may indeed not oppose or contest the matter.

14

THE COURT: I didn't hear him say that.

15

Did you say that?

16

17

18

MR. MASKIN: No. The Government again assumes no posture whatever, and nothing happened to day to require us to take a position.

19

20

THE COURT: From a tactical point of view, it would be a very serious concession.

21

22

MR. KROHLEY: I don't see how this is an issue at all between the defendants and the Government.

23

24

The Government contract defense is the claim the plaintiffs are asserting against us.

25

THE COURT: If the Government ordered something

IG:jk
2pm R3 1

2 MR. MUSSELWHITE: Your Honor, may I ask you a
3 question?

4 Due to the time element -- all we are asking for,
5 basically, from the Government, are the contracts, the
6 officers and inspectors.

7 They are not going to be long depositions.

8 THE COURT: You had better get it cut down.

9 I will put it down for February 27th.

10 MR. GROSS: May we have two weeks beyond that?

11 THE COURT: March 5th.

12 MR. MUSSELWHITE: Can we go ahead and start taking
13 some of these depositions?

14 THE COURT: No.

15 You have got plenty of other things to do. You
16 have not done so great on getting your experts in.

17 MR. LOCKS: Gene Locks on behalf of the Plaintiffs.

18 I think I might have something to do with that.
19 I agree with Mr. Gross. May we go to the 12th rather
20 than the 5th?

21 You have got another hearing date scheduled on
22 the 12th.

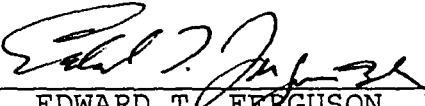
23 THE COURT: You are speaking for the plaintiffs.
24 You are the ones they want.

25 MR. LOCKS: Yes.

THE COURT: March 12th. Government specifications

CERTIFICATE OF SERVICE

I HEREBY AFFIRM that I am an attorney duly admitted to practice in the State of New York and in the Eastern District of New York. I HEREBY CERTIFY that on February 21, 1984 I caused to be served a true and correct copy of the Notice of Motion and the Memorandum of Defendant Monsanto Company in Support of its Motion for a Protective Order on all counsel on the attached service list -- by hand on Mr. Dean and on all counsel in Manhattan, by courier on all others.


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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

RECEIVED
U.S. DISTRICT COURT E.D. N.Y.
JAN 11 1984

----- x
In re:

"Agent Orange"

MDL No. 381
(All Cases)

Product Liability Litigation

SPECIAL MASTER'S FINAL
AMENDED RECOMMENDATION
RE: SCHEDULING ORDER
FOR THE COMPLETION
OF DISCOVERY AND THE
PREPARATION OF A
PRETRIAL ORDER AS
APPROVED BY
JUDGE WEINSTEIN

----- x
Pursuant to the direction of the Court, as set forth in its Pretrial Order #69, the Special Master met with opposing counsel to review their recommendations concerning the completion of discovery and the preparation of a pretrial order. On December 16, 1983, the Special Master's recommendation concerning these matters was sent to the Court with copies to counsel. Thereafter, on December 19, 1983, at a hearing before the Court, the recommendation was reviewed and substantially approved by the Court, and the Special Master was asked to meet again with counsel in an attempt to resolve a few remaining issues. This hearing took place immediately after the Court's hearing on December 19, 1983. A draft of the Special Master's amended scheduling order was thereafter circulated among the interested parties and a further review hearing was held on December 28, 1983. At this hearing, the

12732

views of counsel were further examined by the Special Master, and additional requested changes by plaintiffs', defendants' and government's counsel were reviewed. A number of these changes were accepted by the Special Master and are incorporated herein. The following is the amended scheduling order which is recommended for the Court's consideration:

I. Interrogatories Served by Respective Parties

A. Plaintiffs' Interrogatories

The interrogatories served by the plaintiffs upon the defendants and reviewed by the Court at its hearing on December 12, 1983 are to be served in amended form upon the defendants not later than Thursday, December 22, 1983. Defendants will serve and file their responsive answers not later than Monday, January 16, 1984. Plaintiffs' interrogatories dealing with the Government Contract Defense, which were recently served upon the defendants will be reviewed by the Special Master at a hearing to be held on Thursday, December 29, 1983 at 2:00 p.m., unless prior meetings of counsel resolve the outstanding conflicts. The interrogatories agreed upon by counsel or approved by the Special Master will be served upon the defendants, in amended form, by Wednesday, January 4, 1984 and will be answered by the defendants not later than January 30, 1984.

12733

B. Defendants' Interrogatories

The interrogatories served by the defendants were reviewed by the Special Master and thereafter his recommendations were examined by the Judge at a hearing on December 12, 1983. The Special Master's recommendations were approved by the Court with a few modifications. These revised interrogatories are to be served upon the plaintiffs by December 22, 1983. Plaintiffs will serve and file their answers to these interrogatories not later than Monday, January 16, 1984. Any disputes concerning these amended interrogatories were resolved at the Special Master's hearing of December 29, 1983

II. Interrogatory Requests Served Upon United States
Re Causation Documents

Defendants' documentary requests of December 1, 1983 entitled "Notice to Produce Documents re Causation Issue", and served upon the United States were reviewed by the Special Master at a hearing on December 20, 1983. At this hearing all disputed requests were resolved by the Special Master whose recommendations are contained in the transcript of the hearing. The Special Master advised counsel that if any of the recommendations were to be appealed they were to notify opposing counsel and set forth their objections in written form within a few days after the December 20th hearing; thereafter, the Special Master would hold a hearing to determine the

12734

validity of such objections before submitting his recommendations to the Court. At the December 28, 1983 hearing before the Special Master counsel were requested to state their objections to the Special Master's rulings of December 20, 1983. No objections were raised and defendants were directed to serve an amended documentary request (re: causation issues) upon the government by January 4, 1984. The government was directed to produce documents as soon as they were assembled and not to wait for the final date of January 16, 1984 to make production.

III. Depositions

A. Plaintiffs' Depositions

Plaintiffs' depositions of defendants' present and/or prior employees will continue on a daily basis and end by March 30, 1984 unless good cause be shown for a short extension of this cut-off date. Plaintiffs' depositions of other non-party witnesses, except expert witnesses, discussed below, will be completed by the same date. Plaintiffs' depositions of government experts or persons knowledgeable on the issue of causation and liability will be taken between January 15, 1984 and March 12, 1984. These depositions will be preceded by the plaintiffs' serving upon the government and opposing counsel at least seven (7) days prior to the scheduled depositions a list of documents upon which these government witnesses will be

deposed. In addition, both plaintiffs' and defendants' counsel, in seeking depositions of such government witnesses, must comply with Judge Weinstein's directions concerning preliminary notice and information to be given to the government. (See transcript of proceedings before Judge Weinstein of November 21, 1983, pp. 69 & 71.) This information must also be supplied at least seven (7) days prior to the scheduled depositions.

B. Defendants' Depositions of Plaintiffs'
Representative Parties and Non-Party
Fact Witnesses

Prior to their taking depositions of plaintiffs' representative parties, defendants may serve on plaintiffs a limited number of interrogatories. These interrogatories should be served not later than December 22, 1983; responses due not later than January 11, 1984. Depositions of the plaintiffs' representative parties, their wives, children, relatives and legal representatives will begin on January 16, 1984 and will be completed by April 6, 1984, unless good cause be shown for a short extension of this date. The April 6, 1984 cut-off date also applies to non-party fact witnesses. The government is directed to locate and produce all service and medical records of the representative plaintiffs by January 6, 1984. In addition, all medical records of treating doctors and medical institutions which counsel for the representative plaintiffs have in their possession will be turned over to the defendants by January 6, 1984. Defendants' medical

examinations of the representative plaintiffs, their wives, children and relatives will begin on January 17, 1984 and notice of the said examination will be given to plaintiffs' counsel at least ten (10) days prior to the examination date. In the event that plaintiffs object to the type or place of the said medical examination, these objections will be heard by the Special Master within 48 hours. Defendants will exert all efforts to complete these examinations by March 6, 1984 and will further advise all doctors or institutions conducting such examination that they must submit their reports in writing to the defendants' counsel not later than March 12, 1984. It is expected, however, that these reports will be delivered to counsel as soon as the examinations are completed. This same instruction (i.e., staggered delivery of reports) is applicable to plaintiffs' medical experts.

C. Defendants' Depositions of Government
Witnesses on All Issues Including
Causation

These depositions will begin on January 15, 1984 and be completed by March 30, 1984 unless good cause be shown for a further short extension of this date. Prior to taking the depositions of government witnesses, defendants will deliver to counsel for the government and plaintiffs, copies of documents upon which the said witnesses will be deposed. Such documents

must be received by counsel at least seven (7) days prior to the deposition. Defendants will also provide government's counsel with the additional notice and information, as discussed in paragraph III above.

IV. Expert Witnesses

A. Plaintiffs will deliver to the defendants summaries of plaintiffs' treating doctors' reports pursuant to Rule 26(b)(4)(A)(i) of the Federal Rules of Civil Procedure. Such summaries or copies of the doctors' written reports will be delivered not later than January 16, 1984. In addition, plaintiffs will deliver to defendants' counsel summary reports of other experts who are expected to be called to testify on behalf of plaintiffs, pursuant to the Rule 26(b)(4)(A)(i) of the Federal Rules of Civil Procedure or copies of the experts' written reports by January 23, 1984. All reports or summaries will be accompanied by any documents, including medical tests and/or results, upon which the said reports are based. All medical examinations of representative plaintiffs that plaintiffs will conduct before trial shall be completed in time to furnish the results thereof to the defendants by January 23, 1984. Defendants' depositions of plaintiffs' expert witnesses will begin on February 1, 1984 and be completed by March 13, 1984, unless good cause be shown for a short extension of this date.

B. Defendants will submit either summaries of their experts' testimony pursuant to Rule 26(b)(4)(A)(i) or alternatively, copies of their experts' written reports not 12738

later than March 13, 1984. All reports or summaries will be accompanied by any documents, including medical tests and/or results, upon which these reports are based. Defendants' experts will be deposed by plaintiffs' counsel between March 20, 1984, and April 15, 1984.

C. If counsel cannot agree upon reasonable expenses to be paid for the appearance of opposing counsel's experts, the Special Master will recommend the appropriate fee to be paid.

V. Pretrial Order

Counsel are directed to meet with the Special Master at a date to be set within the next few weeks but prior to February 1, 1984 in an attempt to agree upon a schedule for the completion and filing of a pretrial order not later than April 24, 1984.

VI. Other Matters

A. All fact witnesses who will give testimony in support of the claims of the respective parties will be listed by name, present address and a description of the general nature of the testimony. This information will be exchanged by the parties not later than February 29, 1984. In addition, counsel for the respective parties will have an additional ten (10) days thereafter to supplement their earlier lists.

B. A scheduling order for in limine or pretrial evidentiary rulings, special interrogatories to the jury, preliminary and interim jury instructions and the dates for the submission of trial briefs will be recommended to the Court by the Special Master by February 1, 1984 after consultation with counsel.

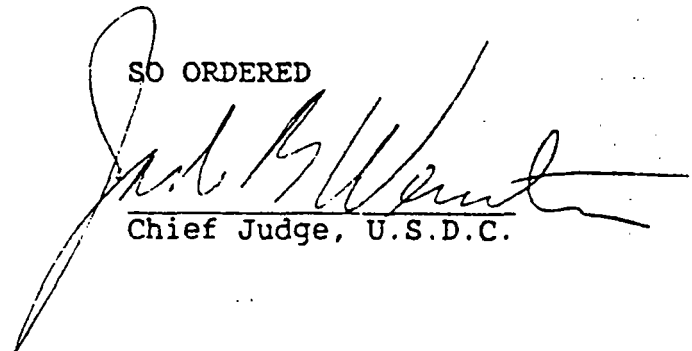
Dated: New York, New York
January 10, 1984

Respectfully submitted,


SOL SCHREIBER
Special Master

Dated: Brooklyn, New York
January 10, 1984

SO ORDERED


Chief Judge, U.S.D.C.

1 MR. GORDON: Well, access will be permitted
2 according to the order.

3 THE SPECIAL MASTER: Well, we can say that the
4 list will be made available to both parties under seal
5 of the Court.

6 So, the Government will supply a list to plaintiffs
7 defendants and to the Court, under seal.

8 MR. PAKULA: What will be filed that purports
9 to be proof of --

10 MR. DEAN: We will file -- no matter what is
11 informally agreed today -- we will file affidavits
12 of service with regard to everyone whom we have mailed
13 notices, including those on the Agent Orange registry

14 THE SPECIAL MASTER: You can say those on the
15 Agent Orange registry but your affidavits of service
16 can only be appropriate to those not on the Agent
17 Orange registry because the Post Office will make the
18 mailing and stuff and supply the stamps.

19 MR. DEAN: And supply their own affidavits of
20 service. They agreed to do that?

21 THE SPECIAL MASTER: Yes.

22 MR. HEINEMANN: May I request the information
23 as to what Post Office person received these tapes
24 since I am going to be the conduit?

25 THE SPECIAL MASTER: I think you ought to get

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those as quickly as possible.

Will you write to Mr. Heinemann by tomorrow?

MR. HEINEMANN: Then we can do it immediately in case it happens suddenly.

THE SPECIAL MASTER: We now have -- unless anyone has another matter to be taken up -- the final order of the business, which Mr. Pakula will address himself to.

MR. PAKULA: Thank you.

Dates and status of disclosure matters that are the subject of the order, scheduling order entered in this case.

January 6th, the Government was to produce all service and medical records of representative plaintiff

As of this morning, we do not have the following records: Danny Ford, we don't have his 201 file -- that is his service record. We don't have his military medical file.

Michael Ryan --

THE SPECIAL MASTER: Let's go one at a time.

Does the Government know all of this information? Is this the first time they are hearing it?

MR. PAKULA: This is the first time they are hearing it and I think a convenient time on a day-to-day proposition --

1 THE SPECIAL MASTER: Shall we ask the Government
2 to respond to each one?

3 MR. PAKULA: I am not suggesting we have an
4 argument about who shot John.

5 THE SPECIAL MASTER: You are just posting the
6 record.

7 MR. PAKULA: I feel you should have a status
8 report regularly.

9 I didn't raise it to stick a knife in them,
10 but --

11 THE SPECIAL MASTER: Let's do all the service
12 and medical records and we will find out what is
13 happening.

14 MR. PAKULA: Michael Ryan. We don't have his
15 military medical file.

16 Mr. Ewault -- we don't have his military
17 medical file.

18 Next date --

19 THE SPECIAL MASTER: Let's stop here for a moment.
20 Can Government counsel illuminate for us where
21 we are?

22 MS. WITT: As to Danny Ford, the problem here --
23 I stood here and said we had not been able to find
24 any record and at that time Danny Ford was dropped
25 from the case and therefore we stopped looking for
him.

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his records again.

Hopefully they will be found quickly, but they were having difficulty before in locating any records pertaining to Mr. Ford.

As to Mr. Ryan and Mr. Ewault, the military records records, I am not aware of the status of those

My belief is that those files were contained within the VA Claims Files and I may be mistaken on that, but most of the veterans whose files we have found, their military medical records, have not been contained with their military file and already forwarded on to VA, as is normally the case when somebody applies for VA benefits.

I will have to go back and look at the records but I thought those records were already contained --

MR. PAKULA: I imagine that you can guess that I have not looked at every page of these records and we too will look and see if we -- we will check and see if we were wrong.

THE SPECIAL MASTER: If it isn't, you will let counsel know immediately.

MR. PAKULA: Of course -- immediately.

THE SPECIAL MASTER: Ewault is the same.

MR. PAKULA: Schaeffer. That was January 11th

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10744

1 and it got changed to January 12th which was the date
2 plaintiffs were to answer defendant's limited
3 interrogatories re representative plaintiff and that
4 is the subject of objections by the defendant to the
5 answers that were served which will be heard at a
6 later time.

7 January 15th -- I'll skip that -- that's the
8 deposition date we talked about before.

9 January 16th, plaintiffs were to answer defendant
10 general interrogatories.

11 Those answers have been received. Objections
12 to the answers have been made. That will be the subject
13 of a later hearing.

14 January 16th was also the last day for the
15 Government to respond to defendant's document request
16 re causation.

17 As you can tell the documents are still rolling
18 in and I think we resolved a lot of problems because
19 of your ruling, but that is the status of that -- they
20 are coming in as they come in.

21 January 16th, the plaintiffs were to produce
22 Rule 26(b) -- you always straighten me out on this --

23 THE SPECIAL MASTER: (b)(4)(a)(1) -- because
24 I have used it so long.

25 MR. PAKULA: For their treating physicians and

1 none have been received.

2 THE SPECIAL MASTER: I received a letter from
3 Mr. Musselwhite which I assume counsel -- which was
4 addressed to the Court and I am not sure -- would you
5 check, Mr. Dean, to make sure that Mr. Musselwhite
6 has the Magistrate on the mailing list because I am
7 not sure that the Magistrate received a copy.

8 MR. DEAN: The Magistrate did not get
9 Mr. Musselwhite's communication and we will remedy
10 that.

11 THE SPECIAL MASTER: That dealt with not only
12 the medical expert but also experts.

13 Frankly, I was troubled not so much that the
14 deadline was not met but there was no indication of
15 a date.

16 MR. DEAN: Mr. Musselwhite told me a couple of
17 days ago he had written a letter and I have not seen
18 it.

19 THE SPECIAL MASTER: More important than that,
20 when are the plaintiffs going to select their experts.

21 MR. DEAN: I know that plaintiffs have now
22 some names of experts.

23 I will tell you that I spoke to Mr. Henderson
24 this morning and he alerted me that he assumed this
25 was going to be discussed.

1 I said, thanks a lot.

2 He wanted me to convey to you the fact that I
3 know his office has received -- had sent out many, many
4 many requests for medical reports from the treating
5 physicians.

6 A number of those reports -- so the defendants
7 are not now prejudiced -- a number of those reports
8 are found within the medical records themselves and
9 I tell you, if there was a way to duplicate those
10 reports --

11 (Continued on next page.)
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1 THE SPECIAL MASTER: But even assuming that the
2 key seems to me that it is your expert medical
3 witness --

4 MR. DEAN: We are not talking about expert
5 witnesses at all. Mr. Pakula was talking about
6 treating physicians.

7 THE SPECIAL MASTER: But they are also -- he
8 is also talking about expert medical. And Mr. Musse
9 white's letter says he is sorry, we missed all
10 deadlines but we are trying our best.

11 That's fine, but somebody has to be in a posi-
12 tion by Monday to ask when is this going to be done.
13 The whole structure of discovery depends on the
14 plaintiff's going first and making proper production.

15 Now, you know the judge's feeling that time is
16 short and people are doing their best, he under-
17 stands it and recognizes it and sympathizes with it.
18 But you better get that done and you should be in a
19 position by Monday to say, Judge, you will get it
20 by Tuesday or Wednesday. And if you don't have a
21 date by then you will be jumping into the frying pan
22 or into the fire, whichever is worse.

23 MR. PAKULA: You have covered the whole subject
24 And we don't have any 26(b) reports of any sort
25 whatsoever. Until we get that there are things that

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2 THE SPECIAL MASTER: I agree, counsel.

3 MR. PAKULA: Those are the only dates that have
4 passed.

5 So the only other thing that I wanted to mention
6 and this is something that the defendants just worked
7 out yesterday or the day before -- yesterday, really
8 and that is that we are scheduling in New York our
9 medical examinations for the period March 1st through
10 March 5th. You probably don't know that yet, Mr. DeLoach.
11 New York is the place and Albert Einstein is the
12 location.

13 THE SPECIAL MASTER: The hospital?

14 MR. PAKULA: Yes.

15 THE SPECIAL MASTER: In the Bronx?

16 MR. PAKULA: And the dates are March 1st through
17 March 5th for the examinations. We will provide
18 other information as well, but I am conveying that
19 date to you now, Dave. I am not asking you to comment
20 on it unless you want to.

21 THE SPECIAL MASTER: It's a fine institution.
22 I once represented them.

23 MR. PAKULA: At the soonest possible time I
24 would like to know if there is anybody that cannot
25 go there or cannot be there at that time. Because

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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

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In re :
"AGENT ORANGE" : MDL No. 381
Product Liability Litigation :
-----x

DEFENDANTS' INTERROGATORIES TO ELEVEN
PROPOSED REPRESENTATIVE PLAINTIFFS

PLEASE TAKE NOTICE that pursuant to the directions of Special Master Schreiber, you are hereby required to answer each of the following interrogatories for each of the eleven proposed representative plaintiffs and for each other person claiming derivatively through him as a result of his exposure to Agent Orange in Vietnam under oath on or before January 11, 1984.

These Interrogatories shall be deemed served only on behalf of those defendants who have properly been made parties hereto by service of the summons and complaint in accordance with the Federal Rules of Civil Procedure and shall not be deemed an appearance, admission of service or consent to jurisdiction by any defendant not so made a party to this action.

These Interrogatories are continuing interrogatories. If at any time after service of answers hereto plaintiff obtains or becomes aware of additional information pertaining to any of the Interrogatories, plaintiff shall immediately serve supplemental sworn written answers setting forth such additional information.

I. GENERAL

1. State your name, social security number, military service number, and each address at which you have ever lived (excluding time during active military service), starting with your current address, and give the dates you lived at each address.
2. Identify each educational institution you attended, the dates of your attendance, and describe any physical or mental examination you received at or in connection with your attendance at each institution, stating with respect to each such examination:
 - a) the date of the examination;
 - b) the hospital or institution where such examination was given; and
 - c) the name and address of the person conducting the examination.
3. If you have ever applied for life, health or accident insurance, state with respect to each such application:
 - a) the date of the application;
 - b) the kind of insurance applied for;
 - c) the name and address of the insurance company to which the application was made;
 - d) whether such application was accepted and if not, why not; and
 - e) whether a medical examination was given in connection with the application, and, if so, identify the person conducting the examination and the medical institution where the examination was given.
4. If you have ever made a claim for benefits for any medical condition (including worker's compensation, veteran's benefits, state or federal disability or insurance or union or third party medical plans) state with respect to each such claim:
 - a) the type of claim (worker's compensation, veteran's benefits, etc.);

- b) the date of the claim;
- c) the claim number or other identification of the claim;
- d) the entity to whom the claim was made, including the name and address;
- e) the medical condition for which the claim was made; and
- f) the disposition of claim.

5. If you have ever filed or otherwise commenced a legal action in connection with any medical condition (other than this action) state as to each such action:

- a) the date that action was filed or otherwise commenced, the court or administrative body, the full title of the action, the index or other identifying number, and the identity of all parties to the action;
- b) a description of the medical condition in connection with which the action was filed, and how you believe that medical condition occurred;
- c) a description of the outcome of the action, or of its present status if it is still pending; and
- d) the dates and amounts of any payments, either as a result of a judgment or settlement, which you have received or which you are scheduled to receive.

II. EMPLOYMENT HISTORY

6. Identify and describe each job you have held, whether employed by others or self-employed, and state as to each:

- a) the name and address of your employer, the address of your workplace, the nature of the business and your job title;
- b) your duties and responsibilities;
- c) the date the job began and ended and the reasons for termination of the job; and
- d) the date and place of each physical or mental examination that you underwent in connection with such job, identifying the name and address of each medical practitioner conducting the examination and the name

and address of any medical institution at which such examination was conducted.

7. With respect to each job identified in response to Interrogatory No. 6, identify each on-the-job injury, medical condition or accident that you experienced, and state separately as to each:
- a) a description of the injury, medical condition or accident;
 - b) the dates of the injury, medical condition or accident; and
 - c) the treatment received, including the treating physician's name and address and all hospitalizations, operations and medication received.

III. FAMILY MEDICAL HISTORY

8. State the names and addresses of your spouse, children, brothers, sisters, parents, grandparents, aunts, uncles, cousins, nieces, nephews and grandchildren, and with respect to each:
- a) if any of them are deceased, state his or her age at the time of death and the time, place and cause of death;
 - b) identify each illness, disease, disability, or medical condition ever had by each during his or her lifetime which required professional medical attention;
 - c) identify any birth or genetic defects or miscarriages which they had; and
 - d) with respect to each relative, identify each medical practitioner and medical institution that treated them, and set forth the diagnosis.

IV. VETERAN'S MEDICAL HISTORY

9. State:
- a) the date of your birth;

- b) the name and address of the hospital or other facility where you were born, and the name and address of each attending physician or other medical practitioner; and
 - c) each birth defect that you had and each medical complication connected with your birth (e.g., premature birth, breech birth, jaundice, fetal alcoholism), and each medical complication or health problem that your mother had in connection with her pregnancy or your birth (e.g., toxemia, long period of labor).
10. Identify each injury, illness, disability or other physical or mental condition which you have ever had, whether temporary or permanent, and state separately as to each:
- a) each medical practitioner and/or medical institution seen or visited by you for the purposes of consultation, diagnosis, prognosis, x-rays, treatment or other care, specifying the dates of all hospitalizations;
 - b) the diagnosis or prognosis made by each medical practitioner and medical institution; and
 - c) the nature and extent of the care and treatment received in each medical institution and from each medical practitioner.
11. With respect to each injury, illness, disability, or other physical or mental condition identified in response to Interrogatory 10, identify each such condition that you claim or believe was caused by or arose out of exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin or some combination thereof, and state separately as to each:
- a) a description of each symptom;
 - b) whether you contend that such injury, illness disability or other physical or mental condition was caused by exposure to Agent Orange, 2,4,5-T, 2,4-D, dioxin, or some combination thereof;
 - c) the date and manner in which each such symptom first manifested itself or was made known to you; and
 - d) the basis for your claim or belief that the condition was caused by or arose out of exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin or some combination thereof, including the name and address of each person who furnished information contributing to said claim or belief, and the substance of that information.

12. Identify each drug or medication ever used or taken by you, including, but not limited to, illegal, recreational and over-the counter drugs, and for each drug or medication, set forth the following with respect to each:
- a) the brand name, generic name, or "street name" of the drug;
 - b) the dates of use;
 - c) the amount used during each period of use;
 - d) the name and address of the physician, if any, who prescribed the drug;
 - e) a description of reasons for your use of the drug; and
 - f) whether you have ever received any medical treatment or counseling in connection with your use of such drugs.
13. Identify each skin condition that you have ever had, and with respect to each such condition:
- a) state the dates during which you had that condition;
 - b) describe any diagnosis or medical treatment you received for the condition, and state:
 - i) the name and address of the person rendering the diagnosis or treatment;
 - ii) the name and address of the medical institution(s) at which you were diagnosed or treated;
 - iii) the dates of the diagnosis or treatment; and
 - iv) the effect of the treatment.
14. If you have ever smoked cigarettes or otherwise used a tobacco product:
- a) identify each type of product (e.g., cigars, cigarettes, chewing tobacco);
 - b) identify the time period during which you used that tobacco product;
 - c) identify the amount used on a daily basis (e.g., packs of cigarettes/day); and
 - d) state whether any physician or other health care professional has ever advised you to stop or reduce your use of cigarettes or other tobacco products, and,

if so, state the name and address of the physician or other health care professional and the date of the advice.

15. If you have ever consumed or drunk alcohol, state separately with respect to each type of alcohol (e.g., liquor, beer, wine, etc.) consumed:
- a) at what age consumption began;
 - b) the amount and frequency of such consumption;
 - c) if consumption ceased at any time, the reasons for such cessation and the reasons for any resumption; and
 - d) whether you were ever hospitalized or institutionalized for alcohol use, or advised to limit or stop alcohol use, and, if so, state the name(s) of each such hospital or institution or medical practitioner who treated or advised you.
16. If any insecticides (e.g., Chlordane, Lindane, DDT), rodenticides (e.g., rat poison), insect repellents (e.g., DEET) or other pest control compounds were ever used by you or others around your living or working quarters, state as to each:
- a) the brand name or generic name of the chemical;
 - b) a description of the chemical (e.g., powder, liquid, color, smell);
 - c) a description of the container for the chemical (e.g., shape, color, markings)
 - d) the dates of use;
 - e) the method of application;
 - f) the place it was applied;
 - g) the frequency of application; and
 - h) whether you experienced any adverse reaction to the compound and, if so, describe the reaction.

VI. MILITARY SERVICE

17. State with respect to your military service:

- a) the branch of the armed services in which you served;
 - b) the inclusive dates of your service;
 - c) the inclusive dates of service in or near Vietnam;
 - d) the name of each military unit to which you were assigned while serving in or near Vietnam; and the dates during which you were assigned to each such unit;
 - e) the name and location of each place or area at which you were physically present in or near Vietnam and the dates during which you were present at each such place or area;
 - f) your immediate superior officer's name and rank while in or near Vietnam; and
 - g) the type of discharge you received.
18. With respect to each illness, injury, wound, or other medical or psychological condition experienced by you during your military service in or near Vietnam, state:
- a) the date of your illness, injury, wound, or other medical or psychological condition;
 - b) a description of the illness, injury, wound, or other medical or psychological condition, including a description of all symptoms;
 - c) the cause of the illness, injury, wound, or other medical or psychological condition;
 - d) the name and rank of the person to whom you first reported the illness, injury, wound, or other medical or psychological condition (if anyone);
 - e) the date that you first reported the illness, injury, wound, or other psychological or medical condition;
 - f) the name, rank and location of each physician or other health care professional who treated your illness, injury, wound, or other psychological or medical condition, including the dates and places of treatment, and a description of the treatment you received; and
 - g) the name and location of each hospital or other health care facility which treated your psychological or medical condition, the dates of treatment, and a description of the treatment that you received.

19. Describe any other medication taken by you during your military service (e.g., Dapsone, Chloroquine, Primaquine, Binotal), stating as to each:
- a) the brand name or generic name of the medication;
 - b) the form of the medication (e.g., pill, capsule, injection, etc.);
 - c) the color, shape, and size of any pill or capsule taken;
 - d) the reasons for taking the medication;
 - e) the name and rank of the person(s) who gave you the medication;
 - f) the dates you took the medication;
 - g) the amount of the medication taken (e.g., pills/day) and
 - h) whether you experienced any adverse reaction to the medication and, if so, describe the reaction.
20. State whether you ever received any training, instructions, warnings or health and safety information concerning herbicides during your military service, and identify as to each:
- a) the dates you received the foregoing;
 - b) the location where received;
 - c) the name and rank of the person(s) from who it was received;
 - d) the substance of any oral information received; and
 - e) the title, date, author or source, and content of any written material received.
21. Set forth with respect to each time you claim to have been exposed to herbicides:
- a) the date of the alleged herbicide exposure;
 - b) the time of day of the alleged exposure;

- c) the closest geographical or political reference point (e.g., hill, town, landing zone) to the place you believe you were exposed;
- d) a description of the terrain at the place of alleged exposure;
- e) a description of how the herbicide was being applied (e.g., helicopter, aircraft, hand, etc.);
- f) a description of your activities at the time of alleged exposure;
- g) the manner you believe your body was physically exposed to the herbicide (e.g., skin contact, inhalation, ingestion or swallowing), and, if you believe you were exposed by contact on your skin, identify the areas of skin that came in contact with the herbicide;
- h) the name and rank of other people present at the time of alleged exposure; and
- i) with respect to any deceased proposed representative plaintiff, state how such plaintiff will demonstrate any of the information requested in subparts a) through h) of this interrogatory, identifying any persons with such information who will testify as to such plaintiff's exposure to herbicides.

ONLY IF YOU CONTEND THAT ANY OF YOUR CHILDREN HAS A BIRTH DEFECT CAUSED BY YOUR EXPOSURE TO AGENT ORANGE, 2,4-D, 2,4,5-T, DIOXIN OR SOME COMBINATION THEREOF, ANSWER THE FOLLOWING INTERROGATORIES.

- 22. Identify the children that you have fathered, including name, date and place of birth of each such child, and the name and address of each child's mother.
- 23. Identify each of your children whom you contend has birth or genetic defects allegedly caused by your exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin or some combination thereof, and identify:
 - a) the birth or genetic defects which you contend were caused by your exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin, or some combination thereof, and state the basis for your belief, including opinions of any physicians;
 - b) any other birth or genetic defects which the child has;

- c) each medical practitioner and medical institution seen or visited by the child or in which the child was confined for purposes of consultation, diagnosis, prognosis, treatment or other care, and the dates, purposes and results of such consultation, diagnosis, prognosis, treatment or other care; and
 - d) the identity of the mother of each child.
24. Identify each and every child of each mother identified in response to Interrogatory 22 and state as to each:
- a) the child's name, address, date of birth and place of birth, including the name and address of the hospital or other place where delivery occurred; and
 - b) the physician(s) who treated the mother during pregnancy and/or delivered the child.
25. With respect to each mother identified in response to Interrogatory 23(d), identify her brothers, sisters, parents, grandparents, aunts, uncles, cousins, nieces, nephews, and grandchildren, and:
- a) if any of them are deceased, state his or her age at the time of death and the time, place, and cause of death;
 - b) identify each illness, disease, disability, or medical condition ever had by each during his or her lifetime which required professional medical attention;
 - c) identify each medical practitioner and medical institution that treated them, and set forth the diagnosis of each, stating the same as to each relative.
26. With respect to each pregnancy, for each mother identified in response to Interrogatory 23(d), state:
- a) whether the mother was exposed to or contracted any viral or bacterial infection or disease during or shortly before the pregnancy (e.g., German measles, flu, etc.) and if so, identify the infection or illness, the period during which it occurred, and any medication or treatment given therefor;
 - b) whether the mother incurred any injury during pregnancy, and, if so, describe the injury, the treatment

received, any examining or treating physicians, and any institutions at which treatment occurred;

- c) whether the mother or father ever had any venereal disease, and, if so, describe the disease, the treatment received, any examining or treating physicians, and any institutions at which treatment occurred;
- d) whether diagnostic procedures, including, but not limited to, abdominal x-ray or pelvimetry, amniocentesis, and/or ultrasound were used, and, if so, set forth the date of the procedure, describe the procedure, the examining or treating physician and any institutions at which the procedure occurred; and
- e) whether any medical problems or complications arose during pregnancy (e.g., toxemia), and, if so, describe the problems or complications and the treatment received.

27. Answer Interrogatories 6, 7, 12, 14, 15, and 16 with respect to each mother identified in response to Interrogatory 23(d).

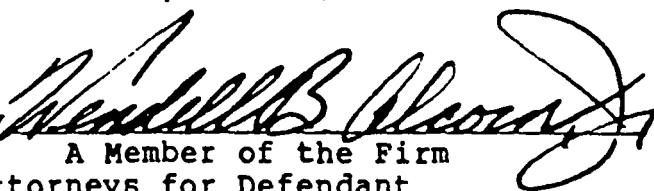
28. For each mother identified in response to Interrogatory 22 identify each and every pregnancy not resulting in a live birth, and state with respect to each:

- a) whether there was a miscarriage and/or spontaneous abortion, and, if so, state the date and describe the reason for the miscarriage and/or spontaneous abortion and identify any examining or treating physicians, and any institutions at which it occurred;
- b) if the response to a) above is affirmative, state whether you contend that such miscarriage and spontaneous abortion was caused by your exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin, or some combination thereof;
- c) whether there was a voluntary or therapeutic abortion, and, if so, state the date and describe the reason for the voluntary or therapeutic abortion, and identify any examining or treating physicians, and any institutions at which the abortion occurred; and
- d) if the response to c) above is affirmative, state whether you contend that such voluntary or therapeutic abortion was caused or necessitated by your exposure to

Agent Orange, 2,4-D, 2,4,5-T, dioxin, or some combination thereof.

Dated: New York, New York
December 23, 1983

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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----x
In re

"AGENT ORANGE" :

Product Liability Litigation :

MDL No. 381

-----x
ANSWERS OF
DAVID GENE LAMBIOTTE
TO
DEFENDANT'S INTERROGATORIES TO
PROPOSED REPRESENTATIVE PLAINTIFFS

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1500 Walnut Street
Philadelphia, PA 19102

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

In re

"AGENT ORANGE"

MDL No. 381

Product Liability Litigation-----

I. GENERAL

1. State your name, social security number, military service number, and each address at which you have ever lived (excluding time during active military service), starting with your current address, and give the dates you lived at each address.

David Gene Lambiotte
223-68-8395
44 Westover Road
Newport News, Virginia
1983

551 Logan Place
Newport News, Virginia
1980-1983

York, Maine
1978-1980

220 Palen Ave.
Newport News, Virginia
1975

304 Hurley Ave.
Newport News, Virginia
1974

River Drive Apartments
Newport News, Virginia
1973

44 Westover Road
Newport News, Virginia
1947-1969

2. Identify each educational institution you attended, the dates of your attendance, and describe any physical or mental examination you received at or in connection with your attendance at each institution, stating with respect to each such examination.
- a) the date of the examination;
 - b) the hospital or institution where such examination was given; and
 - c) the name and address of the person conducting the examination.

2. Attended Christopher Newport Community College, 1968-1971. No physical exam required.

3. If you have ever applied for life, health or accident insurance, state with respect to each such application:

- a) the date of the application;
- b) the kind of insurance applied for;
- c) the name and address of the insurance company to which the application was made;
- d) whether such application was accepted and if not, why not; and
- e) whether a medical examination was given in connection with the application, and, if so, identify the person conducting the examination and the medical institution where the examination was given.

3. Interrogatory deleted.

4. If you have ever made a claim for benefits for any medical condition (including worker's compensation, veteran's benefits, state or federal disability or insurance or union or third party medical plans) state with respect to each such claim:

- a) the type of claim (worker's compensation, veteran's benefits, etc.);
- b) the date of the claim;
- c) the claim number or other identification of the claim
- d) the entity to whom the claim was made, including the name and address;
- e) the medical condition for which the claim was made; and
- f) the disposition of claim.

12766

4. With Veterans Administration for disability, 1979, January. Lymphoma in connection with Agent Orange exposure. Non-service disability awarded.
5. If you have ever filed or otherwise commenced a legal action in connection with any medical condition (other than this action) state as to each such action:
 - a) the date that action was filed or otherwise commenced, the court or administrative body, the full title of the action, the index or other identifying number, and the identity of all parties to the action;
 - b) a description of the medical condition in connection with which the action was filed, and how you believe that medical condition occurred;
 - c) a description of the outcome of the action, or of its present status if it is still pending; and
 - d) the dates and amounts of any payments, either as a result of a judgment or settlement, which you have received or which you are scheduled to receive.
5. Auto accident sprained back and whiplash, settled out court. Auto accident, multiple bruises - settled out of court.

II. EMPLOYMENT HISTORY

6. Identify and describe each job you have held, whether employed by others or self-employed, and state as to each:
 - a) the name and address of your employer, the address of your workplace, the nature of the business and your job title;
 - b) your duties and responsibilities;
 - c) the date the job began and ended and the reasons for termination of the job; and
 - d) the date and place of each physical and mental examination that you underwent in connection

12-67

with such job, identifying the name and address of each medical practitioner conducting the examination and the name and address of any medical institution at which such examinations was conducted.

6. City of Newport News, Virginia, lifeguard and swimming instructor - lifeguard 1965, no examination required. Job was for the summer only.

Various short term jobs one of which required an examination.

Sherwin Williams Paint Company, Consolidated Carpet Installation, Envirotech, office work, time keeper/book keeper, payroll clerk, etc.

7. With respect to each job identified in response to Interrogatory No. 6, identify each on-the-job injury, medical condition or accident that you experienced, and state separately as to each:

- a) a description of the injury, medical condition or accident;
- b) the dates of the injury, medical condition or accident;
- c) the treatment received, including the treating physician's name and address and all hospitalizations, operations and medication received.

7. No on the job injuries except previously mentioned auto accident which occurred while driving a company truck.

III. FAMILY MEDICAL HISTORY

8. State the names and addresses of your spouse, children, brothers, sisters, parents, grandparents, aunts, uncles, cousins, nieces, nephews and grandchildren, and with respect to each:

- a) if any of them are deceased, state his or her age at the time of death and the time, place and cause of death;

- b) identify each illness, disease, disability, or medical condition ever had by each during his or her lifetime which required professional medical attention.
- c) identify any birth or genetic defects or miscarriages which they had; and
- d) with respect to each relative, identify each medical practitioner and medical institution that treated them, and set forth the diagnosis.

B. Married five years to Elizabeth Bugg, no children.

Brothers: Arthur G. Lambiotte, 208 S. Muhlenberg St., Woodstock, Virginia 22664; Michael G. Lambiotte, 18 Milford Road, Newport News, Virginia.; Sidney F. Lambiotte, 2753 Highgate Court, Wheelersburg, Ohio, 45694.

Father: Arthur J. Lambiotte

Mother: Dorothy T. Lambiotte.

IV. VETERAN'S MEDICAL HISTORY

9. State:

- a) the date of your birth;
- b) the name and address of the hospital or other facility where you were born, and the name and address of each attending physician or other medical practitioner; and
- c) each birth defect that you had and each medical complication connected with your birth (e.g., premature birth, breech birth, jaundice, fetal alcoholism), and each medical complication or health problem that your mother had in connection with her pregnancy of your birth (e.g., toxemia, long period of labor).

9.a. November 1, 1947.

12769

- b. Riverside Hospital, Newport News, Virginia, Dr. Bland (deceased).
 - c. No birth defects, mother had anemic condition, short, easy labor.
10. Identify each injury, illness, disability or other physical or mental condition which you have ever had, whether temporary or permanent, and state separately as to each:
- a) each medical practitioner and/or medical institution seen or visited by you for the purposes of consultation, diagnosis, prognosis, x-rays, treatment or other care, specifying the dates of all hospitalizations;
 - b) the diagnosis or prognosis made by each medical practitioner and medical institution; and
 - c) the nature and extent of the care and treatment received in each medical institution and from each medical practitioner.
10. Other than as enumerated in 11 infra, only occasional cold, sore throat, and sinus infection.
11. With respect to each injury, illness, disability, or other physical or mental condition identified in response to Interrogatory 10, identify each such condition that you claim or believe was caused by or arose out of exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin or some combination thereof, and state separately as to each:
- a) a description of each symptom;
 - b) whether you contend that such injury, illness disability or other physical or mental condition was caused by exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin or some combination thereof;
 - c) the date and manner in which each such symptom first manifested itself or was made known to you; and
 - d) the basis for your claim or belief that the condition was caused by or arose out of exposure to

12770

Agent Orange, 2,4-D, 2,4,5-T, dioxin or some combination thereof, including the name and address of each person who furnished information contributing to said claim or belief, and the substance of that information.

11. a. Lymphocytic Lymphoma, with periods of exacerbation, rash, night sweats, loss of weight, sensitivity to sunlight, memory loss, irritability, anxiety, and seizures.

b. deleted ..

c. Seizures began in 1972 or 1973.

12. Identify each drug or medication ever used or taken by you, including, but not limited to, illegal, recreational and over-the-counter drugs, and for each drug or medication, set forth the following with respect to each:

- a) the brand name, generic name, or "street name" of the drug;
- b) the date of use;
- c) the amount used during each period of use;
- d) the name and address of the physician, if any, who prescribed the drug;
- e) a description of reasons for your use of the drug; and
- f) whether you have ever received any medical treatment or counseling in connection with your use of such drugs.

12. a. Valium, Dilantin, Phenobarbital, and Tegretol. and occasional marijuana.

b. Valium since shortly after plaintiff's return from Vietnam. All others to control the seizures.

c. Drs. Warren, Mattern, Salter, Savin, the Neurologist at VA Hospital.

12771

d. For plaintiff's stress problems and to control plaintiff's seizures.

13. Identify each skin condition that you have ever had, and with respect to each such condition:

- a) state the dates during which you had that condition;
- b) describe any diagnosis or medical treatment you received for the condition, and state:
 - i) the name and address of the person rendering the diagnosis or treatment;
 - ii) the name and address of the medical institution(s) at which you were diagnosed or treated;
 - iii) the dates of the diagnosis or treatment;
 - iv) and the effect of the treatment.

13. a. skin cancer on face.

b. Dr. Neal 321 Main Street, Newport News, Virginia, 23601.

14. If you have ever smoked cigarettes or otherwise used a tobacco product:

- a) identify each type of product (e.g., cigars, cigarettes, chewing tobacco);
- b) identify the time period during which you used that tobacco product;
- c) identify the amount used on a daily basis (e.g., packs of cigarettes/day); and
- d) state whether any physician or other health care professional has ever advised you to stop or reduce your use of cigarettes or other tobacco products, and, if so, state the name and address of the physician or other health care professional and the date of the advice.

12772

14. a. yes. cigarettes.
- b. 1965 to present.
- c. One and one half packs per day.
- d. Yes, certain doctors plaintiff has seen.
15. If you have ever consumed or drunk alcohol, state separately with respect to each type of alcohol (e.g., liquor, beer, wine, etc.) consumed:
- a) at what age consumption began;
- b) the amount and frequency of such consumption;
- c) if consumption ceased at any time, the reasons for such cessation and the reasons for any resumption; and
- d) whether you were ever hospitalized or institutionalized for alcohol use, or advised to limit or stop alcohol use, and, if so, state the name(s) of each such hospital or institution or medical practitioner who treated or advised you.
15. a. Eighteen or nineteen.
- b. Socially and moderately.
- c. Has not ceased, has lessened.
- d. No.
16. If any insecticides (e.g., Chlordane, Lindane, DDT), rodenticides (e.g., rat poison), insect repellents (e.g., DEET) or other pest control compounds were ever used by you or others around your living or working quarters, state as to each:
- a) the brand name or generic name of the chemical;
- b) a description of the chemical (e.g., powder, liquid, color, smell);

12773

- c) a description of the container for the chemical (e.g., shape, color, markings)
- d) the date of use;
- e) the method of application;
- f) the place it was applied;
- g) the frequency of application; and
- h) whether you experienced any adverse reaction to the compound and, if so, describe the reaction.

16. Yes. Plaintiff has used insecticides to control ants, flies, fleas, etc. Apartment complexes use insecticides also to control insects however, plaintiff is not aware of the name brands of the products they used. Plaintiff used ordinary store brand powder for fleas and spray for ants with no reaction from such use.

VI. MILITARY SERVICE

17. State with respect to your military service:

- a) the branch of the armed services in which you served;
- b) the inclusive dates of your service;
- c) the inclusive dates of service in or near Vietnam;
- d) the name of each military unit to which you were assigned while serving in or near Vietnam; and the dates during which you were assigned to each such units;
- e) the name and location of each place or area at which you were physically present in or near Vietnam and the dates during which you were present at each such place or area;
- f) your immediate superior officer's name and rank while in or near Vietnam; and
- g) the type of discharge you received.

17. a. Army.
- b. December 1966 - September 1968.
- c. May 1967 - April 1968.
- d. Stationed on Cam Rahn Bay and went with convoys
- e. delivering supplies to various areas on the mainland.
- f. Plaintiff does not remember any specific names of places, he delivered the supplies and left.
- g. Honorable.
18. With respect to each illness, injury, wound or other medical or psychological condition experienced by you during your military service in or near Vietnam, state:
- a) the date of your illness, injury, wound, or other medical or psychological condition;
- b) a description of the illness, injury, wound, or other medical or psychological condition, including a description of all symptoms;
- c) the cause of the illness, injury, wound, or other medical or psychological condition;
- d) the name and rank of the person to whom you first reported the illness, injury, wound, or other medical or psychological condition (if anyone);
- e) the date that you first reported the illness, injury, wound, or other psychological or medical condition;
- f) the name, rank and location of each physician or other health care professional who treated your illness, injury, wound, or other psychological or medical condition, including the dates and places of treatment, and a description of the treatment you received; and
- g) the name and location of each hospital or other health care facility which treated your psychological or medical condition, the dates of treatment, and a description of the treatment that you received.

12775

18. The only injury plaintiff recieved was in the warehouse where he was working. Plaintiff was sitting at a desk doing paper work when a lieutenant who had not been cleared to do so began to use a forklift, he lost control of it and the forklift pinned plaintiff to the wall and injured plaintiff's shin from which plaintiff has a scar.

19. Describe any other medication taken by you during your military service (e.g., Dapsone, Chloroquine, Primaquine, Binoctal), stating as to each:

- a) the brand name or generic name of the medication;
- b) the form of the medication (e.g., pill, capsule, injection, etc.);
- c) the color, shape, and size of any pill or capsule taken;
- d) the reasons for taking the medication;
- e) the name and rank of the person(s) who gave you the medication;
- f) the dates you took the medication;
- g) the amount of the medication taken (e.g., pills/day); and
- h) whether you experienced any adverse reaction to the medication and, if so, describe the reaction.

19. The only medication plaintiff had was for a headache, plaintiff does not recall what medicine it was.

20. State whether you ever received any training, instructions, warnings or health and safety information concerning herbicides during your military service, and identify as to each:

- a) the dates you received the foregoing;
- b) the location where received;
- c) the name and rank of the person(s) from who

12776

it was received;

- d) the substance of any oral information received;
and
- e) the title, date, author or source, and content
of any written material received.

20. No.

21. Set forth with respect to each time you claim to have
been exposed to herbicides:

- a) the date of the alleged herbicide exposure;
- b) the time of day of the alleged exposure;
- c) the closest geographical or political reference
point (e.g., hill, town, landing zone) to the
place you believe you were exposed;
- d) a description of the terrain at the place of alleged
exposure;
- e) a description of how the herbicide was being
applied (e.g., helicopter, aircraft, hand, etc.);
- f) a description of your activities at the time of
alleged exposure;
- g) the manner you believe your body was physically
exposed to the herbicide (e.g., skin contact,
inhalation, ingestion or swallowing), and, if
you believe you were exposed by contact on your
skin, identify the areas of skin that came in
contact with the herbicide;
- h) the name and rank of other people present at the
time of alleged exposure; and
- i) with respect to any deceased proposed repre-
sentative plaintiff, state how such plaintiff
will demonstrate any of the information
requested in subparts a) through h) of this
interrogatory, identifying any persons with such
information who will testify as to such plaintiff's
exposure to herbicides.

12777

21. Cam Rahn was defoliated, plaintiff lived and worked in the soil there, also the areas on the mainland across from Cam Rahn were defoliated and the convoys went to areas to the north and to the south, sometimes overnight runs.

ONLY IF YOU CONTEND THAT ANY OF YOUR CHILDREN HAS A BIRTH DEFECT CAUSED BY YOUR EXPOSURE TO AGENT ORANGE, 2,4-D, 2,4,5-T, DIOXIN OR SOME COMBINATION THEREOF, ANSWER THE FOLLOWING INTERROGATORIES.

22. Identify the children that you have fathered, including name, date and place of birth of each such child, and the name and address of each child's mother.

22. Not applicable.

23. Identify each of your children whom you contend has birth or genetic defects allegedly caused by your exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin or some other combination thereof, and identify:

- a) the birth or genetic defects which you contend were caused by your exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin, or some combination thereof, and state the basis for your belief, including opinions of any physicians;
- b) any other birth or genetic defects which the child has;
- c) each medical practitioner and medical institution seen or visited by the child or in which the child was confined for purposes of consultation, diagnosis, prognosis, treatment or other care, and the dates, purposes and results of such consultation, diagnosis, prognosis, treatment or other care; and
- d) the identity of the mother of each child.

23. Not applicable.

24. Identify each and every child of each mother identified in response to Interrogatory 22 and state as to each:

- a) the child's name, address, date of birth and place of birth, including the name and address of the hospital or other place where delivery occurred; and
- b) the physician(s) who treated the mother during pregnancy and/or delivered the child.

24. Not applicable.

25. With respect to each mother identified in response to Interrogatory 23(d), identify her brothers, sisters, parents, grandparents, aunts, uncles, cousins, nieces, nephews, and grandchildren, and:

- a) if any of them are deceased, state his or her age at the time of death and the time, place and cause of death;
- b) identify each illness, disease, disability, or medical condition ever had by each during his or her lifetime which required professional medical attention;
- c) identify each medical practitioner and medical institution that treated them, and set forth the diagnosis of each, stating the same as to each relative.

25. Not applicable.

26. With respect to each pregnancy, for each mother identified in response to Interrogatory 23(d), state:

- a) whether the mother was exposed to or contracted any viral or bacterial infection or disease during or shortly before the pregnancy (e.g., German measles, flu, etc.) and if so, identify the infection or illness, the period during which it occurred, and any medication or treatment given therefor;
- b) whether the mother incurred any injury during

pregnancy, and, if so, describe the injury, the treatment received, any examining or treating physicians, and any institutions at which treatment occurred;

- c) whether the mother or father ever had any venereal disease, and, if so, describe the disease, the treatment received, any examining or treating physicians, and any institutions at which treatment occurred;
- d) whether diagnostic procedures, including, but not limited to, abdominal x-rays or pelvimetry, amniocentesis, and/or ultrasound were used, and, if so, set forth the date of the procedure, describe the procedure, the examining or treating physician and any institutions at which the procedure occurred; and
- e) whether any medical problems or complications arose during pregnancy (e.g., toxemia), and, if so, describe the problems or complications and the treatment received.

26. Not applicable.

27. Answer Interrogatories 6, 7, 12, 14, 15, and 16 with respect to each mother identified in response to Interrogatory 23(d).

27. Not applicable.

28. For each mother identified in response to Interrogatory 22 identify each and every pregnancy not resulting in a live birth, and state with respect to each:

- a) whether there was a miscarriage and/or spontaneous abortion, and, if so, state the date and describe the reason for the miscarriage and/or spontaneous abortion and identify any examining or treating physicians, and any institutions at which it occurred;
- b) if the response to a) above is affirmative, state whether you contend that such miscarriage and spontaneous abortion was caused by your exposure

12780

to Agent Orange, 2,4-D, 2,4,5-T, dioxin, or some combination thereof;

- c) whether there was a voluntary or therapeutic abortion, and, if so, state the date and describe the reason for the voluntary or therapeutic abortion, and identify any examining or treating physicians, and any institutions at which the abortion occurred; and
- d) if the response to c) above is affirmative, state whether you contend that such voluntary or therapeutic abortion was caused or necessitated by your exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin, or some combination thereof.

28. Not applicable.

Dated: Carle Place, New York
January 14, 1984

PLAINTIFFS' MANAGEMENT COMMITTEE

BY: 

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DEAN, FALANGA & ROSE, ESQS.
One Old Country Road
Carle Place, New York 1151
(516) 248-9888

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----X
In re

"AGENT ORANGE" :

Product Liability Litigation :

MDL No. 381

-----X
ANSWERS OF
DANNY GENE JORDAN
TO
DEFENDANT'S INTERROGATORIES TO
PROPOSED REPRESENTATIVE PLAINTIFFS

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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

In re

"AGENT ORANGE"

MDL No. 381

Product Liability Litigation

I. GENERAL

1. State your name, social security number, military service number, and each address at which you have ever lived (excluding time during active military service), starting with your current address, and give the dates you lived at each address.

Danny Gene Jordan SSN 443-70-2511
MSN US54665959

7212 Sir Gawain, Austin, Texas	1/80 to present
321 William Cannon, Austin, Texas	8/78 to 1/80
6049A Karen Circle, Fort Worth, Texas	6/75 to 8/78
1204 Scotland, Azle, Texas	1/75 to 6/75
3809 Delaware, Fort Worth, Texas	4/73 to 1/75
6215 Lloydhill, Fort Worth, Texas	9/72 to 4/73
Springbrook, Fort Worth, Texas	5/71 to 9/72
215 Polk Street, Mangum, Oklahoma	1/70 to 5/71
404 Alpha, Mangum, Oklahoma	2/69 to 1/70
U.S. Army	6/67 to 2/69
Georgia Street, Mangum, Oklahoma	11/65 to 6/67
Lincoln Street, Mangum, Oklahoma	8/65 to 11/65
1705 1/2 E. Broad, Lake Charles, LA	9/60 to 8/65
Gueydan, Louisiana	9/59 to 1/60
1705 1/2 E. Broad, Lake Charles, La	5/57 to 9/59
Big Lake, Texas	1/57 to 5/57
Glendive, Montana	5/55 to 1/57
Newtown, North Dakota	10/54 to 5/55
Dickinson, North Dakota	8/54 to 10/54
Bismarck, North Dakota	5/54 to 8/54
Minote, nORTH Dakota	1/54 to 5/54
Chickasota, Oklahoma	12/53 to 1/54
Mangum, Oklahoma	9/53 to 12/53

2. Identify each educational institution you attended, the dates of your attendance, and describe any physical or mental examination you received at or in connection with your attendance at each institution, stating with respect to each such examination.

- a) the date of the examination;
- b) the hospital or institution where such examination was given; and
- c) the name and address of the person conducting the examination.

University of Texas. Auston, Texas
No physical or mental exam given

9/78 to 12/78

12783

Texas Wesleyan University, Fort Worth, TX 1/73 to 5/74
No physical or mental exam required

Altus Jr. College, Altus, Oklahoma 9/69 to 5/71
Physical by Dr. Pierson (in office)
Mangum, Oklahoma 73554

Lake Charles High School, Lake Charles, LA 9/61 to 5/65
Physical by dR. Charles Woodard (in office)
Lake Charles, La.

Central Elementary, Lake Charles, La. 9/60 to 5/61
Physical by Dr. Charles Woodard and
Lake Charles, La. 8/57 to 9/59

Catholic School Gueydan, Louisiana 9/59 to 9/60
Do not remember any medical exams for
school.

3. If you have ever applied for life, health or accident insurance, state with respect to each such application:
- a) the date of the application;
 - b) the kind of insurance applied for;
 - c) the name and address of the insurance company to which the application was made;
 - d) whether such application was accepted and if not, why not; and
 - e) whether a medical examination was given in connection with the application, and, if so, identify the person conducting the examination and the medical institution where the examination was given.

INTERROGATORY DELETED

4. If you have ever made a claim for benefits for any medical condition (including worker's compensation, veteran's benefits, state or federal disability or insurance or union or third party medical plans) state with respect to each such claim:
- a) the type of claim (worker's compensation, veteran's benefits, etc.);

12784

- b) the date of the claim;
- c) the claim number or other identification of the claim
- d) the entity to whom the claim was made, including the name and address;
- e) the medical condition for which the claim was made; and
- f) the disposition of claim.

- a. Workman's Compensation
- b. Spring 1975
- c. Moody Printing, Fort Worth, Texas
- d. Farmers Insurance Group, Fort Worth, Texas
- e. Ruptured disk
- f. Awarded 100% disability with settlement

- a. Social Security Disability
- b. 3/77
- c. SSN 443-70-2511
- d. Social Security Agency, Fort worth, Texas
- e. Neck and back injuries
- f. Awarded 100% disability

- a. Veterans Disability
- b. October, 1978
- c. C 24880850
- d. Veteran's Administration Olin Teague Hospital, Temple, Texas
- e. Exposure to Toxins (including Agent Orange), Choracne, loss of feeling extremities, birth defects in children and wounds received in combat, including shrapnel and loss of hearing.
- f. Awarded service connected disability. 10% for wounds, denied symptoms of toxin exposure, citing lack of medical proof.

5. If you have ever filed or otherwise commenced a legal action in connection with any medical condition (other than this action) state as to each such action:

- a) the date that action was filed or otherwise commenced, the court or administrative body, the full title of the action, the index or other identifying number, and the identity of all parties

12785

to the action;

- b) a description of the medical condition in connection with which the action was filed, and how you believe that medical condition occurred;
- c) a description of the outcome of the action, or of its present status if it is still pending; and
- d) the dates and amounts of any payments, either as a result of a judgment or settlement, which you have received or which you are scheduled to receive.

See answer to 4-A. No lawsuit actually filed.

II. EMPLOYMENT HISTORY

6. Identify and describe each job you have held, whether employed by others or self-employed, and state as to each:

- a) the name and address of your employer, the address of your workplace, the nature of the business and your job title;
- b) your duties and responsibilities;
- c) the date the job began and ended and the reasons for termination of the job; and
- d) the date and place of each physical and mental examination that you underwent in connection with such job, identifying the name and address of each medical practitioner conducting the examination and the name and address of any medical institution at which such examinations was conducted.

A. Part-time janitor employed by others

Central Elementary School, Lake Charles, La.
Helping sweep and mop cafeteria in exchange for free lunches.
during school terms from 1957 to 1960
graduated to high school
unknown.

B. Newspaper Delivery Boy - employed by others

Lake Charles American Press Daily Newspaper
Delivery Boy

12786

Delivery of papers 7 days a week, collections, etc.
Fall 1957 to 1959 - moved
Unknown

- C. School Student Aide - employed by others
St. Josephs Catholic School
Gueydan, Louisiana
Cleaning classrooms and mowing church grounds
10/59 to 5/61 - moved away
Unknown
- D. Summer jobs in High School - construction worker -
employed by others

Richard Construction Co., Lake Charles, La.;
residential and commercial construction; part-time
laborer
job site cleanup
Summers of 1963 and 1964; returned to school
N/A
- E. Seismograph Worker - employed by others
Western Drilling Co.; Oil Exploration
Big Lake, Texas; Jug Lineman
Laying seismophones along blast sites and
driving water truck.
Summer of 1961; returned to school
Unknown
- F. Seismograph Driller's Helper - Employed by others
Phillips Petroleum Co. Bartlesville, Oklahoma;
Kermit, Texas and Jal, New Mexico; Petrikeyn
Exploration, Driller's helper
To help the driller in punching test holes for
seismic exploration.
Summer of 1962; returned to school
Unknown
- G. Fast Food Worker - employed by others

Slick's Drive-In, Mangum, Oklahoma
Slick Avery property
Soda fountain and short order cook
July 1965 to October 1965; better job
N/A
- H. Grocery Employee - employed by others

United Supermarket, Mangum, Oklahoma
Wade Ridley, Manager, Grocery Sales, Clerk
Checking, stocking, sacking, ordering and
building sales displays.

12787

October, 1969 to June, 1967; Drafted into army
Unknown

I. Police Officer - employed by others

City of Mangum, Oklahoma; Mangum Police Station
Law Enforcement; patrolman
Car patrol; enforcement of the law
June, 1969 to August, 1969; enrolled in college
Unknown

J. Work study employee - employed by others

Altus Jr. College, Altus, Oklahoma, education,
student aide
Helping in computer lab grading papers, etc.
During school sessions from 1969 to May, 1971;
Graduated
N/A

K. Laborer, summer - employed by others

City of Mangum, Oklahoma Street Department
Road and street maintenance; laborer
Drove dump trucks and ran tractors with mowers
on City right-of-way.
Part-time Fall 1969 to Spring, 1970; Fall, 1971;
moved
Unknown

L. Gas Station Attendant - employed by others

Bill's Shamrock Station, Mangum, Oklahoma;
service station; Bill Van Vacter, Owner; cashier-
attendant
Pumping gas, repairing flats, etc.
February, 1971 to May 1971; moved
No exam

M. Retail sales - employed by others

K-Mart Sporting Goods, Fort Worth, Texas
Bruce Watson District Manager, Stockboy,
Assistant Manager and Manager
Buying, selling, merchandising sporting goods;
hiring, and firing personnel; accounting,
inventory, etc.
September, 1971, to June, 1974; resigned
Unknown

N. Retail Grocery; employed by others

12783

Safeway Grocery Co., Lake Worth, Texas
Groceries; night stocker
Ordering and restocking grocery supply
September, 1974, to October, 1974; better job
Unknown

P. Warehouse and delivery; employed by others

Moody Printing Company, Main Street, Fort Worth,
Texas; Ed Moody prop.; warehouse man
Inventory control paper warehouse for printing
company
January - June, 1975; injury, then fired
Unknown

Q. Convenience Store Clerk; employed by others

McClouds Food Stores, Fort Worth, Texas;
Manager trainee
Stocking, checking in convenience store
August-September 1975; health problems
Unknown

R. Warehouse Work; employed by others

Waples/Platter, Inc., Fort Worth, Texas
wholesale groceries; order puller
Filling orders, loading trucks
October - November, 1975; health
Unknown

7. With respect to each job identified in response to Interrogatory No. 6, identify each on-the-job injury, medical condition or accident that you experienced, and state separately as to each:

- a) a description of the injury, medical condition or accident;
- b) the dates of the injury, medical condition or accident;
- c) the treatment received, including the treating physician's name and address and all hospitalizations, operations and medication received.

See answer to Interrogatory No. 4 supra.

III. FAMILY MEDICAL HISTORY

8. State the names and addresses of your spouse, children, brothers, sisters, parents, grandparents, aunts, uncles, cousins, nieces, nephews and grandchildren, and with respect to each:

- a) if any of them are deceased, state his or her age at the time of death and the time, place and cause of death;
- b) identify each illness, disease, disability, or medical condition ever had by each during his or her lifetime which required professional medical attention.
- c) identify any birth or genetic defects or miscarriages which they had; and
- d) with respect to each relative, identify each medical practitioner and medical institution that treated them, and set forth the diagnosis.

Spouse - Donna Frances Hukill Jordan
7212 Sir Gawain, Austin, Texas

- a. Living
- b. Normal childhood diseases; none other known
- c. Had one spontaneous abortion
- d. Obstetricians involved with the birth of two sons:

- 1. Chad - OB was Dr. Kingery, but he did not deliver. Dr. Funell delivered baby by Caesarean section at Mercy Hospital in Oklahoma City, Okla.
- 2. Michael -OB was Dr. Darwin Fielder who delivered the baby at All Saints Hospital, Ft. Worth, Texas.

Son - Chad Alan Jordan
7212 Sir Gawain, Austin, Texas

- a. Living
- b. Bronchitis; Various birth defects
- c. Medical problems involving missing wrist bones, absence of thumb on either hand with an extra digit on the left hand.
- d. Scottish Rite Hospital for Children, Dr. Aston and Dr. Senevey it Ft. Worth made the following diagnosis among others: 12790

"Bilateral terminal radial hemimelia with Bilateral
deuplication of index fingers and Absence of both
thumbs."

Son - Michael Ryan Jordan

7212 Sir Gawain, Austin, Texas

- a. Living
- b. Various birth defects
- c. Medical problems involving clubbed hands, thumb missing on both hands and large forearm bone missing.
- d. Scottish Rite Hospital for Children, Dr. Aston and Dr. Senevey in Ft. Worth made the following diagnosis among others:
"Bilateral radial club hands, left hand has four digits (absence of left thumb) and short humerous and forearm."

Sister - Sheryl Lynette Jordan Gonder

4009 Shawnee Trail, Lake Worth, Texas

- a. Living
- b. Unknown
- c. None
- d. Unknown

Mother - Billie Marie Thompson Jordan Bell

4004 Bonnie Drive, Ft. Worth, Texas

- a. Living
- b. Other than birth of children and one miscarriage, had none
- c. Born with a weak joint (next to nail) on each thumb; She did have one miscarriage and did have one infant die a few days after birth.
- d. Dr. Ohl in each instance treated her at the Chickasha Memorial in Chickasha, Oklahoma

Father - Harold Eugene Jordan

LeBleu Road, Lake Charles, Louisiana

- a. Living
- b. Unknown
- c. No birth defects
- d. Unknown

Paternal Grandfather - Joseph Jordan

Miami Beach, Florida

- a. Deceased; Age 58; 1953; Miami Beach, Florida
Heart Attack
- b. Unknown
- c. No birth defects
- d. Unknown

12791

Paternal Grandmother - Hester Dunham Jordan
Baird, Texas

- a. Deceased; Age 60; or thereabout; 1969; Baird, Texas;
Cause of death was cancer (Type unknown)
- b. Unknown
- c. Unknown
- c. Unknown

Maternal Grandfather - George Hancel Thompson
Mangum, Oklahoma

- a. Deceased; Age 66; 1970; Mangum, Oklahoma; Cause of
death were complications resulting from a stroke
- b. See c.
- c. Did have trait of both thumbs with frozen joints.
- d. Dr. Sellers, Mangum, Oklahoma

Maternal Grandmother - Mable Cordelia Miller Thompson
Mangum, Oklahoma

- a. Living
- b. Good health, other facts unknown
- c. Did have four or five miscarriages and one stillbirth
Also had one child born with frozen joint in thumb
- d. Unknown

IV. VETERAN'S MEDICAL HISTORY

9. State:

- a) the date of your birth;
 - b) the name and address of the hospital or other
facility where you were born, and the name and
address of each attending physician or other
medical practitioner; and
 - c) each birth defect that you had and each medical
complication connected with your birth (e.g.,
premature birth, breech birth, jaundice, fetal
alcoholism), and each medical complication or
health problem that your mother had in connection
with her pregnancy of your birth (e.g., toxemia,
long period of labor).
- a. February 4, 1947
 - b. Chickasha Memorial Hospital
Chickasha, Oklahoma

10792

Dr. Ohl
Chickasha, Oklahoma

c. Birth complications for him? None

Birth complications for mother? None

10. Identify each injury, illness, disability or other physical or mental condition which you have ever had, whether temporary or permanent, and state separately as to each:

a) each medical practitioner and/or medical institution seen or visited by you for the purposes of consultation, diagnosis, prognosis, x-rays, treatment or other care, specifying the dates of all hospitalizations;

Doesn't remember

b) the diagnosis or prognosis made by each medical practitioner and medical institution; and

Unknown

c) the nature and extent of the care and treatment received in each medical institution and from each medical practitioner.

Did have to wear casts and braces on legs temporarily, Gueton, Louisiana

See answer to question no. 4

11. With respect to each injury, illness, disability, or other physical or mental condition identified in response to Interrogatory 10, identify each such condition that you claim or believe was caused by or arose out of exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin or some combination thereof, and state separately as to each:

a) a description of each symptom;

Chloracene, fatigue, elevated red blood count, low blood pressure, rectal bleeding, spastic colon, liver disfunction, loss of sensory feelings, disrupted immune system

b) whether you contend that such injury, illness

12793

disability or other physical or mental condition was caused by exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin or some combination thereof;

- c) the date and manner in which each such symptom first manifested itself or was made known to you; and

Rash (Tentatively diagnosed as chloracene) April, 1968; Fatigue, March 1969; Elevated Red Blood Count, March 1969; Low blood pressure, March 1969; Rectal bleeding, 1976; Spastic colon, 1979; Liver disfunction, around 1978; Loss of sensory feelings in arms beginning in 1973 and has now extended to toes and feet beginning around 1978 or 1979; disrupted immune system, March 1969.

12. Identify each drug or medication ever used or taken by you, including, but not limited to, illegal, recreational and over-the-counter drugs, and for each drug or medication, set forth the following with respect to each:

- a) the brand name, generic name, or "street name" of the drug;
- b) the date of use;
- c) the amount used during each period of use;
- d) the name and address of the physician, if any, who prescribed the drug;
- e) a description of reasons for your use of the drug; and
- f) whether you have ever received any medical treatment or counseling in connection with your use of such drugs.

D. Plaintiff is not aware of all drugs taken during childhood, but has listed the following as those taken in his adult life:

- 1. (Not aware of name)
- b. October or November, 1967
- c. Not aware of amount
- d. Female Major located at the Ft. Polk army hospital
- e. Had double pneumonia with 107 degree temperature
- f. No

12794

2. Marijuana
 - b. Not aware of dates; used approximately fifteen times in a one year period (1968)
 - c. Joints (YZ)
 - d. Not applicable
 - e. Recreation
 - f. No
3. Dexadrene
 - b. Not aware of dates; seldom used depending upon patrol assignment in 1968
 - c. Amount - 2 tabs per day
 - d. Issued by Army Medic
 - e. Drug used for alertness on patrol
 - f. no
4. Dapsone
 - b. Daily used 1968
 - c. 1 small tablet
 - d. Issued by the Army Medic
 - e. This is an anti-malarial drug
 - f. no
5. (Not aware of name)
 - b. Taken 1 time weekly
 - c. 1 orange tablet
 - d. Issued by the Army Medic
 - e. This is an anti-malarial drug
 - f. no
6. Iodine tablets
 - b. Placed in canteen each time it was filled
 - c. 1 tablet
 - d. Issued by Army Medic
 - e. Water purification
 - f. no
7. Valium
 - b. 4X daily
 - c. 1 tablet; 5 mg.
 - d. Issued by Dr. Van Zant and Dr. Bernell
 - e. Muscle relaxant
 - f. yes
8. Percodan
 - b. As needed, probably took 35 tablets over a 6 or 7 month period
 - c. 1 tablet
 - d. Issued by Doctors' VanZant and Bernell
 - e. This drug is a pain killer
 - f. no

- 9. Robaxson
 - b. 4 X daily for 3 months
 - c. 1 tablet
 - d. Issued by Drs' VanZant and Bernell
 - e. Muscle relaxer
 - f. No
- 10. Elevil
 - b. 1 or 2 tablets daily for 6 or 7 months
 - c. see (b)
 - d. Issued by Drs' VanZant and Bernell
 - e. To aid in giving up the Valium
 - f. No
- 11. Antibiotics (Erythromycin)
 - b. 2 tablets daily for 1 month; 250 mg.
 - c. 1 tablet
 - d. Issued by VA Hospital in Temple, Texas; Dr. Redman
 - e. skin rash
 - f. No
- 13. Identify each skin condition that you have ever had, and with respect to each such condition:
 - a) state the dates during which you had that condition;
 - b) describe any diagnosis or medical treatment you received for the condition, and state:
 - i) the name and address of the person rendering the diagnosis or treatment;
 - ii) the name and address of the medical institution(s) at which you were diagnosed or treated;
 - iii) the dates of the diagnosis or treatment;
 - iv) and the effect of the treatment.

From April 1968 to present, Plaintiff has had a skin condition tentatively diagnosed by Dr. Sonstein and the VA Hospital (Dr. Temple) as chloracene. Dr. Sonstein is located at 7201 Manachaca Road, Austin, Texas 78745 and the VA Hospital is located at 1902 South 1st, Temple, Texas 76501. Treatment? Diff. Scrubbs; ointment

- 14. If you have ever smoked cigarettes or otherwise used a tobacco product:

12796

- a) identify each type of product (e.g., cigars, cigarettes, chewing tobacco);

Cigarettes

- b) identify the time period during which you used that tobacco product;

From the time he was seventeen years of age

- c) identify the amount used on a daily basis (e.g., packs of cigarettes/day); and

one and a half packs a day

- d) state whether any physician or other health care professional has ever advised you to stop or reduce your use of cigarettes or other tobacco products, and, if so, state the name and address of the physician or other health care professional and the date of the advice.

Dr. Daum located in Hackensack, New Jersey, advised him in November of 1983 to quit smoking.

- 15. If you have ever consumed or drunk alcohol, state separately with respect to each type of alcohol (e.g., liquor, beer, wine, etc.) consumed:

- a) at what age consumption began;

Drank for the first time when he was approximately sixteen or seventeen years old

- b) the amount and frequency of such consumption;

Possibly once a week during high school and thereafter socially

- c) if consumption ceased at any time, the reasons for such cessation and the reasons for any resumption; and

Stopped drinking in 1974 or 1975 due to the fact that he was having blackouts. Other reasons included; alcohol made him violent, he was tired of it, health problems and his father was an alcoholic.

- d) whether you were ever hospitalized or

12797

institutionalized for alcohol use, or advised to limit or stop alcohol use, and, if so, state the name(s) of each such hospital or institution or medical practitioner who treated or advised you.

No

16. If any insecticides (e.g., Chlordane, Lindane, DDT), rodenticides (e.g., rat poison), insect repellents (e.g., DEET) or other pest control compounds were ever used by you or others around your living or working quarters, state as to each:

- a) the brand name or generic name of the chemical;
- b) a description of the chemical (e.g., powder, liquid, color, smell);
- c) a description of the container for the chemical (e.g., shape, color, markings)
- d) the date of use;
- e) the method of application;
- f) the place it was applied;
- g) the frequency of application; and
- h) whether you experienced any adverse reaction to the compound and, if so, describe the reaction.

To his knowledge, he was never exposed to the listed insecticides prior to Vietnam. Since Vietnam, he has used the various foggers (Raid, Holiday) a couple of times in his home. Never directly handled on the job. Knows specifically, he did not use those listed.

VI. MILITARY SERVICE

17. State with respect to your military service:

- a) the branch of the armed services in which you served;

Army

12798

- b) the inclusive dates of your service;

June 1967 through February 1969

- c) the inclusive dates of service in or near Vietnam;

February 1968 through February 1969

- d) the name of each military unit to which you were assigned while serving in or near Vietnam; and the dates during which you were assigned to each such units;

Delta Company 1/5 First Air Cavalry (February 1968 through October 1968)

Echo Company 1/5 First Air Cavalry (October 1968 through February 1969)

- e) the name and location of each place or area at which you were physically present in or near Vietnam and the dates during which you were present at each such place or area;

Quang Tri Province (February, 1968 through November 1968) and Tua Thien Province (same dates). I-Corps Located at the following landing zones (LZ); Hue, Red Beach, LZ Jane, LZ Stud, LZ Wharton, LZ Butcher, Khe Sahn Valley, LZ Peanuts, LZ Barbara, Con Tien, Dua Viet, Dong Ha, A Shau Valley, Lang Vei, and An Khe base camp. These were areas they worked out of as base camps. This is not a conclusive list.

Also, from November 1968 through February 1969, with III Corps in Tau Ninh Province and Quan Loi Province. These included the following areas "Katun Special Forces (SF) camp, Chien Lien (SF); War Zone C & D. the Iron Triangle region, Hobo Wood and Vietnam/Cambodia border.

- f) your immediate superior officer's name and rank while in or near Vietnam; and

Delta Company - Sgt. E5 John Willis (Platoon Sergeant)
Echo Company - Staff Sergeant Timothy Meador (Platoon Sergeant)

Dan had 6 or 7 different commanding officers, but is unable to remember particular names of each.

- g) the type of discharge you received.

Honorable

12793

18. With respect to each illness, injury, wound or other medical or psychological condition experienced by you during your military service in or near Vietnam, state:

- a) the date of your illness, injury, wound, or other medical or psychological condition;
- b) a description of the illness, injury, wound, or other medical or psychological condition, including a description of all symptoms;
- c) the cause of the illness, injury, wound, or other medical or psychological condition;
- d) the name and rank of the person to whom you first reported the illness, injury, wound, or other medical or psychological condition (if anyone);
- e) the date that you first reported the illness, injury, wound, or other psychological or medical condition;
- f) the name, rank and location of each physician or other health care professional who treated your illness, injury, wound, or other psychological or medical condition, including the dates and places of treatment, and a description of the treatment you received; and
- g) the name and location of each hospital or other health care facility which treated your psychological or medical condition, the dates of treatment, and a description of the treatment that you received.

- a. 1967
- b. Pneumonia
- c. Does not know
- d. Doesn't recall
- e. Approximately October or November, 1967
- f. Fort Polk physician
- g. Fort Polk Army Base; Does not recall the treatment for this illness due to high temperature. He was delirious but does remember alcohol and ice dips.

- a. November, 1968 (Was nit pulled from field)
- b. Shrapnel wound to left shoulder

12800

- c. Enemy fire
- d. Army company medic
- e. November, 1968
- f. Army company medic treated Plaintiff, by giving him a tetanus shot, cleaning wound and using butterfly bandages with field dressing.
- g. Katum Special Forces Camp

- a. October, 1968 (Was not pulled from field)
- b. Pneumonia, flu like illness
- c. Cause unknown, but whole company had it
- d. Army company medic
- e. October, 1968
- f. Army company medic diagnosed, but they were never treated for it.
- g. LZ Barbara with Echo Company

- a. July, August of 1968 (taken from field)
- b. Heat Stroke
- c. Weather conditions
- d. Army company medic
- e. July or August 1968
- f. Battalion Aid Unit doctored him; He was given a glucose and saline solution (several IV's of each)
- g. LZ Jane with Delta Company

- a. April or May of 1968 (Was not pulled from field)
- b. Dysentary
- c. Not known, but was located in heavily defoliated area at time. The whole company had this for approximately 2 weeks.
- d. Army company medic thought it was dysentary, but this was not actually diagnosed.
- e. April or May 1968
- f. Army company medic
- g. Delta Company LZ Jane

19. Describe any other medication taken by you during your military service (e.g., Dapsone, Chloroquine, Primaquine, Binocet), stating as to each:

- a) the brand name or generic name of the medication;
- b) the form of the medication (e.g., pill, capsule, injection, etc.);
- c) the color, shape, and size of any pill or capsule taken;

12801

- d) the reasons for taking the medication;
- e) the name and rank of the person(s) who gave you the medication;
- f) the dates you took the medication;
- g) the amount of the medication taken (e.g., pills/day); and
- h) whether you experienced any adverse reaction to the medication and, if so, describe the reaction.

See Question 12 1 through 6 items for the answers to a) through g).

- h. The dexadrene made him nervous and edgy. He also experienced some chest pains. This drug was taken as needed for patrol duty.

The iodine which they put in the water for purification purposes seemed to make everyone nauseous. He is not sure if this was due to iodine or the water.

20. State whether you ever received any training, instructions, warnings or health and safety information concerning herbicides during your military service, and identify as to each:

- a) the dates you received the foregoing;
- b) the location where received;
- c) the name and rank of the person(s) from who it was received;
- d) the substance of any oral information received; and
- e) the title, date, author or source, and content of any written material received.

Plaintiff never received any information concerning herbicides. They were told that the planes were spraying the foliage to hinder the enemy.

12802

21. Set forth with respect to each time you claim to have been exposed to herbicides:

- a) the date of the alleged herbicide exposure;
 - b) the time of day of the alleged exposure;
 - c) the closest geographical or political reference point (e.g., hill, town, landing zone) to the place you believe you were exposed;
 - d) a description of the terrain at the place of alleged exposure;
 - e) a description of how the herbicide was being applied (e.g., helicopter, aircraft, hand, etc.);
 - f) a description of your activities at the time of alleged exposure;
 - g) the manner you believe your body was physically exposed to the herbicide (e.g., skin contact, inhalation, ingestion or swallowing), and, if you believe you were exposed by contact on your skin, identify the areas of skin that came in contact with the herbicide;
 - h) the name and rank of other people present at the time of alleged exposure; and
 - i) with respect to any deceased proposed representative plaintiff, state how such plaintiff will demonstrate any of the information requested in subparts a) through h) of this interrogatory, identifying any persons with such information who will testify as to such plaintiff's exposure to herbicides.
-
- a. Khe Sahn Valley and A Shau Valley April, 1968 through June, 1968
 - b. Usually early a.m. and late afternoon, dusk
 - c. Khe Sahn Valley, A Shau Valley, LZ Jane, LZ Barbara, LZ Stud, LZ Wharton, LZ Peanut, Dong Ha, Con Tien, Qua Viet, Lan Vei SF
 - d. Mountainous; mostly jungle; some rice paddies
 - e. Aircraft
 - f. Usually eating breakfast and dinner
 - g. Body exposed in each instance listed; Contact with skin to exposed parts of body (face, hairline, hands)

- h. IV Delta Company I-Corps; Sergeant J. Willis
- i. E-5 Bob Brown; Bitch Westerland, Gene Cummings, et al.

- a. November, 1968 through February 1969
- b. Usually early a.m. and late afternoon, dusk
Occasionally at midday
- c. War Zones C & D; Iron Triangle; Hobo Wood; Michelin
Rubber Plantation; Katum SF; Chi Lien SF; Ho Chi Mien
Trail
- d. Mostly rice paddies; terrain was flatter; Jungles were
five or six canopies thick
- e. Aircraft
- f. Usually eating breakfast and dinner
- g. Same as above
- h. Sgt. Timothy Meddor, Sgt. E-5 Thomas O'Donnell; Ayres
(Radio Operator); Some of the same people listed above.

ONLY IF YOU CONTEND THAT ANY OF YOUR CHILDREN HAS A BIRTH
DEFECT CAUSED BY YOUR EXPOSURE TO AGENT ORANGE, 2,4-D,
2,4,5-T, DIOXIN OR SOME COMBINATION THEREOF, ANSWER THE
FOLLOWING INTERROGATORIES.

- 22. Identify the children that you have fathered, including
name, date and place of birth of each such child, and the
name and address of each child's mother.
 - a. Chad Allan Jordan born January 7, 1971 at Mercy Hospital in
Oklahoma City, Oklahoma
 - b. Michael Ryan Jordan born November 17, 1972 at All Saints
Hospital in Fort Worth, Texas

Mother: Donna Frances Hukill Jordan
7212 Sir Gawain, Austin, Texas
- 23. Identify each of your children whom you contend has birth
or genetic defects allegedly caused by your exposure to
Agent Orange, 2,4-D, 2,4,5-T, dioxin or some other
combination thereof, and identify:
 - a) the birth or genetic defects which you contend were
caused by your exposure to Agent Orange, 2,4-D,
2,4,5-T, dioxin, or some combination thereof, and
state the basis for your belief, including opinions
of any physicians; 12804
 - b) any other birth or genetic defects which the child has:

- c) each medical practitioner and medical institution seen or visited by the child or in which the child was confined for purposes of consultation, diagnosis, prognosis, treatment or other care, and the dates, purposes and results of such consultation, diagnosis, prognosis, treatment or other care; and
- d) the identity of the mother of each child.

Chad Allan Jordan

- a. Missing thumbs, missing wristbones
- b. None
- c. Dr. Senevey, Dr. Aston, Texas Scottish Rite Hospital for Crippled Children in Ft. Worth, Texas. Diagnosis was bilateral terminal radial hemimelia with Bilateral duplication of index fingers and absence of both thumbs. Had various surgeries on May, 1974, July 1975, and June 1976 (list may be inconclusive)
- d. Donna Frances Hukill Jordan

Michael Ryan Jordan

- a. Missing thumb, club hands, missing wristbones, missing bone in forearm
- b. None
- c. Dr. Senevey, Dr. Aston, Texas Scottish Rite Hospital for Crippled Children in Ft. Worth, Texas. Diagnosis was Bilateral radial club hands, Left hand has four digits (absence of left thumb) and short humerus and forearm. Had various surgeries on February 1975, July 1975 and June 1976. Surgeries continuing.
- d. Donna Frances Hukill Jordan

24. Identify each and every child of each mother identified in response to Interrogatory 22 and state as to each:

- a) the child's name, address, date of birth and place of birth, including the name and address of the hospital or other place where delivery occurred; and
- b) the physician(s) who treated the mother during pregnancy and/or delivered the child.

Chad Allan Jordan

7212 Sir Gawain

Austin, Texas

Born January 7, 1971

Mercy Hospital in Oklahoma City, Oklahoma

12805

Michael Ryan Jordan
7212 Sir Gawain
Austin, Texas
Born November 17, 1972
All Saints Hospital in Fort Worth, Texas

- b. Dr. Funell delivered Chad, Dr. Kingery was OB
Dr. Fielder delivered Michael

25. With respect to each mother identified in response to Interrogatory 23(d), identify her brothers, sisters, parents, grandparents, aunts, uncles, cousins, nieces, nephews, and grandchildren, and:

- a) if any of them are deceased, state his or her age at the time of death and the time, place and cause of death;
- b) identify each illness, disease, disability, or medical condition ever had by each during his or her lifetime which required professional medical attention;
- c) identify each medical practitioner and medical institution that treated them, and set forth the diagnosis of each, stating the same as to each relative.

Mother - Vada Hukill
Mangum, Oklahoma

- a. Living
- b. In good health; had chronic bronchitis between 1957 and 1961; Also had one miscarriage in 1954
- c. Doctors' names unavailable, but both instances were treated at Gardenia Hospital, Gardenia, California.

Father - F. Gerald Hukill
Mangum, Oklahoma

- a. Living
- b. In good health; did have cyst cut from back (1956) and one cut from thigh (1957); Vitamin B deficiency noted in 1983
- c. Doctors' names unavailable, but operations for cysts done at Gardenia Hospital, Gardenia, California. Vitamin B deficiency noted by Dr. Troung Thach in Mangum, Oklahoma

Brother - Jerry Hukill
Stillwater, Oklahoma

12806

- a. Living
- b. Good health, no other details known
- c. Unknown

Maternal Uncle - Chester N. Anderson
Commerce City, Colorado

- a. Living
- b. Disability - has a vascular and circulatory problems in legs
- c. Unknown

Maternal Grandmother - Ada Anderson
Mangum, Oklahoma

- a. Living
- b. Has high blood pressure
- c. Dr. Thach in Mangum, Oklahoma
Dr. Lenaburg in Mangum, Oklahoma

Maternal Grandfather - Chester H. Anderson

- a. Deceased; 1958; Age 54; Heart attack
- b. Unknown
- c. Dr. White at Bethina Hospital in Wichita Falls, Texas

Maternal cousins - Larry Anderson
Denver, Colorado
Gary Anderson
Denver, Colorado
Donnie Anderson
(Deceased; Dallas, Texas, 1977,
murdered, early 20's)
Joleyn Anderson, Commerce City, TX
Angel Anderson, Commerce City, TX
Denise Anderson, Commerce City, TX
Melody Anderson, Ft. Worth, TX
Chester Anderson, Ft. Worth, TX

- a. Living , exception to Donnie
- b. Unknown
- c. Unknown

Paternal Grandmother - Audrey Hukill
Mangum, Oklahoma

- a. Deceased, 1970; 70; Cerebral hemorrhage
- b. High blood pressure, ulcers, intestinal blockage
- c. Dr. Laniberg, Mangum, Oklahoma

Paternal Grandfather - Francis Letcher Hukill
Mangum, Oklahoma

- a. Deceased, 1983; Age 87; Pneumonia
- b. Unknown
- c. Mangum City Hospital

Paternal Uncle -Dr. Viron Hukell
Conway, Arkansas

- a. Living

1980

- b. Wounded severly in World War II; No other details known
- c. Unknown

Paternal Cousin - Cynthia Hukell
Kansas City, Missouri

- a. Living
- b. Unknown
- c. Unknown

26. With respect to each pregnancy, for each mother identified in response to Interrogatory 23(d), state:

- a) whether the mother was exposed to or contracted any viral or bacterial infection or disease during or shortly before the pregnancy (e.g., German measles, flu, etc.) and if so, identify the infection or illness, the period during which it occurred, and any medication or treatment given therefor;
 - b) whether the mother incurred any injury during pregnancy, and, if so, describe the injury, the treatment received, any examining or treating physicians, and any institutions at which treatment occurred;
 - c) whether the mother or father ever had any venereal disease, and, if so, describe the disease, the treatment received, any examining or treating physicians, and any institutions at which treatment occurred;
 - d) whether diagnostic procedures, including, but not limited to, abdominal x-rays or pelvimetry, amniocentesis, and/or ultrasound were used, and, if so, set forth the date of the procedure, describe the procedure, the examining or treating physician and any institutions at which the procedure occurred; and
 - e) whether any medical problems or complications arose during pregnancy (e.g., toxemia), and, if so, describe the problems or complications and the treatment received.
- a. Contracted Belles Palsy (a neurological disorder) but other than this did not contract virus and exposed to any.
 - b. None
 - c. No.
 - d. Did receive x-rays in the ninth month of both

12808

pregnancies. Dr. Kingery ordered the x-ray for Chad and Dr. Fielder for Michael.

e. No

27. Answer Interrogatories 6, 7, 12, 14, 15, and 16 with respect to each mother identified in response to Interrogatory 23(d).

6. See attached handwritten sheet

7. No on the job injuries

12. a. Birthcontrol (does not remember name)

b. October 1967 through 1969

c. 1 pill one time daily

d. Dr. Kingery, Mangum, Oklahoma

e. Birth control reasons

f. No

a. Medication given during Bell's Palsy

b. January 1971 through March 1971

c. Once daily, she did not take due to pregnancy

d. Dr. Thomas Parker, Oklahoma City, Oklahoma

e. Helped condition

f. No

a. Librium

b. June, 1972

c. Once daily, she only took 2 or 3

d. Dr. Fielder in Fort Worth, Texas

e. Nervous condition

f. No

12809

14.
 - a. cigarettes
 - b. Eighteen years of age to present, none during pregnancy
 - c. 1 pack daily
 - d. No
15.
 - a. Eighteen years
 - b. Infrequently - once a month
 - c. NA
 - d. NO
16. She used various foggers (Raid, Holiday) in the house approximately 2 or 3 times a year. Never exposed due to the fact that they totally clear the house of fumes before entering.

28. For each mother identified in response to Interrogatory 22 identify each and every pregnancy not resulting in a live birth, and state with respect to each:

- a) whether there was a miscarriage and/or spontaneous abortion, and, if so, state the date and describe the reason for the miscarriage and/or spontaneous abortion and identify any examining or treating physicians, and any institutions at which it occurred;
- b) if the response to a) above is affirmative, state whether you contend that such miscarriage and spontaneous abortion was caused by your exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin, or some combination thereof;
- c) whether there was a voluntary or therapeutic abortion, and, if so, state the date and describe the reason for the voluntary or therapeutic abortion, and identify any examining or treating physicians, and any institutions at which the abortion occurred; and
- d) if the response to c) above is affirmative, state whether you contend that such voluntary or therapeutic abortion was caused or necessitated by

12810

your exposure to Agent Orange, 2,4-D, 2,4,5-T,
dioxin, or some combination thereof.

- a. Spontaneous abortion
Occurred around January 1972
Dr. Rhodes treated at White Settlement Austiopathic
Hospital, White Settlement, Texas
- b. Yes, due to toxins
- c. No
- d. NA

Dated: Carle Place, New York
January 14, 1984

PLAINTIFFS' MANAGEMENT COMMITTEE

By: 

DAVID J. DEAN, ESQ.
DEAN, FALANGA & ROSE, ES
One Old Country Road
Carle Place, New York 11
(516) 248-9888

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----X
In re

"AGENT ORANGE" :

Product Liability Litigation :

MDL No. 381

-----X
ANSWERS OF
MICHAEL FRANCIS RYAN
TO
DEFENDANT'S INTERROGATORIES TO
PROPOSED REPRESENTATIVE PLAINTIFFS

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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

In Re .
"Agent Orange" . MDL NO. 281
Product Liability Litigation .

I. GENERAL

1. State your name, social security number, military service number, and each address at which you have ever lived (excluding time during active military service), starting with your current address, and give the dates you lived at each address.

Michael Francis Ryan
133-34-2420
US 51579873

73 University Heights Drive
Stony Brook, New York 1971 - Present

41 Juniper Road
Kings Park, New York 1970 - 1971

5805 Avenue "O"
Brooklyn, New York 1967 - 1970

U.S. Army 1965 - 1967

3320 Avenue "L"
Brooklyn, New York

2. Identify each educational institution you attended, the dates of your attendance, and describe any physical or mental examination you received at or in connection with your attendance at each institution, stating with respect to each such examination.

- a) the date of the examination;
- b) the hospital or institution where such examination was given; and
- c) the name and address of the person conducting the examination.

Our Lady Help of Christians
1951-1959
Brooklyn, New York

12813

Brooklyn Preparatory
1959 - 1961

Midwood High School
1961 - 1964

St. John's University
Brooklyn, New York
1964 - 1965
Service 1965-1967

Suffolk Community College
Suffolk County
1972 or 1973

Doesn't recall any examinations

3. If you have ever applied for life, health or accident insurance, state with respect to each such application:
- a) the date of the application;
 - b) the kind of insurance applied for;
 - c) the name and address of the insurance company to which the application was made;
 - d) whether such application was accepted and if not, why not; and
 - e) whether a medical examination was given in connection with the application, and, if so, identify the person conducting the examination and the medical institution where the examination was given.

INTERROGATORY DELETED

4. If you have ever made a claim for benefits for any medical condition (including worker's compensation, veteran's benefits, state or federal disability or insurance or union or third party medical plans) state with respect to each such claim:
- a) the type of claim (worker's compensation, veteran's benefits, etc.);
 - b) the date of the claim;

- c) the claim number of other identification of the claim
- d) the entity to whom the claim was made, including the name and address;
- e) the medical condition for which the claim was made; and
- f) the disposition of claim.

2/13/72 Suffolk County Police Department
 Sprained Thumb
 Insurance: Royal Globe

3/10/73 Concussion
 Insurance: Royal Globe

4/12/73 Puncture Wound Right Wrist
 Contusion to rib cage
 Insurance: Royal Globe

5/19/73 Sprained ring finger
 Insurance: Royal Globe

12/19/73 Two chipped teeth, all teeth loosened
 swollen jaw
 Insurance: Royal Globe

1/17/77 Neck Sprain
 Insurance: Suffolk County

6/12/77 Abrasions on hand, arms and smoke inhalation
 Insurance: Suffolk County

9/22/78 Sprained left elbow, wrist and knee
 Insurance: Suffolk County

11/26/81 Hematoma right wrist and elbow
 Insurance: Suffolk County

5. If you have ever filed or otherwise commenced a legal action in connection with any medical condition (other than this action) state as to each such action:

- a) the date that action was filed or otherwise commenced, the court or administrative body, the full title of the action, the index or other

identifying number, and the identity of all parties to the action;

- b) a description of the medical condition in connection with which the action was filed, and how you believe that medical condition occurred;
- c) a description of the outcome of the action, or of its present status if it is still pending; and
- d) the dates and amounts of any payments, either as a result of a judgment or settlement, which you have received or which you are scheduled to receive.

NONE

II. EMPLOYMENT HISTORY

- 6. Identify and describe each job you have held, whether employed by others or self-employed, and state as to each:
 - a) the name and address of your employer, the address of your workplace, the nature of the business and your job title;
 - b) your duties and responsibilities;
 - c) the date the job began and ended and the reasons for termination of the job; and
 - d) the date and place of each physical and mental examination that you underwent in connection with such job, identifying the name and address of each medical practitioner conducting the examination and the name and address of any medical institution at which such examinations was conducted.

10/70 to present
Suffolk County Police Department
Physical examination prior to hiring

10/70 - 2/70
New York City Police
Physician examination prior to hiring

2/70 - 8/67
IBM
Physical examination prior to hiring

8/67 - 10/65
U.S. Army

12816

10/65 - 6/65
Service Bureau Corp.
IBM Subsidiary

7. With respect to each job identified in response to Interrogatory No. 6, identify each on-the-job injury, medical condition or accident that you experienced, and state separately as to each:
- a) a description of the injury, medical condition or accident;
 - b) the dates of the injury, medical condition or accident;
 - c) the treatment received, including the treating physician's name and address and all hospitalizations, operations and medication received.

See Answer to Interrogatory #5 supra.

III. FAMILY MEDICAL HISTORY

8. State the names and addresses of your spouse, children, brothers, sisters, parents, grandparents, aunts, uncles, cousins, nieces, nephews and grandchildren, and with respect to each:
- a) if any of them are deceased, state his or her age at the time of death and the time, place and cause of death;
 - b) identify each illness, disease, disability, or medical condition ever had by each during his or her lifetime which required professional medical attention.
 - c) identify any birth or genetic defects or miscarriages which they had; and
 - d) with respect to each relative, identify each medical practitioner and medical institution that treated them, and set forth the diagnosis.

SPOUSE: Maureen Ann, 73 University Heights Dr., Stony Brook, NY

12817

10/10/85 - 8/85

Service Bureau Corp.
IBM Subscribers

7. With respect to each job identified in response to Interrogatory No. 6, identify each on-the-job injury, medical condition or accident that you experienced, and state separately as to each:

- a) a description of the injury, medical condition or accident;
- b) the dates of the injury, medical condition or accident;
- c) the treatment received, including the treating physician's name and address and all hospitalizations, operations and medication received.

See answer to Interrogatory #5 supra.

III. FAMILY MEDICAL HISTORY

8. State the names and addresses of your spouse, children, brothers, sisters, parents, grandparents, aunts, uncles, cousins, nieces, nephews and grandchildren, and with respect to each:

- a) if any of them are deceased, state his or her age at the time of death and the time, place and cause of death;

- b) identify each illness, disease, disability, or medical condition ever had by each during his or her lifetime which required professional medical attention;

- c) identify any birth or genetic defects or miscarriages which they had; and

- d) with respect to each relative, identify each medical practitioner and medical institution that treated them, and set forth the diagnosis.

SPOUSE: Maureen Ann, 73 University Heights Dr., Stony Brook, NY

One miscarriage before birth of first child (Kerry), two children born with birth defects, Dr. Wilton Fritz, Brooklyn NY; Dr. Baker, Stony Brook, NY; Women's Hospital, Manhattan.

CHILDREN: Kerry Ann Ryan, 73 University Heights Dr., Stony Brook, NY

Born with approximately 22 birth defects; Dr. Bertrand Schwartz, Brooklyn, NY; Dr. Oscar Schwartz; Dr. Benjamin, Maimonides Hospital, NY; Community Hospital, Brooklyn, NY

Michael Francis Ryan (son), 73 University Heights Drive, Stony Brook, NY

Born with diffuse brain atrophy, University Hospital, Stony Brook, NY

PLAINTIFF'S

SISTERS: Patricia Ann Stransky, South Mallard, NY

One child, no complications, she is currently pregnant

Deidre Stransky, Seldon, NY No children

PLAINTIFF'S

PARENTS: Michael Francis Ryan, Kings Park, NY; Healthy

Victoria Ryan, Kings Park, NY;
Hip replacement, osteoporosis, Roger Dee, M.D., Stony Brook, NY Sox miscarriages, each in the sixth month of pregnancy, RH factor, Dr. Joseph E. Hall, Brooklyn, NY

PATERNAL GRANDPARENTS: Michael Francis Ryan, Died 1929, stroke, Ireland.

Mary Ellen Ryan, Died 1940, stroke, Ireland.

Plaintiff does not recall doctors or the respective dates of death.

MATERNAL GRANDPARENTS: William Molloy, Died Approx. 1940-1941, lung cancer, Brooklyn, NY

Isabelle Molloy, Died approx. 1977-1976, natural causes, Brooklyn, NY

IV. VETERAN'S MEDICAL HISTORY

9. State:

- a) the date of your birth;
 - b) the name and address of the hospital or other facility where you were born, and the name and address of each attending physician or other medical practitioner; and
 - c) each birth defect that you had and each medical complication connected with your birth (e.g., premature birth, breech birth, jaundice, fetal alcoholism), and each medical complication or health problem that you mother had in connection with her pregnancy of your birth (e.g., toxemia, long period of labor).
- a) 7/25/45
 - b) Brooklyn Hospital, Brooklyn, NY Dr. Joseph E. Hall, Dr. Thomas Lamb (believed to be deceased)
 - c) None

10. Identify each injury, illness, disability or other physical or mental condition which you have ever had, whether temporary or permanent, and state separately as to each:

- a) each medical practitioner and/or medical institution seen or visited by you for the purposes of consultation, diagnosis, prognosis, x-rays, treatment or other care, specifying the dates of all hospitalizations;
- b) the diagnosis or prognosis made by each medical practitioner and medical institution; and
- c) the nature and extent of the care and treatment received in each medical institution and from each medical practitioner.

Before 1966: Tonsils removed, broken nose, 1966-67: plaintiff was admitted to the 91st EVAC Hospital at Long Binh. for upper respiratory distress (difficulty breathing); fatigue, severe weight loss, migraine headaches, skin rash in groin, neck and facial areas.

12820

Plaintiff was hospitalized 10 days for the above-listed symptoms in the 91st EVAC hospital in Long Binh and given penicillin and bedrest.

From approx. 1966 to 1971, with periods of exacerbation and remission, plaintiff suffered from a severe skin rash which left large scars, later diagnosed as chloracne, Dr. Susan Baum, N.J.

1967 - Migraine headaches, hearing loss and nervous condition. VA Offices, Seventh Ave., NY. Awarded 10% disability for nervous condition, 10% disability for hearing loss.

Migraine headaches - seeing Dr. Robert Dinapoli since Approximately 1983. Prescribed periactin and recently prescribed Tylenol with codeine.

11. With respect to each injury, illness, disability, or other physical or mental condition identified in response to Interrogatory 10, identify each such condition that you claim or believe was caused by or arose out of exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin or some combination thereof, and state separately as to each:

a) a description of each symptom;

c) the date and manner in which each such symptom first manifested itself or was made known to you; and

11a) Rapid weight loss
Migrain headaches
Inability to breathe - upper respiratory difficulties
Chloracne
Nervous condition
1966

12. Identify each drug or medication ever used or taken by you, including, but not limited to, illegal, recreational and over-the-counter drugs, and for each drug or medication, set forth the following with respect to each:

a) the brand name, generic name, or "street name" of the drug;

b) the date of use;

12821

- c) the amount used during each period of use;
- d) the name and address of the physician, if any, who prescribed the drug;
- e) a description of reasons for your use of the drug; and
- f) whether you have ever received any medical treatment or counseling in connection with your use of such drugs.

Plaintiff was prescribed antibiotics for removal of his tonsils. He cannot recall the exact antibiotics or doctors. Plaintiff was prescribed percordan for a root canal; he does not recall the doctor.

"Catodot" - Plaintiff does not recall prescribing doctor

"Periactin" - Dr. Robert Dinapoli, Port Jeferson Station, NY in about 1983 for plaintiffs migraine headaches

Tylenol codeine - Dr. Robert Dinapoli prescribed tylenol codeine within the past few weeks to be taken as well as the periactin for the plaintiff's migraine headaches.

f) None

13. Identify each skin condition that you have ever had, and with respect to each such condition:

- a) state the dates during which you had that condtion;
- b) describe any diagnosis or medical treatment you received for the condition, and state:
 - i) the name and address of the person rendering the diagnosis or treatment;
 - ii) the name and address of the medical institution(s) at which you were diagnosed or treated;
 - iii) the dates of the diagnosis or treatment;
 - iv) and the effect of the treatment.

Plaintiff first suffered from a severe rash in the groin,

12822

neck and facial area in 1966. this same skin rash persisted until at least 1971, leaving very large, deep scars.

Plaintiff's skin condition was believed to be jungle rot in 1966-1967. This condition was later diagnosed in 1983 as chloracne by Dr. Susan Baum, NJ.

Plaintiff was not treated by a physician for this skin condition.

14. If you have ever smoked cigarettes or otherwise used a tobacco product:

- a) identify each type of product (e.g., cigars, cigarettes, chewing tobacco);
- b) identify the time period during which you used that tobacco product;
- c) identify the amount used on a daily basis (e.g., packs of cigarettes/day); and
- d) state whether any physician or other health care professional has ever advised you to stop or reduce your use of cigarettes or other tobacco products, and, if so, state the name and address of the physician or other health care professional and the date of the advice.

Cigarettes - 1-1/2 pack/day since 1965, with the exception of approximately 5 years during which plaintiff quit on his own accord.

Plaintiff was never advised to quit.

15. If you have ever consumed or drunk alcohol, state separately with respect to each type of alcohol (e.g., liquor, beer, wine, etc.) consumed:

- a) at what age consumption began;
- b) the amount and frequency of such consumption;
- c) if consumption ceased at any time, the reasons for such cessation and the reasons for any resumption; and

12823

d) whether you were ever hospitalized or institutionalized for alcohol use, or advised to limit or stop alcohol use, and, if so, state the name(s) of each such hospital or institution or medical practitioner who treated or advised you.

a) Approximately age 18.

b) Plaintiff drank for approximately two years and consumed during this period one to two six-packs of beer per week.

c) Plaintiff quit drinking in 1966.
Plaintiff cannot drink now.

d) No

16. If any insecticides (e.g., Chlordane, Lindane, DDT), rodenticides (e.g., rat poison), insect repellents (e.g., DEET) or other pest control compounds were ever used by you or others around your living or working quarters, state as to each:

a) the brand name or generic name of the chemical;

b) a description of the chemical (e.g., powder, liquid, color, smell);

c) a description of the container for the chemical (e.g., shape, color, markings)

d) the date of use;

e) the method of application;

f) the place it was applied;

g) the frequency of application; and

h) whether you experienced any adverse reaction to the compound and, if so, describe the reaction.

Plaintiff never used any insecticides.

VI. MILITARY SERVICE

17. State with respect to your military service:

12824

- a) the branch of the armed services in which you served;
 - b) the inclusive dates of your service;
 - c) the inclusive dates of service in or near Vietnam;
 - d) the name of each military unit to which you were assigned while serving in or near Vietnam; and the dates during which you were assigned to each such units;
 - e) the name and location of each place or area at which you were physically present in or near Vietnam and the dates during which you were present at each such place or area;
 - f) your immediate superior officer's name and rank while in or near Vietnam; and
 - g) the type of discharge you received.
-
- a) U.S. Army
 - b) 11/65 - 8/67
 - c) Vietnam - 8/66 - 8/67
 - d) 11th Armored Cavalry Regiment
3rd Squadron, Headquarters Co.
Long Binh, Xuan Loc
1st Sergeant Snipes
Honorable Discharge (good conduct medal)
 - e) Long Binh, Xuan Loc
 - f) Plaintiff can only recall first Sergeant Stripes
 - g) Honorable

18. With respect to each illness, injury, wound or other medical or psychological condition experienced by you during your military service in or near Vietnam, state:

- a) the date of your illness, injury, wound, or other medical or psychological condition;
- b) a description of the illness, injury, wound, or other medical or psychological condition, including a description of all symptoms;
- c) the cause of the illness, injury, wound, or other medical or psychological condition;
- d) the name and rank of the person to whom you first

12825

reported the illness, injury, wound, or other medical or psychological condition (if anyone):

- e) the date that you first reported the illness, injury, wound, or other psychological or medical condition;
- f) the name, rank and location of each physician or other health care professional who treated your illness, injury, wound, or other psychological or medical condition, including the dates and places of treatment, and a description of the treatment you received; and
- g) the name and location of each hospital or other health care facility which treated your psychological or medical condition, the dates of treatment, and a description of the treatment that you received.

In 1966 Plaintiff was hospitalized in the 91st EVAC hospital in Long Binh for 10 days for upper respiratory distress, severe weight loss, fatigue, migraine headaches and a skin rash.

Plaintiff does not recall the name of the person he first reported his medical conditions to. Plaintiff reported the above-listed problems in 1966.

Plaintiff has been treated for migraine headaches by Dr. Robert Dinapoli, Fort Jefferson Station, NY.

19. Describe any other medication taken by you during your military service (e.g., Dapsone, Chloroquine, Primaquine, Binocet), stating as to each:

- a) the brand name or generic name of the medication;
- b) the form of the medication (e.g., pill, capsule, injection, etc.);
- c) the color, shape, and size of any pill or capsule taken;
- d) the reasons for taking the medication;
- e) the name and rank of the person(s) who gave you the medication;
- f) the dates you took the medication;
- g) the amount of the medication taken (e.g., pills/day); and

12826

h) whether you experienced any adverse reaction to the medication and, if so, describe the reaction.

Plaintiff did not take any drugs while in Vietnam, including malaria pills.

20. State whether you ever received any training, instructions, warnings or health and safety information concerning herbicides during your military service, and identify as to each:

- a) the dates you received the foregoing;
- b) the location where received;
- c) the name and rank of the person(s) from who it was received;
- d) the substance of any oral information received; and
- e) the title, date, author or source, and content of any written material received.

None.

21. Set forth with respect to each time you claim to have been exposed to herbicides:

- a) the date of the alleged herbicide exposure;
- b) the time of day of the alleged exposure;
- c) the closest geographical or political reference point (e.g., hill, town, landing zone) to the place you believe you were exposed;
- d) a description of the terrain at the place of alleged exposure;
- e) a description of how the herbicide was being applied (e.g., helicopter, aircraft, hand, etc.);
- f) a description of your activities at the time of alleged exposure;
- g) the manner you believe your body was physically

12827

exposed to the herbicide (e.g., skin contact, inhalation, ingestion or swallowing), and, if you believe you were exposed by contact on your skin, identify the areas of skin that came in contact with the herbicide;

- h) the name and rank of other people present at the time of alleged exposure; and
- i) with respect to any deceased proposed representative plaintiff, state how such plaintiff will demonstrate any of the information requested in subparts a) through h) of this interrogatory, identifying any persons with such information who will testify as to such plaintiff's exposure to herbicides.

To the best of plaintiff's recollection he believes that he was physically exposed to herbicides through skin contact, inhalation, ingestion and swallowing. Plaintiff believes he was exposed to herbicides in Long Binh and additional areas which he cannot recall at this time.

ONLY IF YOU CONTEND THAT ANY OF YOUR CHILDREN HAS A BIRTH DEFECT CAUSED BY YOUR EXPOSURE TO AGENT ORANGE, 2,4-D, 2,4,5-T, DIOXIN OR SOME COMBINATION THEREOF, ANSWER THE FOLLOWING INTERROGATORIES.

- 22. Identify the children that you have fathered, including name, date and place of birth of each such child, and the name and address of each child's mother.

Kerry Ann Ryan
1/24/71
Community Hospital
Brooklyn, New York

Michael Francis Ryan
6/26/83
University Hospital
Stony Brook, NY

Mother - Maureen Ryan
73 University Heights Drive
Stony Brook, New York

- 23. Identify each of your children whom you contend has birth or genetic defects allegedly caused by your exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin or some other

12828

combination thereof, and identify:

- a) the birth or genetic defects which you contend were caused by your exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin, or some combination thereof, and state the basis for your belief, including opinions of any physicians;
- b) any other birth or genetic defects which the child has;
- c) each medical practitioner and medical institution seen or visited by the child or in which the child was confined for purposes of consultation, diagnosis, prognosis, treatment or other care, and the dates, purposes and results of such consultation, diagnosis, prognosis, treatment or other care; and
- d) the identity of the mother of each child.

- a) Kerry was born with approximately 22 birth defects. These include:

- 4 deformed fingers on her right hand
- missing thumb on right hand
- 2/3 of ulna bone missing
- left hand is missing muscles and nerves
- hyperplasia of sacrum
- neurogenic bladder
- duodinal atresia
- hole in heart
- occult spinobifida
- double reproductive organs (i.e. 2 uterus', 2 cervixes, 2 vaginas, undetermined amount of ovaries)
- missing anus
- pyloric stenosis

- b) due to her operations, Kerry suffered brain damage, blindness, scoliosis, "hyphosis", speech, hearing and intellectual impediments. She is also permanently confined to a wheelchair.

- c) Maureen Ann Ryan

24. Identify each and every child of each mother identified in response to Interrogatory 22 and state as to each:

- a) the child's name, address, date of birth and place of birth, including the name and address of the hospital or other place where delivery occurred; and

12829

- b) the physician(s) who treated the mother during pregnancy and/or delivered the child.

Kerry Ann Ryan, 73 University Heights Drive, Stony Brook, NY, 1/24/71. Community Hospital, Brooklyn, NY. Dr. Wilton Fritz, Brooklyn NY.

Michael Francis Ryan, 73 University Heights Drive, Stony Brook, NY. University Hospital, Stony Brook, NY. Dr. Baker

25. With respect to each mother identified in response to Interrogatory 23(d), identify her brothers, sisters, parents, grandparents, aunts, uncles, cousins, nieces, nephews, and grandchildren, and:

- a) if any of them are deceased, state his or her age at the time of death and the time, place and cause of death;
- b) identify each illness, disease, disability, or medical condition ever had by each during his or her lifetime which required professional medical attention;
- c) identify each medical practitioner and medical institution that treated them, and set forth the diagnosis of each, stating the same as to each relative.

Maureen Ann Ryan

PARENTS: Daniel O'Connor, Died 1961, Pancreatic cancer, Ireland and New York.

Helen O'Connor, Still living, Bronx NY.

PATERNAL GRANDPARENTS: John O'Connor, Died in 1970's, natural causes.

Josephine O'Connor, Died in 1970's, natural causes.

BROTHERS AND SISTERS:

Helen Calahan, still living, healthy to the best of plaintiff's knowledge. 3 children, no miscarriages, Howell NJ.

Carol Gallagher, still living, 4 children, no

12830

miscarriages, Lakewood, NJ.

Lorraine Reilly, born with a turned foot (NY Orthopedic Hospital), 3 children, one miscarriage, New Rochelle, NY.

Bernadette Miesner, 2 children, no miscarriages, Bardonia, NY.

Gayle Stapleton, 2 children, currently pregnant, no miscarriages, Bardonia, NY.

Daniel O'Connor, no children, lives in Virginia.

John O'Connor, unmarried, no children, Bronx, NY.

Brian O'Connor, unmarried, no children, Bronx, NY.

26. With respect to each pregnancy, for each mother identified in response to Interrogatory 23(d), state:

- a) whether the mother was exposed to or contracted any viral or bacterial infection or disease during or shortly before the pregnancy (e.g., German measles, flu, etc.) and if so, identify the infection or illness, the period during which it occurred, and any medication or treatment given therefor;
- b) whether the mother incurred any injury during pregnancy, and, if so, describe the injury, the treatment received, any examining or treating physicians, and any institutions at which treatment occurred;
- c) whether the mother or father ever had any venereal disease, and, if so, describe the disease, the treatment received, any examining or treating physicians, and any institutions at which treatment occurred;
- d) whether diagnostic procedures, including, but not limited to, abdominal x-rays or pelvimetry, amniocentesis, and/or ultrasound were used, and, if so, set forth the date of the procedure, describe the procedure, the examining or treating physician and any institutions at which the procedure occurred; and
- e) whether any medical problems or complications arose during pregnancy (e.g., toxemia), and, if so, describe the problems or complications and the treatment received.

12931

Plaintiff's wife Maureen had a normal pregnancy while carrying Kerry.

Neither Plaintiff or Plaintiff's wife with no complications ever had venereal disease.

27. Answer Interrogatories 6, 7, 12, 14, 15, and 16 with respect to each mother identified in response to Interrogatory 23(d).

Maureen worked for the following:

A & P Food Store, 1962-1964, New Rochelle

Service Bureau Corp., 1965-1971/72, NY NY

Kings Park Hospital, Kings Park, NY

In 1982 Maureen Ryan suffered a severe asthmatic attack. She has been hospitalized seven or eight times at University Hospital, Stony Brook, NY for her respiratory condition. She is now on disability for a severe asthmatic condition diagnosed by Dr. Michael Sampson, University Hospital, Stony Brook.

To the best of Plaintiff's knowledge, Maureen Ryan has taken the following medications:

Allupent - 2 sprays, 4 times a day

Theodur - 2000 mg/day

Steroids

Bennet positive pressure breathing machine 4 times a day.

Her treating physician is Michael Sampson, University Hospital, Stony Brook, NY

Maureen Ryan does not smoke and has drunk approximately five drinks in her lifetime.

Plaintiff's wife has been exposed to insecticides beginning approximately in 1979 or 1980 at the Kings Park Hospital. The insecticide was used by the hospital. She does not know the brand name but recalls it being used approximately once a month in the hospital.

28. For each mother identified in response to Interrogatory 22 identify each and every pregnancy not resulting in a live birth, and state with respect to each:

12832

- a) whether there was a miscarriage and/or spontaneous abortion, and, if so, state the date and describe the reason for the miscarriage and/or spontaneous abortion and identify any examining or treating physicians, and any institutions at which it occurred;
 - b) if the response to a) above is affirmative, state whether you contend that such miscarriage and spontaneous abortion was caused by your exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin, or some combination thereof;
 - c) whether there was a voluntary or therapeutic abortion, and, if so, state the date and describe the reason for the voluntary or therapeutic abortion, and identify any examining or treating physicians, and any institutions at which the abortion occurred; and
 - d) if the response to c) above is affirmative, state whether you contend that such voluntary or therapeutic abortion was caused or necessitated by your exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin, or some combination thereof.
- a) Plaintiff had one miscarriage before the birth of Kerry in 1971.

Dated: Carle Place, New York
January 14, 1984

PLAINTIFFS' MANAGEMENT COMMITTEE

By: 

DAVID J. DEAN, ESQ.
DEAN, FALANGA & ROSE, ESC
One Old Country Road
Carle Place, New York 115
(516) 248-9888

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----x
In re

"AGENT ORANGE" :

Product Liability Litigation : MDL No. 381

-----x

ANSWERS OF
DANNY LEE FORD
TO
DEFENDANT'S INTERROGATORIES TO
PROPOSED REPRESENTATIVE PLAINTIFFS..

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Philadelphia, PA 19102

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----X

In re

"AGENT ORANGE"

MDL No. 381

Product Liability Litigation.

-----X

I. GENERAL

1. State your name, social security number, military service number, and each address at which you have ever lived (excluding time during active military service), starting with your current address, and give the dates you lived at each address.

Danny Lee Ford 365-52-1794 US 54976275 3507 St. Anthony Rd. Temperance, MI. 48412 1974-Present; 6507 Secor Rd. Toledo, OH. 43613 1973-1974; 13478 South County Line Hwy. Ottawa Lake, MI 49267 1953-73; 5024 Trellis Way, Sylvania, OH 1948-1953

2. Identify each educational institution you attended, the dates of your attendance, and describe any physical or mental examination you received at or in connection with your attendance at each institution, stating with respect to each such examination.

- a) the date of the examination;
- b) the hospital or institution where such examination was given; and
- c) the name and address of the person conducting the examination.

Whiteford Agricultural High School, a. b. c.: none

3. Interrogatory deleted.

4. If you have ever made a claim for benefits for any medical condition (including worker's compensation, veteran's benefits, state or federal disability or

12835

insurance or union or third party medical plans) state with respect to each such claim:

- a) the type of claim (worker's compensation, veteran's benefits, etc.);
- b) the date of the claim;
- c) the claim number or other identification of the claim
- d) the entity to whom the claim was made, including the name and address;
- e) the medical condition for which the claim was made; and
- f) the disposition of claim.

Veterans Benefits - malaria - 10% disability, State of Ohio
Bureau of Workmans Compensation

Back injury - Feb. 1973, claim allowed

Carbon monoxide poisoning, approx, 1975 - claim allowed
Semi-truck accident - November 5, 1979 - laceration left knee,
abdominal contusions - claim allowed.

May 1983 - resection of small bowel - claim allowed - AMC Jeep
Corporation insurance carrier Aetna

1974 - removal of plate and screws right leg

1976 - Flower Hospital crushed big toe

1980 - Toledo Hospital biopsy and surgery

1980 - chemotherapy, radiation therapy

1981 - Toledo Hospital stress fracture

April, 1981 - biopsy right leg

January, 1982 - bone graft right leg

May, 1983 - surgery right leg, Flower Hospital

12836

Summer, 1983 - chemotherapy - Drs. Horvath and Schafer

Radiation - Flower Hospital - fall of 1983 - Devilbiss Company
Insurance carrier unknown at this time.

Tonsillectomy - date unknown at this time

Fractured right femur 1966

1967 - removed rod - right femur

Bankers Life, Des Moines, Iowa - Agent - Gary Barricklow - Bell
Building, Toledo, OH

1970 - compound fracture right tibia

1972 - Appendectomy

5. If you have ever filed or otherwise commenced a legal
action in connection with any medical condition (other
than this action) state as to each such action:

- a) the date that action was filed or otherwise
commenced, the court or administrative body,
the full title of the action, the index or other
identifying number, and the identity of all parties
to the action;
- b) a description of the medical condition in connection
with which the action was filed, and how you believe
that medical condition occurred;
- c) a description of the outcome of the action, or of
its present status if it is still pending; and
- d) the dates and amounts of any payments, either as a
result of a judgment or settlement, which you have
received or which you are scheduled to receive.

Out of court settlement in connection with motorcycle/auto
accident in 1970 - \$15,000 awarded in 1972.

Workers compensation suit - Danny Ford vs. Jeep Corporation
1982 No. 81-2872 - lost case involving semi-truck accident in
Chatham, Ontario Canada.

12837

II. EMPLOYMENT HISTORY

6. Identify and describe each job you have held, whether employed by others or self-employed, and state as to each:

- a) the name and address of your employer, the address of your workplace, the nature of the business and your job title;
- b) your duties and responsibilities;
- c) the date the job began and ended and the reasons for termination of the job; and
- d) the date and place of each physical and mental examination that you underwent in connection with such job, identifying the name and address of each medical practitioner conducting the examination and the name and address of any medical institution at which such examinations was conducted.

Stubnitz, division of Hoover Ball Bearing 1966-1967 Adrain, MI. Welder, went into service.

Jo-Jo's Pizzaria, Monroe St., Toledo, Ohio, 1966 - deliveryman - went to work at Stibnitz.

Aamco Transmission Monroe St., Toledo, Ohio - transmission installer - doesn't remember when.

Landmark farm bureau - Berkey, Ohio - deliveryman - doesn't remember dates or pay.

Eddy's gas and oil Sylvania-Petersburg Rd. Sylvania, Ohio - 43560 truck driver 1969-1973 \$135. Weekly went to AMC Jeep 12638 AMC Jeep Corporation, press operator, inspector, semi-truck driver - \$615.00 weekly - physical January, 1973 - Dr. Gerber, 940 N. Cove Blvd. Toledo, Ohio

accident;

- b) the dates of the injury, medical condition or accident;
- c) the treatment received, including the treating physician's name and address and all hospitalizations, operations and medication received.

See answer to question #4.

Dr. Robert Cooke Hollsmd- Sylvania Rd. Sylvania, OH 43560
Parafon forte

Dr. Randall Finken, Sunforest Court, Toledo, Ohio 43612

St. Joseph's Hospital, Chatham, Ontario, Canada

Dr. Ernst Sternfeld, Secor Rd., Toledo, Ohio 43613

Dr. Ernst Sternfeld Flower Hospital Harroun Rd. Syslania,
OH 43560

III. FAMILY MEDICAL HISTORY

- B. State the names and addresses of your spouse, children, brothers, sisters, parents, grandparents, aunts, uncles, cousins, nieces, nephews and grandchildren, and with respect to each:

- a) if any of them are deceased, state his or her age at the time of death and the time, place and cause of death;
- b) identify each illness, disease, disability, or medical condition ever had by each during his or her lifetime which required professional medical attention.
- c) identify any birth or genetic defects or miscarriages which they had; and
- d) with respect to each relative, identify each medical practitioner and medical institution that treated them, and set forth the diagnosis.

12839

Wife Christina Margaret Crawfis Ford 3507 St. Anthony Rd.

Temperance, MI 48183. Mitral valve insufficiency - Dr. Thomas
Abound Sector Rd., Toledo OH. Breast tumor benign - Dr.
Abraham Steinberg, Phillips Ave., Toledo, Ohio.
Father - Raymond Ford, 13478 South County Line Hwy., Ottawa
Lake, MI 49267 - None

Mother - Rose Ford, 13478 South County Line Hwy., Ottawa Lake,
MI - back surgery - Dr. Robt Cooke - hysterectomy Dr. Wm. Mewborn

Brother - Terry Ford, 6507 Sector Rd., Toledo, OH 43613 - Cut on
hand - Flower Hospital, Tonsillectomy - Dr. Wm. Mewborn

Brother - Randy Ford, Rt#2 Ottawa Lake, MI 49267 - tonsillectomy
Dr. Wm. Mewborn

Aunt Mildred Barricklow Woodrow St. Sylvania, OH 43560
hysterectomy Dr. Randal Finken Sunforest Ct. Toledo, OH 43612

Aunt Buelah Southard died January 26, 1964 at home cancer

Uncle Morgan Ford Tecumseh, MI 300 outer Dr.

Uncle Garland Ford 2969 Eastbrook Toledo, OH none

Uncle Arthur Ford deceased June 1971 heart attack at home 61
yrs.

Grandfather Lyman Ford deceased 1953 stroke at home 74 yrs.

Grandmother Susie Ford deceased 5-45 heart attack at home 60
years

Grandfather Earl Capron deceased 11-21-50 car accident 61
years

Grandmother Esther Capron 5319 Secor Rd. Toledo, OH. None

Aunt Helen Price 5319 Secor Rd. Toledo, OH. 43623 abdominal
adhesions Toledo Hospital - doesn't recall date

Aunt Jerry Hoyt Rt#2 Ottawa Lake, MI. 49267- Appendectomy
could not recall Dr.'s name

Uncle Earl Capron 13460 South County Line Hwy, Ottawa Lake,
MI. 49267

Uncle Ron Capron 4814 Bowser Dr., Toledo, OH. 32613

Niece Mandy Ford Rt#2 Ottawa Lake, MI. none

12840

Nephew Andy Ford Rt#2 Ottawa Lake, MI.49267 none

IV. VETERAN'S MEDICAL HISTORY

9. State:

- a) the date of your birth;
- b) the name and address of the hospital or other facility where you were born, and the name and address of each attending physician or other medical practitioner; and
- c) each birth defect that you had and each medical complication connected with your birth (e.g., premature birth, breech birth, jaundice, fetal alcoholism), and each medical complication or health problem that you mother had in connection with her pregnancy of your birth (e.g., toxemia, long period of labor).

8-23-48 Toledo Hospital N. Cove Blvd. Toledo, OH Dr. Wm. Mewborn Sunforest Ct. Toledo, OH 43612

c. none

10. Identify each injury, illness, disability or other physical or mental condition which you have ever had, whether temporary or permanent, and state separately as to each:

- a) each medical practitioner and/or medical institution seen or visited by you for the purposes of consultation, diagnosis, prognosis, x-rays, treatment or other care, specifying the dates of all hospitalizations;
- b) the diagnosis or prognosis made by each medical practitioner and medical institution; and
- c) the nature and extent of the care and treatment received in each medical institution and from each medical practitioner.

Tonsilectomy Dr. Wm. Mewborn

Fractured right Femur February 1966 Dr. Robt Cooke Toledo

12841

Hospital fourteen days open reduction with Schneider rod
crutches-one year-temporary

Toledo Hospital Dr. Robert Cooke removed rod- received
physical therapy-Toledo clinic temporary

1970 Toledo Hospital Dr. Robert Cooke compound fracture of
right tibia- 14 days hospitalization, fracture plated
temporary

1972 appendectomy Dr. Wm. Mewborn-ten days-Toledo Hospital
temporary

1974 removal of plate from right tibia- temporary- Toledo
Hospital-approximate 3 day-stay Dr. Robert Cooke

1974 Dr. Randal Finken - high blood pressure - received
medication

1976 Flower Hospital- Dr. Fred Hawken- crushed big toe-
observation and x-rays

November 5, 1979 Chatham, Ontario St. Joseph's Hospital-
observation and suturing of left knee laceration

Transferred by ambulance to Flower Hospital - Dr. Ernst
Sternfeld - November 7, 1979-observation-released November 10,
1979

Flower Hospital-Dr. Ernst Sternfeld-Nov. 12, 1979-possible
bowel obstruction due to truck accident-10 day stay

Office visit-Dr. Robert Cooke-pain lower right leg- x-rays
both legs-November 27, 1979-referred to Dr. Paul Clark

Office visit Dr. Paul Clark-possible soft tissue infection-
elevation of leg, warm soaks-keflex 500 mg

December 1979 Toledo Hospital-outpatient laminograms

Dr. Paul Clark D.V. possible phlebitis, sigvaris stockings

Toledo Hospital tomographs, xero radiographs

January 1980 Gallium scan, possible abscess

Referred back to Robert Cooke by Dr. Paul Cooke

Outpatient biopsy- Toledo Hospital-February 22, 1980- Dr.
Robert Cooke-Malignant mass in right leg

Admitted to Toledo Hospital February 22, 1980 for further

12842

surgery Dr. Robert Cooke Feb. 27, 1980 radical resection of right leg -oncologist called in-regimine of chemotherapy started

Six weeks chemotherapy-Dr.s Horvath and Schafer's office

Radiation therapy-3 treatments-Flower Hospital

Dr. Stanley Zupnick, Psychologist, mental adjustment to cancer

Stress fracture right leg-Toledo Hospital-x-rays

Dr. Stephen Kiechel-casted leg

Continued chemotherapy Dr.s Schafer and Horvath

Flower Hospital-April 1981-biopsy right leg, negative, Dr. Stephen Kiechel

Finished chemotherapy August 1981

Flower Hospital Dr. S. Kiechel bone graft Jan. 1982

Follow up office visits-Dr.s Horvath and Schafer

Chest x-ray Flower Hospital

Flower Hospital-Dr. S. Kiechel-May 16, 1983-mass in lower thigh, extensive surgery on thigh, resection of retroperitoneal area, vein graft, tumors in leg and abdomen, resection small bowel due to truck accident in 1979

Chemotherapy, Dr.s Horvath and Schafer-3 months

11. With respect to each injury, illness, disability, or other physical or mental condition identified in response to Interrogatory 10, identify each such condition that you claim or believe was caused by or arose out of exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin or some combination thereof, and state separately as to each:

- a) a description of each symptom;
- c) the date and manner in which each such symptom first manifested itself or was made known to you; and

Intolerance to alcohol
1974-1975

Rash in thighs and buttocks
1969

Joint pain
1974-1975

Memory loss
1976

Headaches
1969-1970

12. Identify each drug or medication ever used or taken by you, including, but not limited to, illegal, recreational and over-the-counter drugs, and for each drug or medication, set forth the following with respect to each:

- a) the brand name, generic name, or "street name" of the drug;
- b) the date of use;
- c) the amount used during each period of use;
- d) the name and address of the physician, if any, who prescribed the drug;
- e) a description of reasons for your use of the drug; and
- f) whether you have ever received any medical treatment or counselling in connection with your use of such drugs.

Aspirin, periodically through present, for headaches and joint pain

HCTZ 2 times daily prescribed, Dr. Thomas Abound Sector Rd. Toledo, OH 43613, hypertension

Keflex 500 mg Dr. Paul Clark 3930 Sunforest Ct. Toledo, OH 43612-possible soft tissue infection

Tylenol 3 Dr. Stephen Kiechel Secor Rd. Toledo, OH 43613

Parafon forte Dr. Robert Cooke Holland- Sylvania, Sylvania, OH 43560-back injury

Anti-malarial drug prescribed in Vietnam

Marijuana occasionally in Vietnam

13. Identify each skin condition that you have ever had, and with respect to each such condition:

- a) state the dates during which you had that condition;
- b) describe any diagnosis or medical treatment you received for the condition, and state:
 - i) the name and address of the person rendering the diagnosis or treatment;
 - ii) the name and address of the medical institution(s) at which you were diagnosed or treated;
 - iii) the dates of the diagnosis or treatment;
 - iv) and the effect of the treatment.

Rash on thighs and buttocks- 1969-present never seen by physician

14. If you have ever smoked cigarettes or otherwise used a tobacco product:

- a) identify each type of product (e.g., cigars, cigarettes, chewing tobacco);
- b) identify the time period during which you used that tobacco product;
- c) identify the amount used on a daily basis (e.g., packs of cigarettes/day); and
- d) state whether any physician or other health care professional has ever advised you to stop or reduce your use of cigarettes or other tobacco products, and, if so, state the name and address of the physician or other health care professional and the date of the advice.

Cigarettes less than one pack daily for five years- quit on own accord

15. If you have ever consumed or drunk alcohol, state separately with respect to each type of alcohol (e.g., liquor, beer, wine, etc.) consumed:

- a) at what age consumption began;
- b) the amount and frequency of such consumption;
- c) if consumption ceased at any time, the reasons for such cessation and the reasons for any resumption; and
- d) whether you were ever hospitalized or institutionalized for alcohol use, or advised to limit or stop alcohol use, and, if so, state the name(s) of each such hospital or institution or medical practitioner who treated or advised you.

Beer less than 3 per week. Distilled spirits less than 3 per week. Stopped due to digestive disturbances

16. If any insecticides (e.g., Chlordane, Lindane, DDT), rodenticides (e.g., rat poison), insect repellents (e.g., DEET) or other pest control compounds were ever used by you or others around your living or working quarters, state as to each:

- a) the brand name or generic name of the chemical;
- b) a description of the chemical (e.g., powder, liquid, color, smell);
- c) a description of the container for the chemical (e.g., shape, color, markings)
- d) the date of use;
- e) the method of application;
- f) the place it was applied;
- g) the frequency of application; and
- h) whether you experienced any adverse reaction to the compound and, if so, describe the reaction.

None

12846

VI. MILITARY SERVICE

17. State with respect to your military service:

- a) the branch of the armed services in which you served;
- b) the inclusive dates of your service;
- c) the inclusive dates of service in or near Vietnam;
- d) the name of each military unit to which you were assigned while serving in or near Vietnam; and the dates during which you were assigned to each such units;
- e) the name and location of each place or area at which you were physically present in or near Vietnam and the dates during which you were present at each such place or area;
- f) your immediate superior officer's name and rank while in or near Vietnam; and
- g) the type of discharge you received.

Army

1-15-68 - 9-18-67

Sept. 1968 - Sept. 1969

Charlie Battery First Battalion 92nd Artillery

Sept. 1968 Cameron Bay, Paeiku, Kontum, Bambi Tuit, Dak
to Landing Zone Marylou, Firebase 13, Firebase
Blackhawk, can't remember dates

Capt. Farmer

Honorable

18. With respect to each illness, injury, wound or other medical or psychological condition experienced by you during your military service in or near Vietnam, state:

- a) the date of your illness, injury, wound, or other medical or psychological condition;
- b) a description of the illness, injury, wound, or other medical or psychological condition, including a description of all symptoms;
- c) the cause of the illness, injury, wound, or other

12847

medical or psychological condition;

- d) the name and rank of the person to whom you first reported the illness, injury, wound, or other medical or psychological condition (if anyone):
- e) the date that you first reported the illness, injury, wound, or other psychological or medical condition;
- f) the name, rank and location of each physician or other health care professional who treated your illness, injury, wound, or other psychological or medical condition, including the dates and places of treatment, and a description of the treatment you received; and
- g) the name and location of each hospital or other health care facility which treated your psychological or medical condition, the dates of treatment, and a description of the treatment that you received.

Schrapnel right lower leg. L.2. Marylou, don't recall date treated by army medical station on perimeter

Malaria contracted in Kontum, sent to aide station and then to Cameron Bay and hospitalized. Don't recall date.

19. Describe any other medication taken by you during your military service (e.g., Dapsone, Chloroquine, Primaquine, Binocet), stating as to each:

- a) the brand name or generic name of the medication;
- b) the form of the medication (e.g., pill, capsule, injection, etc.);
- c) the color, shape, and size of any pill or capsule taken;
- d) the reasons for taking the medication;
- e) the name and rank of the person(s) who gave you the medication;
- f) the dates you took the medication;
- g) the amount of the medication taken (e.g., pills/day); and
- h) whether you experienced any adverse reaction to the medication and, if so, describe the reaction.

Some sort of anti-malarial drug. Don't recall type. Took medication for entire stay. Did not have adverse reaction.

20. State whether you ever received any training, instructions, warnings or health and safety information concerning herbicides during your military service, and identify as to each:

- a) the dates you received the foregoing;
- b) the location where received;
- c) the name and rank of the person(s) from who it was received;
- d) the substance of any oral information received; and
- e) the title, date, author or source, and content of any written material received.

No

21. Set forth with respect to each time you claim to have been exposed to herbicides:

- a) the date of the alleged herbicide exposure;
- b) the time of day of the alleged exposure;
- c) the closest geographical or political reference point (e.g., hill, town, landing zone) to the place you believe you were exposed;
- d) a description of the terrain at the place of alleged exposure;
- e) a description of how the herbicide was being applied (e.g., helicopter, aircraft, hand, etc.);
- f) a description of your activities at the time of alleged exposure;
- g) the manner you believe your body was physically exposed to the herbicide (e.g., skin contact, inhalation, ingestion or swallowing), and, if you believe you were exposed by contact on your skin, identify the areas of skin that came in contact with the herbicide;
- h) the name and rank of other people present at the

12849

time of alleged exposure; and

- i) with respect to any deceased proposed representative plaintiff, state how such plaintiff will demonstrate any of the information requested in subparts a) through h) of this interrogatory, identifying any persons with such information who will testify as to such plaintiff's exposure to herbicides.

Exposed at various times unit was airlifted into various areas sprayed with defoliant, drank water from rice paddies in areas with dead and dying foliage, chopped down dead and dying foliage, went to bathroom in dead and dying foliage. L.2. Marylou and other areas previously mentioned in Question 17.

Fred Falana, Robert Snodgrass, Sgt. Brown

Worked and often lived in areas sprayed with dead and/or dying foilage.

Dated: Carle Place, New York
January 14, 1984

PLAINTIFFS' MANAGEMENT COMMITTEE

BY: 

DAVID J. DEAN, ESQ.
DEAN, FALANGA & ROSE, ESQS.
One Old Country Road,
Carle Place, New York 11514
(516) 248-9888

12850

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----X
In re

"AGENT ORANGE" :

Product Liability Litigation :

MDL No. 381

-----X
ANSWERS OF
Stephen John Zardis

TO
DEFENDANT'S INTERROGATORIES TO
PROPOSED REPRESENTATIVE PLAINTIFFS

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Philadelphia, PA 19102

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----x
In Re .

"Agent Orange" .

Product Liability Litiagation . MDL No. 381
-----x

I. GENERAL

1. State your name, social security number, military service number, and each address at which you have ever lived (excluding time during active military service), starting with your current address, and give the dates you lived at each address.

Stephen John Zardis, 013-34-8809, RA 11621846.
Addresses:

52 Pitman Road
Marblehead, MA
PRESENT - September, 1981

141 Front Street
Marblehead, MA
February, 1972 - June, 1971

18 Merritt Street
Marblehead, MA
Sept., 1981 - Sept., 1981

35 Baker Street
Malden, MA
June, 1971 - June, 1970

One Crocker Park
Marblehead, MA
Sept., 1980 - Sept., 1979

ACTIVE SERVICE
US Army
June, 1970 - June, 1967

141 Front Street
Marblehead, MA
Sept., 1979 - May, 1976

35 Baker Street
Malden, MA
June, 1967 - 1956

50 Holden Road
Sterling Junction, MA
May, 1976 - May, 1975

Gore Nursing Home
Wollaston, MA
1956 - 1954

Clintwood Village
Bldg. 3, Apt., 5
Clinton, MA
May, 1975 - Feb. 1972

Cook Street
Charlestown, MA
1954 - 1948

2. Identify each educational institution you attended, the dates of your attendance, and describe any physical or mental examination you received at or in connection with your attendance at each institution, stating with respect to each such examination.

- a) the date of the examination;
- b) the hospital or institution where such examination was given; and
- c) the name and address of the person conducting the examination.

Salem State College, Salem Massachusetts
Fall Semester, 1976

Worcester State College, Worcester, Massachusetts
Spring, 1975; Fall, 1974; Spring, 1974; Fall, 1973

Salem State College, Salem, Massachusetts
Spring, 1972; Fall, 1971

Boston College, Chestnut Hill, Massachusetts
Fall, 1965; Spring, 1967

- 4. If you have ever made a claim for benefits for any medical condition (including worker's compensation, veteran's benefits, state or federal disability or insurance or union or third party medical plans) state with respect to each such claim:

- a) the type of claim (worker's compensation, veteran's benefits, etc.);
- b) the date of the claim;
- c) the claim number or other identification of the claim
- d) the entity to whom the claim was made, including the name and address;
- e) the medical condition for which the claim was made; and
- f) the disposition of claim.

A) Veteran's benefits

B) July, 1970; March 7, 1977

C) C-26083311

D) Veteran's Administration Regional Office,
Federal Building, Boston, Massachusetts

12853

- E) July, 1970 -- Injury to jaw as a result of combat in Vietnam and urinary tract problem incurred while in Vietnam.
March 7, 1977 -- compensation for neurological damage.
- F) All claims approved 10 percent jaw, 40 percent urinary tract problem, 100 percent neurological problem.

5. If you have ever filed or otherwise commenced a legal action in connection with any medical condition (other than this action) state as to each such action:

- a) the date that action was filed or otherwise commenced, the court or administrative body, the full title of the action, the index or other identifying number, and the identity of all parties to the action;
- b) a description of the medical condition in connection with which the action was filed, and how you believe that medical condition occurred;
- c) a description of the outcome of the action, or of its present status if it is still pending; and
- d) the dates and amounts of any payments, either as a result of a judgment or settlement, which you have received or which you are scheduled to receive.

Plaintiff has never filed or commenced any other legal action with regard to any medical condition which plaintiff has had other than this lawsuit.

II. EMPLOYMENT HISTORY

6. Identify and describe each job you have held, whether employed by others or self-employed, and state as to each:
- a) the name and address of your employer, the address of your workplace, the nature of the business and your job title;
 - b) your duties and responsibilities;
 - c) the date the job began and ended and the reasons for termination of the job; and
 - d) the date and place of each physical and mental examination that you underwent in connection with such job, identifying the name and address of each medical practitioner conducting the examination and the name and address of any medical institution at which such examinations was conducted.

Commonwealth of Massachusetts, Department of Social Services, 150 Causeway Street, Boston, Massachusetts, Social Worker, March, 1979 through September, 1978. Terminated because of neurological problem. Could not walk to make home visits. Plaintiff did not have any physical or mental examinations performed upon him.

Robert F. Kennedy Action Corps., Assistant Director of Residential Diagnostic Center, Lancaster, Massachusetts. Child Care Worker, September, 1970 through May, 1976. Home for emotionally disturbed children. Plaintiff did not have any physical or mental examinations performed upon him.

Military Service, physical examination at Boston Army Base, Boston, Massachusetts, 1967-1970.

Boston College, Chestnut Hill, Massachusetts, full-time student, 1965-1976.

Revere Knitting Mills, Ferry Street, Malden, Massachusetts, Summer, 1966. Filling orders in warehouse for clothing shipped to retail customers.

7. With respect to each job identified in response to Interrogatory No. 6, identify each on-the-job injury 12555

medical condition or accident that you experienced, and state separately as to each:

- a) a description of the injury, medical condition or accident;
- b) the dates of the injury, medical condition or accident;
- c) the treatment received, including the treating physician's name and address and all hospitalizations, operations and medication received.

NONE

III. FAMILY MEDICAL HISTORY

8. State the names and addresses of your spouse, children, brothers, sisters, parents, grandparents, aunts, uncles, cousins, nieces, nephews and grandchildren, and with respect to each:
- a) if any of them are deceased, state his or her age at the time of death and the time, place and cause of death;
 - b) identify each illness, disease, disability, or medical condition ever had by each during his or her lifetime which required professional medical attention.
 - c) identify any birth or genetic defects or miscarriages which they had; and
 - d) with respect to each relative, identify each medical practitioner and medical institution that treated them, and set forth the diagnosis.

Plaintiff has no spouse, children, no sisters and no brothers. To the best of plaintiff's recollection, there have been no birth defects. Both of plaintiff's parents are still living. They are as follows:

FATHER: Emmanuel Zardis, Age 61
Polyps removed from throat, 1981
Harvard Community Health Program
Cambridge, Massachusetts

12856

MOTHER: Irene Zardis, Age 60
Cancer of breast, 1980
Mastectomy performed
Brigham and Women's Hospital
Boston, Massachusetts

MATERNAL GRANDMOTHER: Catherine MacFarlane
Deceased - Summer, 1978
Complications from diabetes
Everett, Massachusetts

MATERNAL GRANDFATHER: John MacFarlane
Deceased - 1962
Cancer of Colon
Chelsea, Massachusetts

FATERNAL GRANDMOTHER: Mary Zardis
Deceased - 1930
Complications at childbirth
Queens, New York

FATERNAL GRANDFATHER: John Zardis
Deceased - 1943
Queens, New York

FAMILY PHYSICIANS: Dr. Halpin (deceased)
Dr. Finnegan

IV. VETERAN'S MEDICAL HISTORY

9. State:

- a) the date of your birth;
- b) the name and address of the hospital or other facility where you were born, and the name and address of each attending physician or other medical practitioner; and
- c) each birth defect that you had and each medical complication connected with your birth (e.g., premature birth, breech birth, jaundice, fetal alcoholism), and each medical complication or health problem that your mother had in connection with her pregnancy of your birth (e.g., toxemia, long period of labor).

January 26, 1948

Chelsea Memorial Hospital, Chelsea, Massachusetts
Physician unknown

No birth defects or medical complications.

10. Identify each injury, illness, disability or other physical or mental condition which you have ever had, whether temporary or permanent, and state separately as to each:
 - a) each medical practitioner and/or medical institution seen or visited by you for the purposes of consultation, diagnosis, prognosis, x-rays, treatment or other care, specifying the dates of all hospitalizations;
 - b) the diagnosis or prognosis made by each medical practitioner and medical institution; and
 - c) the nature and extent of the care and treatment received in each medical institution and from each medical practitioner.

November, 1959 -- broken ankle. Dr. Halpin. Treated at Lawrence Memorial Hospital, Medford, Massachusetts. Ankle set and cast made.

August, 1960 -- Chest x-ray. Dr. Halpin. Treated at Lawrence Memorial Hospital, Medford, Massachusetts. Fell on chest, had trouble breathing and physician took x-ray which was negative.

February 22, 1977 -- Jamaica Plain Veterans Administration Hospital and West Roxbury Veterans Administration Hospital. Each period of hospitalization since this time has been for neurological problems. The hospitalization are so numerous that plaintiff cannot recall each and every hospitalization, which dates are set forth in plaintiff's various hospital records.

In the Republic of Vietnam, plaintiff had a fever of

12858

unknown origin and was hospitalized at the 187th Evacuation Hospital and then Medivaced to Cu Chi 25th Evacuation Hospital and seen at Tay Ninh Hospital.

Agent Orange Exposure:

Resulting in a severe, progressive demyelination disease, which has been diagnosed as multiple sclerosis, with peripheral neuropathy, marked lower extremity and back rigidity and severe spasticity (requiring L1-S1 anterior rhizotomy), progressive lower extremity weakness, loss of movement and marked sensory ataxia, stiffness of lower extremities, right foot drop, intractable pain syndrome of lower extremities, intermittent numbness of the feet, paraplegia, severe spasticity and limitation of movement of upper extremities, marked decreased sensation of both upper extremities, intermittent numbness of both hands, significant impairment in strength, dexterity and proprioception in upper extremities, resulting in low level "quadraplegia", recurrent urinary tract infections, intermittent renal failure, bladder dysfunction with incontinence, bladder sphincter dysynergia (requiring TURP and TURBN with sphincterotomy), intermittent bowel incontinence, prolapsing of rectum, enlargement of prostate, sacral decubiti, left ischial ulcer (requiring left ischiectomy ulcer excision), sexual dysfunction, marked visual disturbances and deficit, severe diplopia, internuclear ophthalmoplegia and ataxia, marked left lateral nystagmus, left greater than right, severe loss of vision, decreased visual acuity, abdominal mass (requiring excision), chloracne, chronic urinary tract infections, recurrent fever of unknown origin, inability to swallow, drastic weight loss, disanthenia, emotional overlay depression, lethargy, depressive neuritis, loss of appetite, speech incoordination, chronic fatigue, persistent headaches and joint and muscle pain, irascibility, erratic behavior difficulties and irritability.

11. With respect to each injury, illness, disability, or other physical or mental condition identified in response to Interrogatory 10, identify each such condition that you claim or believe was caused by or arose out of exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin or some combination thereof, and state separately as to each:

- a) a description of each symptom;
- c) the date and manner in which each such symptom first manifested itself or was made known to you; and

See Plaintiff's answer to question number 10 supra re: Agent Orange Exposure.

12. Identify each drug or medication ever used or taken by you, including, but not limited to, illegal, recreational and over-the-counter drugs, and for each drug or medication, set forth the following with respect to each:

- a) the brand name, generic name, or "street name" of the drug;
- b) the date of use;
- c) the amount used during each period of use;
- d) the name and address of the physician, if any, who prescribed the drug;
- e) a description of reasons for your use of the drug; and
- f) whether you have ever received any medical treatment or counseling in connection with your use of such drugs.

Pain medication, morphine, valium.

Various times while hospitalized from 1977 onward.

See medical records.

Various doctors at Jamaica Plain Veteran's Administration Hospital, Jamaica Plain, Massachusetts, and West Roxbury Veteran's Administration, West Roxbury, Massachusetts.

Prescription to ease pain, for muscle spasticity and loss of sleep.

No.

12860

13. Identify each skin condition that you have ever had, and with respect to each such condition:

- a) state the dates during which you had that condition;
- b) describe any diagnosis or medical treatment you received for the condition, and state:
 - I) the name and address of the person rendering the diagnosis or treatment;
 - II) the name and address of the medical institution(s) at which you were diagnosed or treated;
 - III) the dates of the diagnosis or treatment;
 - IV) and the effect of the treatment.

In late 1968 or early 1969 while in Vietnam, plaintiff developed a rash on his arms and chest. Plaintiff was seen by a physician at the 187th Assault Helicopter Company Hospital in Tay Ninh. A white ointment, which Plaintiff believes to be cortisone was given by said physician, who believed Plaintiff may have been suffering from an allergy to diesel fuel. The ointment was ineffective. The condition, experiencing periods of exacerbation and remission, remains.

14. If you have ever smoked cigarettes or otherwise used a tobacco product:

- a) identify each type of product (e.g., cigars, cigarettes, chewing tobacco);
- b) identify the time period during which you used that tobacco product;
- c) identify the amount used on a daily basis (e.g., packs of cigarettes/day); and
- d) state whether any physician or other health care professional has ever advised you to stop or reduce your use of cigarettes or other tobacco products, and, if so, state the name and address of the physician or other health care professional and the date of the advice.

Cigarettes -- January, 1968.

Two packs/day.

December, 1982.

No.

15. If you have ever consumed or drunk alcohol, state separately with respect to each type of alcohol (e.g., liquor, beer, wine, etc.) consumed:

- a) at what age consumption began;
- b) the amount and frequency of such consumption;
- c) if consumption ceased at any time, the reasons for such cessation and the reasons for any resumption; and
- d) whether you were ever hospitalized or institutionalized for alcohol use, or advised to limit or stop alcohol use, and, if so, state the name(s) of each such hospital or institution or medical practitioner who treated or advised you.

17 years of age.

Beer - infrequently. Consumed very little alcohol, perhaps a six pack/month while in the service. Wine and occasional liquor now less than one (1) bottle of wine/month. Less than ten (10) cocktails/month.

Consumption ceased for extended periods while hospitalized.

No.

12862

16. If any insecticides (e.g., Chlordane, Lindane, DDT),

rodenticides (e.g., rat poison), insect repellents (e.g., DEET) or other pest control compounds were ever used by you or others around your living or working quarters, state as to each:

- a) the brand name or generic name of the chemical;
- b) a description of the chemical (e.g., powder, liquid, color, smell);
- c) a description of the container for the chemical (e.g., shape, color, markings)
- d) the date of use;
- e) the method of application;
- f) the place it was applied;
- g) the frequency of application; and
- h) whether you experienced any adverse reaction to the compound and, if so, describe the reaction.

None to the best of Plaintiff's knowledge.

VI. MILITARY SERVICE

17. State with respect to your military service:

- a) the branch of the armed services in which you served;
- b) the inclusive dates of your service;
- c) the inclusive dates of service in or near Vietnam;
- d) the name of each military unit to which you were assigned while serving in or near Vietnam; and the dates during which you were assigned to each such units;
- e) the name and location of each place or area at which you were physically present in or near Vietnam and the dates during which you were present at each such place or area;
- f) your immediate superior officer's name and rank while in or near Vietnam; and

g) the type of discharge you received.

United States Army.

June 25, 1967 through June 26, 1970.

April 4, 1968 through April 7, 1969.

362nd Aviation Support Detachment attached to 2nd Brigade 25th Infantry Division; 1st Air Cavalry Division, 228th-229th Companies; Aero-Scout Detachment of the 11th Armored Cavalry at Tay Ninh; B-32 Fifth Special Forces Group; Advisory Team 90, Military Assistance Command, Vietnam 187th Assault Helicopter Company of First Aviation Brigade. Unit plaintiff was assigned to was responsible for air space security or ground control of aircraft to insure planes and helicopters did not fly into each other. Clearance for air strikes and spraying missions, medical evacuations, insertion and extraction of troops, tactical and logistical air flights.

Tay Ninh Province, East and West, Dau Tieng, Trang Bang, Cu Chi to Cambodia. Plaintiff ws in this general area the entire while he was in Vietnam. Plaintiff was on the ground the entire period of time except for a couple of hours per month when being transported from one place to another.

Major Bell, Major Scully. Field Grade Officers. There were others which plaintiff cannot recall.

Honorable.

18. With respect to each illness, injury, wound or other medical or psychological condition experienced by you during your military service in or near Vietnam, state:

- a) the date of your illness, injury, wound, or other medical or psychological condition;
- b) a description of the illness, injury, wound, or other medical or psychological condition, including a description of all symptoms;
- c) the cause of the illness, injury, wound, or other medical or psychological condition;

12864

- d) the name and rank of the person to whom you first reported the illness, injury, wound, or other medical or psychological condition (if anyone):
- e) the date that you first reported the illness, injury, wound, or other psychological or medical condition;
- f) the name, rank and location of each physician or other health care professional who treated your illness, injury, wound, or other psychological or medical condition, including the dates and places of treatment, and a description of the treatment you received; and
- g) the name and location of each hospital or other health care facility which treated your psychological or medical condition, the dates of treatment, and a description of the treatment that you received.

July, 1968, injured jaw from rocket explosion. Urinary tract infections from August, 1968, onward. Pain especially when urinating, but almost continuous.

Sometime around September through November, 1968, Plaintiff was medivaced to Cu Chi for throat examination. Plaintiff was unable to swallow. Plaintiff was taken to Tay Ninh Base Camp Hospital.

Plaintiff was evaluated psychologically in or about January, 1969, for fitness for duty in combat zone.

Combat.

Throat, fever of unknown origin, and jaw injury -- Doctor at 187th Assault Helicopter Company, who referred to 25th Infantry Hospital. Hospitalized 4 to 5 days for fever of unknown origin and throat. Jaw -- out-patient, 187th Assault Helicopter Company Hospital. Psychological - out-patient, 187th Assault Helicopter Company Hospital.

January, 1969, psychological. September through November, 1968, throat, fever of unknown origin, and jaw injury.

Unknown.

187th Assault Helicopter Company Hospital for all injuries. The jaw and psychological examinations were on an out-patient basis and plaintiff was returned to duty that same day. The swallowing difficulties and fever of unknown origin occurred simultaneously, and plaintiff was sent to the 25th Infantry Hospital and hospitalized for several days.

12865

19. Describe any other medication taken by you during your military service (e.g., Dapsone, Chloroquine, Primaquine, Binocet), stating as to each:

- a) the brand name or generic name of the medication;
- b) the form of the medication (e.g., pill, capsule, injection, etc.);
- c) the color, shape, and size of any pill or capsule taken;
- d) the reasons for taking the medication;
- e) the name and rank of the person(s) who gave you the medication;
- f) the dates you took the medication;
- g) the amount of the medication taken (e.g., pills/day); and
- h) whether you experienced any adverse reaction to the medication and, if so, describe the reaction.

Plaintiff never took any of the medications described except a salmon-colored (pink) horse tablet for anti-malaria which Plaintiff took a few times upon first arriving in Vietnam in April, 1968.

One Sgt. Freeman was in charge of dispersing the medication, which he usually did by leaving in the sleeping quarters.

Plaintiff consumed a couple of pills upon arrival in Vietnam, then stopped.

Diarrhea.

20. State whether you ever received any training, instructions, warnings or health and safety information concerning herbicides during your military service, and identify as to each:

- a) the dates you received the foregoing;
- b) the location where received;
- c) the name and rank of the person(s) from who it was received;

12866

- d) the substance of any oral information received;
and
- e) the title, date, author or source, and content
of any written material received.

NONE

21. Set forth with respect to each time you claim to have been exposed to herbicides:

- a) the date of the alleged herbicide exposure;
- b) the time of day of the alleged exposure;
- c) the closest geographical or political reference point (e.g., hill, town, landing zone) to the place you believe you were exposed;
- d) a description of the terrain at the place of alleged exposure;
- e) a description of how the herbicide was being applied (e.g., helicopter, aircraft, hand, etc.);
- f) a description of your activities at the time of alleged exposure;
- g) the manner you believe your body was physically exposed to the herbicide (e.g., skin contact, inhalation, ingestion or swallowing), and, if you believe you were exposed by contact on your skin, identify the areas of skin that came in contact with the herbicide;
- h) the name and rank of other people present at the time of alleged exposure; and
- i) with respect to any deceased proposed representative plaintiff, state how such plaintiff will demonstrate any of the information requested in subparts a) through h) of this interrogatory, identifying any persons with such information who will testify as to such plaintiff's exposure to herbicides.

Nui Ba Dinh, Trang Bang, Dau Tieng -- this is the general area where plaintiff recalls being sprayed directly. On two occasions in the early morning, plaintiff remembers being caught in a drift of foggy, foul smelling chemical sprayed by United State's planes. The first occasion, was either June or July of 1968, and shortly afterwards, the

12367

Plaintiff vomited. The second occasion, the Plaintiff developed a fever of unknown origin a week or so thereafter.

On two other occasions, one when a UC 123 got hit with groundfire and dumped its load of chemicals, Plaintiff was sprayed directly. This occurred around November, 1968. The other occasion was a flyby 50-100 meters from me. Plaintiff was again sprayed directly.

All spraying were by aircraft.

Plaintiff was walking on the ground.

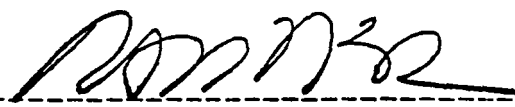
Head, arms and chest were exposed.

Only twenty-two men in Unit. Plaintiff worked on generators by himself. Exposed with E4 soldier on initial spraying and with RVN regulars second time. Plaintiff was exposed by himself on the next two occasions.

Dated: Carle Place, New York
January 14, 1984

PLAINTIFFS' MANAGEMENT COMMITTEE

BY



DAVID J. DEAN, ESQ.
DEAN, FALANGA & ROSE, ESQS.
One Old Country Road
Carle Place, New York 11514
(516) 240-9888

12668

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----X
In re

"AGENT ORANGE" :

Product Liability Litigation :

MDL No. 381

-----X
ANSWERS OF
GEORGE W. EWALT, JR.
TO
DEFENDANT'S INTERROGATORIES TO
PROPOSED REPRESENTATIVE PLAINTIFFS

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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----X

In re

"AGENT ORANGE"

Product Liability Litigation.

MDL No. 381

-----X

I. GENERAL

1. State your name, social security number, military service number, and each address at which you have ever lived (excluding time during active military service), starting with your current address, and give the dates you lived at each address.

George W. Ewitt, Jr.: S.S. #129-38-4538; M.S. #US52807845.
Past Addresses: Present, at 4301 Lauriston, Philadelphia, PA 19128 - over 4 years. Prior to that 701 Summit Avenue, Philadelphia, PA 19128, 1 1/2 years; 5300 block Ridge Avenue, Philadelphia, 1 year; 200 block Jamestown Street, Philadelphia, 1 year; 200 block Wendover Street, Philadelphia, 1 year; 701 Penn Pines Boulevard, Clifton Heights, PA approximately 2 years; military service, 2 years; 701 Penn Pines Boulevard 6 years; 729 West Wood Drive, Clifton Heights, PA, 2 years; 134 Ridgeway Avenue, Norwood, PA 8 or 9 years; Greenway Avenue in Sharon Hill Pennsylvania. Born in Fitzgerald Mercy Hospital, Darby, PA September 14, 1947.

2. Identify each educational institution you attended, the dates of your attendance, and describe any physical or mental examination you received at or in connection with your attendance at each institution, stating with respect to each such examination.

Grade School at St. Gabriel's, Norwood, PA from 1st to 6th grade; 7th and 8th grade Blessed Virgin Mary in Darby, PA; four years of high school at Monsenior Bonner in Drexel Hill, PA after service, night school in approximately 1978 or 1979 at Chestnut Hill College. No recollection of any specific testing, physically or mentally, during the above period other than regular scholastic testing such as SAT's. He has no present recall of the dates of the SAT's. Routine physicals, dates unknown.

a) the date of the examination;

12870

- b) the hospital or institution where such examination was given; and
 - c) the name and address of the person conducting the examination.
4. If you have ever made a claim for benefits for any medical condition (including worker's compensation, veteran's benefits, state or federal disability or insurance or union or third party medical plans) state with respect to each such claim:
- a) benefits, etc.;
 - b) the date of the claim.
 - c) the claim number or other identification of the claim
 - d) the entity to whom the claim was made, including the name and address;
 - e) the medical condition for which the claim was made;
 - f) and the disposition of the claim.

Claim for Veteran Administration benefits for left knee, fractured in Texas while in the service, Fort Hood, Texas in 1968. Thereafter, a claim for post-traumatic stress. Prior to filing the post-traumatic stress claim and subsequent to the fractured knee claim.

Plaintiff filed an Agent Orange claim. Claims have been made under George W. Ewalt, no Jr. Certain had Worker's Comp. claims with the Bell Telephone Co. Approximately 6 to 8 years ago Mr. Ewalt broke a finger on the job. The claim was made with Bell Telephone, medical bills were paid. Approximately 4 or 5 years ago, additionally, left arm, elbow, shoulder struck by van. Medical bills were paid, No recollection of lost time for either.

5. If you have ever filed or otherwise commenced a legal

12871

action in connection with any medical condition (other than this action) state as to each such action:

- a) the date that action was filed or otherwise commenced, the court or administrative body, the full title of the action, the index or other identifying number, and the identity of all parties to the action;
- b) a description of the medical condition in connection with which the action was filed, and how you believe that medical condition occurred;
- c) a description of the outcome of the action, or of its present status if it is still pending; and
- d) the dates and amounts of any payments, either as a result of a judgment or settlement, which you have received or which you are scheduled to receive.

Automobile accident approximately 10 years ago, and out of work for some weeks. Injury to neck and upper back. Emergency treatment and x-rays at Roxborough Memorial Hospital. Thereafter, followed by his family physician, Dr. Joan Hurlock. The case was settled with carrier. In approximately 1969, had an accident while a passenger in car. Injury to head and neck. lost little expenses. No recollection of attorney's name.

II. EMPLOYMENT HISTORY .

- a. Identify and describe each job you have held, whether employed by others or self-employed, and state as to each:
 - a) the name and address of your employer, the address of your workplace, the nature of the business and your job title;
 - b) your duties and responsibilities;
 - c) the date the job began and ended and the reasons for termination of the job; and
 - d) the date and place of each physical and mental examination that you underwent in connection

with such job, identifying the name and address of each medical practitioner conducting the examination and the name and address of any medical institution at which such examinations was conducted.

While in high school in approximately 1964 worked part-time for Adams Cadillac, 20th and Sansom Streets, Philadelphia. Washing and cleaning the automobiles. He was terminated when he graduated from high school and went into full line employment. While in high school, George also was a vendor for the Nylon Brothers food concessions at the stadiums selling hot dogs, candy bars, cokes, 7-Ups and root beer beverages.

After high school, accepted full-time work - Curtis Publishing Co. in June of 1965 to January of 1966. He operated an automatic labeling machine.

Left Curtis Publishing Co. for a better employment opportunity at Sorenson Industry. Colwin, PA. and worked in the machine shop as metal man, (bringing material to the operator). The job ended when he was drafted into the military.

In 1968, returned to Sorenson Industries as a machinist for 3 or 4 months. He left intending to go back to school. Thereafter, employed by Wings and Wheels as a part-time driver for a freight company.

In 1969, he became a full-time employee with the U.S. Postal Service for 1 year in Wayne, PA. as a regular mailman delivering mail.

In 1970, became employed with the telephone company, Bell of PA. He started as a splicer-helper, and was then promoted after 13 months to lineman. Was a lineman until 1983. Although he was a titled lineman until 1983, in 1981 to 1983 due to his health problems he performed function of office worker. He became a facility assigner in 1983 and is presently employed at Bell Telephone at that position.

Plaintiff believes he is presently employed by Bell Avantic, although has not yet received first check after telephone companies reorganization. Any physical examinations during the period of employment with Sorenson Industries and many of the part-time jobs before were performed by family doctor, Dr. Marvin Werlinsky, Alden, PA.

7. With respect to each job identified in response to Interrogatory No. 6, identify each on-the-job injury, medical condition or accident that you experienced, and state separately as to each:

12873

- a) a description of the injury, medical condition or accident;
- b) the dates of the injury, medical condition or accident;
- c) the treatment received, including the treating physician's name and address and all hospitalizations, operations and medication received.

Each on the job injury recalled has been stated. While at Sorenson's, he did have a not job related injury. At home, he sliced the top of his finger. Treated at Fitzgerald Merck Hospital in Darby, PA.

III. FAMILY MEDICAL HISTORY

- 8. State the names and addresses of your spouse, children, brothers, sisters, parents, grandparents, aunts, uncles, cousins, nieces, nephews and grandchildren, and with respect to each:
 - a) if any of them are deceased, state his or her age at the time of death and the time, place and cause of death;
 - b) identify each illness, disease, disability, or medical condition ever had by each during his or her lifetime which required professional medical attention.
 - c) identify any birth or genetic defects or miscarriages which they had; and
 - d) with respect to each relative, identify each medical practitioner and medical institution that treated them, and set forth the diagnosis.

Resides with husband wife's name is Shiela S. Ewalt. One child, a daughter, 12, Tara Catherine, who also resides at home with her mother and father.

Plaintiff has no brothers, and has two sisters. Susan and Margaret Scanlon. Margaret is the oldest and married

12874

to Peter Forlano, Staff Sergeant, U.S. Army, stationed at Ft. Dix. There are no other brothers and sisters. Parents, George and Eunice, reside at 731 Penn Pines Boulevard. Father, grandfather and great grandfather were all extended career soldiers. The health of parents and sisters is good.

Grandparents: father's side:

Charley Ewalt, born January 29, 1879, died July 18, 1968, 89 years old. Father's mother's name is Hazel Force Ewalt, born June 1, 1888, died September 10, 1928.

Mother's side:

Grandfather, John Hovette, born May 21, 1885, died July 2, 1963, 78 years old. Mother's mother is Eunice Margaret Egan Hovette, born either December 17 or 26, 1888, passed away June 14, 1966 at 72 years of age.

Plaintiff's father's grandfather lived to be 97 and his father's grandfather lived to be 89.

Plaintiff's father's grandfather had 7 brothers and sisters and they all lived beyond 80. Father is from Mackinaw City, Michigan.

Aunts and Uncles: Mother's side.

Plaintiff's mother had 7 brothers and 5 sisters. Two brothers are deceased. 1 was killed in the Korean War, the other had an industrial accident sometime in the 70's. Believes that one of his uncles has diabetes, the rest of them are in good health. Knows of no major illnesses, if any, with the exception of one of his aunts on his mother's side who has developed leukemia in the past year. Her name is Margaret Johnson and she lives in Norwood, PA on Amosland Road. With reference to nieces and nephews, has 3 nieces and 1 nephew. Their names are Michele Scanlon, 13, good health; Stephen Scanlon, approximately 7 or 8 years old, good health; Yolanda Forlano, approximately 12 years old, good health except for scoliosis last year and Alice Forlano, approximately 10 years old. No grandchildren.

9. State:

- a) the date of your birth;
- b) the name and address of the hospital or other facility where you were born, and the name and address of each attending physician or other medical practitioner; and
- c) each birth defect that you had and each medical complication connected with your birth (e.g., premature birth, breech birth, jaundice, fetal alcoholism), and each medical complication or health problem that you mother had in connection with her pregnancy or your birth (e.g., toxemia, long period of labor).

5/13/57

Fitzgerald Mercy Hospital, Derby, MA - no other knowledge:

No known birth defects.

10. Identify each injury, illness, disability or other physical or mental condition which you have ever had, whether temporary or permanent, and state separately as to each:

- a) each medical practitioner and/or medical institution seen or visited by you for the purposes of consultation, diagnosis, prognosis, x-rays, treatment or other care, specifying the dates of all hospitalizations;
- b) the diagnosis or prognosis made by each medical practitioner and medical institution; and
- c) the nature and extent of the care and treatment received in each medical institution and from each medical practitioner.

Other than the conditions as enumerated in 11 infra, plaintiff sustained a broken left wrist at 10 years of age, Fitzgerald Mercy Hospital; length of disability guessed at 6 to 8 weeks. Right ear mastoid operation approximately 6 years old, Fitzgerald Mercy Hospital, disability unknown, believes he was in the hospital for

12876

approx. 1 month. At age 10, because of continuing earaches, he was treated with radiation on right ear and removed skin that had grown over the scar tissue and no problems since then. He had normal routine x-rays for the auto accident of his neck, x-rays of his back in the V.A. Hospital when they tried a spinal tap, x-rays of his left knee. Additionally, he broke left wrist in the summer of 1983 when he fell while playing softball. He was x-rayed in Wilkes Barre Medical Center Hospital, Wilkes Barre, PA and at Roxborough Memorial Hospital in Philadelphia.

Plaintiff recalls the first doctors is Dr. Paul Keenan, Norwood, PA; Dr. Patton, Alden, PA; Dr. Worklinsky, Alden, PA; Dr. Joan Hurlock, Philadelphia, PA at Roxborough Medical Building. The right ear problem above-described was handled by Dr. McConnell in Pilgrim Garden, PA. the operation was at Fitzgerald Mercy Hospital and treatment also in Derby, PA. Dr. Joan Hurlock is more or less and has been Plaintiff's family doctor since late '60's or early '70's. Dr. George M. Wilson, general surgeon, Roxborough Memorial Hospital removed the skin growths in the head, right arm, left legs, back and throat. Plaintiff was referred to Dr. Wilson by Dr. Hurlock. Recently has been seen by Ronald Cidario, M.D. for his Agent Orange problems and has been seen by enumerable doctors at the V.A.

Additionally, Plaintiff had his tonsils out at age 4 or so at Fitzgerald Mercy Hospital. Perhaps the same physician that did his ear. Plaintiff still has his appendix. Opthamologist, is Dr. Corozo, Roxborough Medical Building. Has been seen by Dr. Barbara Rockett initially with the V.A., and her private practice at Philadelphia Institute.

11. With respect to each injury, illness, disability, or other physical or mental condition identified in response to Interrogatory 10, identify each such condition that you claim or believe was caused by or arose out of exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin or some combination thereof, and state separately as to each:

See #11 for Agent Orange poisoning problems.

- a) a description of each symptom;
- c) the date and manner in which each such symptom first manifested itself or was made known to you; and

12877

Had severe stomach pains at base camp in Phuc-Vinh requiring reassignment from combat and treatment. Skin growths including a basal cell carcinoma, shingles, chloracne, elevated porphyrin level. Numbness in hands and feet, pains in joints, pains along the back, muscle pains concentrated in his legs, but all through body; muscle spasms all through body; pins and needles sensations in scalp; pains that feel as if hot needles are being inserted in his body. Severe reactions to beer and alcohol; fatigue, chest pains, peripheral neuropathy, eyes are sensitive to light; unnatural aging of nails; Nausea; Numbness on the left side of his jaw. High blood pressure, nervousness, depression, other associated mental problems, greater susceptibility to diseases, illnesses, and anger, tremors, insomnia, delayed stress syndrome; decline in physical strength. Difficulty with memory and concentration, anorexia.

Plaintiff believes that the symptoms first became known when he suffered severe pains in the field, and was also treated in the field for boils and growths on his left arm.

11. Identify each drug or medication ever used or taken by you, including, but not limited to, illegal, recreational and over-the-counter drugs, and for each drug or medication, set forth the following with respect to each:

- a) the brand name, generic name, or "street name" of the drug;
- b) the date of use;
- c) the amount used during each period of use;
- d) the name and address of the physician, if any, who prescribed the drug;
- e) a description of reasons for your use of the drug; and
- f) whether you have ever received any medical treatment or counseling in connection with your use of drugs.

Marijuana, de. edrine pills, taken in Vietnam, not before

or after. The dexedrine was handed out by the Army. In addition, Plaintiff had prescribed for him a tranquilizer in the 70's. It was prescribed by a physician who substituted for his family physician, Dr. Harlock. For approximately one year during 1980 Plaintiff was on Nerdil prescribed by V.A. physicians. Additional drugs included Tylenol for muscle pains, penicillin; vitamin B12 for shingles. The V.A. also prescribed a high regimen of vitamins including vitamin B and folic acid.

17. Identify each skin condition that you have ever had, and with respect to each such condition:

- a) state the dates during which you had that condition;
- b) describe any diagnosis or medical treatment you received for the condition, and state:
 - i) the name and address of the person rendering the diagnosis or treatment;
 - ii) the name and address of the medical institution(s) at which you were diagnosed or treated;
 - iii) the dates of the diagnosis or treatment;
 - iv) and the effect of the treatment.

The skin condition started in Vietnam and has continued sporadically to the present time. It included pustules, boils, shingles, chloracne and other skin growths. Treatment includes lancing of the boils in Vietnam, continuing treatment in the United States, removal of boils, removal of cysts, and surgical removal of the growths at Roxborough Memorial Hospital under George M. Wilson in 1975 or 76, 1979 or 80, and 1981. Plaintiff presently has some growths on his left leg which will require surgical removal. In addition, Basal cell carcinoma on the right side of the Plaintiff's head was removed by Dr. Wilson in 1975 or 1976.

14. If you have ever smoked cigarettes or otherwise used a tobacco product:

12879

- a) identify each type of product (e.g., cigars, cigarettes, chewing tobacco);
- b) identify the time period during which you used that tobacco product;
- c) identify the amount used on a daily basis (e.g., packs of cigarettes/day); and
- d) state whether any physician or other health care professional has ever advised you to stop or reduce your use of cigarettes or other tobacco products, and, if so, state the name and address of the physician or other health care professional and the date of the advice.

Cigarettes. A pack to a pack and a half a day. Once stopped when he got out of the service and in the late 70's. Early 80's resumed smoking Salem in approximately the same amount as before. Dr. Godaric has advised him to stop smoking cigarettes.

15. If you have ever consumed or drunk alcohol, state separately, with respect to each type of alcohol (e.g., liquor, beer, wine, etc.) consumed:

- a) at what age consumption began;
- b) the amount and frequency of such consumption;
- c) if consumption ceased at any time, the reasons for such cessation and the reasons for any resumption; and
- d) whether you were ever hospitalized or institutionalized for alcohol use, or advised to limit or stop alcohol use, and, if so, state the name(s) of each such hospital or institution or medical practitioner who treated or advised you.

Plaintiff consumed before service in Vietnam. In Vietnam he could drink a six-pack of beer. After Vietnam

consumption of beer caused the Plaintiff to become ill and produced severe headaches. Advised to discontinue when on Nardil.

15. If any insecticides (e.g., Chlordane, Lindane, DDT), rodenticides (e.g., rat poison), insect repellents (e.g., DEET) or other pest control compounds were ever used by you or others around your living or working quarters, state as to each:

- a) the brand name or generic name of the chemical;
- b) a description of the chemical (e.g., powder, liquid, color, smell);
- c) a description of the container for the chemical (e.g., shape, color, markings);
- d) the date of use;
- e) the method of application;
- f) the place it was applied;
- g) the frequency of application; and
- h) whether you experienced any adverse reaction to the compound and, if so, describe the reaction.

Plaintiff has never applied or knowingly used any chlordane, lindane, DDT. He has used Decon mousetraps in his house on several occasions.

While in Vietnam insect repellent was used by Plaintiff infrequently, found out it didn't work. He was also given insect repellent to rub on his hands and neck area, which was infrequently used. The cans were o.d., green cans about 6 - 8 inches tall, approximately 3 inches and looked like a shaving cream can. The rub-on repellent came in a clear plastic bottle about 2 inches high, rounded rectangular shape with black lettering.

17. State with respect to your military service:

- a) the branch of the armed services in which you served;
- b) the inclusive dates of your service;
- c) the inclusive dates of service in or near Vietnam;
- d) the name of each military unit to which you were assigned while serving in or near Vietnam; and the dates during which you were assigned to each such unit;
- e) the name and location of each place or area at which you were physically present in or near Vietnam and the dates during which you were present at each such place or area;
- f) your immediate supervisor officer's name and rank while near/in Vietnam, and
- g) the type of discharge you received

United States Army, 9/14/66 - 9/17/68. February 25, 1967 to February 24, 1968. First Infantry Division, Company E, First Battalion, 26th Infantry, First Brigade. For a few months he was attached to headquarters of that unit.

He arrived in Viet Nam on the 25th of February, 1967 at Ben Hoa. Plaintiff's group stayed at the replacement depot for 4 or 5 days then they were split into individual units and George's unit was sent to the First Infantry Division at Kien. After a week to a week and a half Plaintiff was sent to his unit at Phuoc Vinh. He was there for approximately 3 to 4 weeks. Then he joined his unit in Quan Loi where he remained in operations in that area, i.e., the Iron Triangle, Loc Ninh, anloc, Lai Kai, Boi Loi Woods, Phu Loi, song Bai, Nue Boi Bia (English name Black Virgin Mountain) in Tay Ninh Province, Phuoc Wai. Thereafter George left Quan Loi and went to Kien than back to the replacement center near Den Wai then to Ton Son Nhut airport to Oakland, California.

Captain Federson; thereafter Captain Smith; First Lieutenant Smith. The E5 squad leader's name was Sergeant Diaz. The brigade commander was Lieutenant Colonel

12882

Alexander M. Haig, Jr. and thereafter Colonel Hoffman.

Honorable discharge.

18. With respect to each illness, injury, wound or other medical or psychological condition experienced by you during your military service in or near Vietnam, state:

- a) the date of your illness, injury, wound, or other medical or psychological condition;
- b) a description of the illness, injury, wound, or other medical or psychological condition, including a description of all symptoms;
- c) the cause of the illness, injury, wound, or other medical or psychological condition;
- d) the name and rank of the person to whom you first reported the illness, injury, wound, or other medical or psychological condition (if anyone);
- e) the date that you first reported the illness, injury, wound, or other psychological or medical condition;
- f) the name, rank and location of each physician or other health care professional who treated your illness, injury, wound, or other psychological or medical condition, including the dates and places of treatment, and a description of the treatment you received; and
- g) the name and location of each hospital or other health care facility which treated your psychological or medical condition, the dates of treatment, and a description of the treatment that you received.

The stomach problem arose in approximately October of 1967 and the skin problems were seen monsoon season in Vietnam around mid-summer of 1967. While Plaintiff was at an L.F. position outside his perimeter and he was struck in the lip by a bullet. This went unreported and no purple heart was received.

Plaintiff's stomach and skin problems have been described. Plaintiff was first treated at Auan Loi and then was sent to Fuc Vinh.

12883

19. Describe any other medication taken by you during your military service (e.g., Dapsone, Chloroquine, Primaquine, Binocet), stating as to each:

- a) the brand name or generic name of the medication;
- b) the form of the medication (e.g., pill, capsule, injection, etc.);
- c) the color, shape, and size of any pill or capsule taken;
- d) the reasons for taking the medication;
- e) the name and rank of the person(s) who gave you the medication;
- f) the dates you took the medication;
- g) the amount of the medication taken (e.g., pills day); and
- h) whether you experienced any adverse reaction to the medication and, if so, describe the reaction.

Plaintiff took an orange pill weekly and a white more often both given by the medics. Plaintiff had no adverse reaction to either. Was taken by Plaintiff during the entire time he was in Vietnam.

20. State whether you ever received any training, instructions, warnings or health and safety information concerning herbicides during your military service, and identify as to each:

- a) the dates you received the foregoing;
- b) the location where received;
- c) the name and rank of the person(s) from who it was received;
- d) the substance of any oral information received; and

12884

- e) the title, date, author or source, and content of any written material received.

No

21. Set forth with respect to each time you claim to have been exposed to herbicides:

- a) the date of the alleged herbicide exposure;
- b) the time of day of the alleged exposure;
- c) the closest geographical or political reference point (e.g., hill, town, landing zone) to the place you believe you were exposed;
- d) a description of the terrain at the place of alleged exposure;
- e) a description of how the herbicide was being applied (e.g., helicopter, aircraft, hand, etc.);
- f) a description of your activities at the time of alleged exposure;
- g) the manner you believe your body was physically exposed to the herbicide (e.g., skin contact, inhalation, ingestion or swallowing), and, if you believe you were exposed by contact on your skin, identify the areas of skin that came in contact with the herbicide;
- h) the name and rank of other people present at the time of alleged exposure; and
- i) with respect to any deceased proposed representative plaintiff, state how such plaintiff will demonstrate any of the information requested in subparts a) through h) of this interrogatory, identifying any persons with such information who will testify as to such plaintiff's exposure to herbicides.

12085

Plaintiff was subjected to herbicide exposure the entire time he was in Vietnam. Specific dates and times are presently unavailable, except as to a spraying mission which was conducted at Phuoc Vinh, March 7, 1967.

Plaintiff was consistently and repeatedly in perimeter areas that had obviously been recently detonated and he repeatedly saw the Vietnamese civilian army employees spray around mess halls, barracks, tents and hootches. Additionally, "thunder" bases and Highway 13 were defoliated for 100 meters on each side. In mid-1967, Plaintiff's battalion went to Lai Kai. After helicopter drop off in Tay Ninh Province, his battalion marched through jungle to destination hilltop. Plaintiff recalls that these areas had oily substance on freshly dying vegetation.

There was no one particularly closest geographical or political reference point other than the jungle and the base camp located at Phuoc Vinh and Quan Loi and the Iron Triangle. See also answer to #21 (a).

The terrain included jungle, low flat lands; rice paddies; Michelin rubber plantations.

Exposure was through skin contact, ingestion and inhalation.

Other people present included Bob Weber, EA; Staff Sergeant Diaz; Lieutenant Smith; Colonel Haig; Colonel Hoffman; Captain Pederson; Captain Smith; enumerable other soldier's names presently unknown.

ONLY IF YOU CONTEND THAT ANY OF YOUR CHILDREN HAS A BIRTH DEFECT CAUSED BY YOUR EXPOSURE TO AGENT ORANGE, 2,4-D, 2,4,5-T, DIOXIN OR SOME COMBINATION THEREOF, ANSWER THE FOLLOWING INTERROGATORIES.

22. Identify the children that you have fathered, including name, date and place of birth of each such child, and the name and address of each child's mother.

Tara Catherine Ewalt, 8/27/71, Roxborough Memorial Hospital, Philadelphia. Mother Shiela Ewalt. All reside together.

23. Identify each of your children whom you contend has birth or genetic defects allegedly caused by your exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin or some other combination thereof, and identify:

- a) the birth or genetic defects which you contend were caused by your exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin, or some combination thereof, and state the basis for your belief, including opinions of any physicians;
- b) any other birth or genetic defects which the child has;
- c) all medical practitioner and medical institution seen or visited by the child or in which the child was confined for purposes of consultation, diagnosis, prognosis, treatment or other care, and the dates, purposes and results of such consultation, diagnosis, prognosis, treatment or other care; and
- d) the identity of the mother of each child.

The present known defects include ear problems requiring approximately four or five inner ear operations, measles, pyloric stenosis at birth which required close attention during first three weeks of life. Temper evidenced by personality changes requiring psychological counseling. She was hyperactive, and although she has the intelligence of a gifted child, she does not work close to her ability. She is easily distracted and has a rash on her ankles, wrists and hands. It looks like dried skin which sometimes breaks open, flares up and becomes infected. The skin around her ankles is leathery. Whenever she becomes sickly, which is often, she complains of joint pain.

Physicians include Dr. Consuelo Saulka, Pennsylvania Medical College, Henry Avenue, Philadelphia - delivered Tara. The pediatrician was Dr. Jean Galwin, who is presently retired. Dr. Joan Hurlock, Dr. Sabina, West Park Hospital, 3500 block Conshohocken Avenue, Philadelphia, PA 19131. Her allergist is Dr. Jeffrey Green, Children's Hospital, Philadelphia. Present pediatrician - Dr. Carolyn Verler, Children's Hospital, Dr. Paul Honig for skin

12887

problems at Children's. Latest skin doctor is Dr. Kolblenzer, Spruce Street, Philadelphia. Dr. Coroze takes care of her eye problems - Roxborough Medical Center. Her psychologist is Dr. Annette Lynch, Schoolhouse Lane, Philadelphia.

24. Identify each and every child of each mother identified in response to Interrogatory 22 and state as to each:

- a) the child's name, address, date of birth and place of birth, including the name and address of the hospital or other place where delivery occurred; and
- b) the physician(s) who treated the mother during pregnancy and/or delivered the child.

See also c.

25. With respect to each mother identified in response to Interrogatory 22(d), identify her brothers, sisters, parents, grandparents, aunts, uncles, cousins, nieces, nephews, and grandchildren, and:

- a) if any of them are deceased, state his or her age at the time of death and the time, place and cause of death;
- b) identify each illness, disease, disability, or medical condition ever had by each during his or her lifetime which required professional medical attention;
- c) identify each medical practitioner and medical institution that treated them, and set forth the diagnosis of each, stating the same as to each relative.

Previously answered. See #8 supra.

26. With respect to each pregnancy, for each mother identified in response to Interrogatory 23(d), state:

- a) whether the mother was exposed to or contracted any viral or bacterial infection or disease during or shortly before the pregnancy (e.g., German measles, flu, etc.) and if so, identify the infection or illness, the period during which it occurred, and any medication or treatment given therefor;
- b) whether the mother incurred any injury during pregnancy, and, if so, describe the injury, the treatment received, any examining or treating physicians, and any institutions at which treatment occurred;
- c) whether the mother or father ever had any venereal disease, and, if so, describe the disease, the treatment received, any examining or treating physicians, and any institutions at which treatment occurred;
- d) whether diagnostic procedures, including, but not limited to, abdominal exams or pelvimetry, amniocentesis, and/or ultrasound were used, and, if so, set forth the date of the procedure, describe the procedure, the examining or treating physician and any institutions at which the procedure occurred; and
- e) whether any medical problems or complications arose during pregnancy (e.g., toxemia), and, if so, describe the problems or complications and the treatment received.

Possibility of an early miscarriage at the Women's Medical College in 1970 and 1971. Diagnosis not confirmed. Plaintiff's do not believe that the mother was exposed to or contracted any viral bacteria, infection or disease during or shortly before the pregnancy.

27. Answer Interrogatories 6, 7, 12, 14, 15, and 16 with

respect to each mother identified in response to Interrogatory 23(d).

Not applicable.

26. For each mother identified in response to Interrogatory 22 identify each and every pregnancy not resulting in a live birth, and state with respect to each:

- a) whether there was a miscarriage and/or spontaneous abortion, and, if so, state the date and describe the reason for the miscarriage and/or spontaneous abortion and identify any examining or treating physicians, and any institutions at which it occurred;
- b) if the response to a) above is affirmative, state whether you contend that such miscarriage and spontaneous abortion was caused by your exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin, or some combination thereof;
- c) whether there was a voluntary or therapeutic abortion, and, if so, state the date and describe the reason for the voluntary or therapeutic abortion, and identify any examining or treating physicians, and any institutions at which the abortion occurred; and
- d) if the response to c) above is affirmative, state whether you contend that such voluntary or therapeutic abortion was caused or necessitated by your exposure to Agent Orange, 2,4-D, 2,4,5-T, dioxin, or some combination thereof.

Dated: Carle Place, New York
January 14, 1984

12890

PLAINTIFFS' MANAGEMENT COMMITTEE

BY: 

DAVID J. DEAN, ESQ.
DEAN, FALANGA & ROSE, ESQS.
One Old Country Road
Carle Place, New York 11514
(516) 240-0000

Defendants' interrogatories
to Plaintiffs dated December
22, 1983 and Plaintiffs'
answers thereto dated
January 16, 1984

Defendants' Interrogatory

1. Separately as to each person identified as required by Paragraph "1" of Pretrial Order No. 65, specify each illness or injury you contend was caused to him or her by exposure to Agent Orange and the date of onset of each such illness or injury.

Plaintiffs' Response

1. See answers to interrogatories filed as to each plaintiff on January 16, 1984.

Defendants' Interrogatory

2. Separately as to each person referred to in Interrogatory 1 and each illness or injury specified in your answer to that interrogatory:

(a) specify each component, ingredient or impurity of Agent Orange you contend caused or contributed to each such illness or injury;

Plaintiffs' Response

2. (a) 2,3,7,8 tetrachlorodibenzo-p-dioxin (TCDD), dichlorophenoxyacetic acid (2,4-D), trichlorophenoxyacetic acid and tetrachlorodibenzofuran (2,3,7,8-TCDF) and all other isomers of polychlorinated dibenzo-p-dioxin, of which TCDD appears to be the most hazardous. These chemical compositions are all hereinafter referred to as "material".

Defendants' Interrogatory

2. (b) State all facts as to the amount, manner, type and dates of exposures to Agent Orange, any component, ingredient or impurity of Agent Orange or any other substance you contend caused or contributed to each such illness or injury;

Plaintiffs' Response

2. (b) Such facts as are known concerning his exposure by each plaintiff have been set forth in their answers to interrogatories filed as to each plaintiff on January 16, 1984.

Defendants' Interrogatory

2. (c) State all facts as to the amounts and routes of absorption and manner and rates of elimination of Agent Orange or any component, ingredient or impurity of Agent Orange or of any other substance you contend caused or contributed to each such illness or injury;

Plaintiffs' Response

2. (c) No plaintiff has sufficient knowledge as to the amount of material which be absorbed, or the routes and manner of its absorption. Suffice it to say that each plaintiff absorbed sufficient material to produce his illness or injury, or to produce the untoward side-effects it did in his children. The plaintiffs like-wise have no information as to how much material was eliminated from their systems or what amount still remains therein.

Defendants' Interrogatory

2. (d) Fully describe each scientific theory upon which you base your contention that exposure to each component, ingredient or impurity of Agent Orange caused or contributed to each such illness or injury;

Plaintiffs' Response

2. (d) These theories will be a matter of presentation in the expert witness statements to be filed by the plaintiffs on January 23, 1984.

Defendants' Interrogatory

2. (e) State all facts as to the medical, military and occupational history of each such person.

Plaintiffs' Response

2. (e) The pertinent facts are that each veteran plaintiff was physically present in South Viet Nam and was exposed to the material in some amount through any or all of several methods. The medical history of each person is available through the medical records of each plaintiff which are being produced as rapidly as they become available and which plaintiffs have authorized the defendants to obtain. To the best of the knowledge of each veteran plaintiff, no occupational history is relevant because there was no known exposure to the material by any verteran plaintiff other than in South Viet Nam.

Defendants' Interrogatory

3. Do you intend to support your claims as to the persons referred to in Interrogatory 1 with evidence that exposure to Agent Orange caused any illnesses or injuries other than those illnesses or injuries specified in your answer to Interrogatory 1? If so:

(a) specify each such other illness or injury;

Plaintiffs' Response

3. (a) Chloracne; porphyria cutanea tarda; hyperpigmentation; hyperkeratosis; hirsutism; asthenia; weakness in low extremities; loss of strength; easy fatigability; fatigue; headaches; peripheral neuropathy; polyneuropathy; intolerance to cold; other neurological deficits; irritation to eyes; impairment of sight; impairment of hearing; impairment of smell; impairment of taste; loss of weight; loss of appetite; anorexia; loss of sexual drive; sleep disturbances; orthostatic hypotension; abdominal pain; nausea; vomiting; diarrhea; other gastrointestinal disorders; nerasthenia; depression; violent behavior; other psychobehavioral disorders; myocardial infarction; atherosclerosis; other cardiovascular disorders; liver damage; pancreatic dysfunction; kidney disorders; urinary tract disorders; pulmonary pathologies; other respiratory disorders;

fat metabolism disorders; carbohydrate metabolism disorders; cholangiocarcinoma; other liver cancers; kidney cancer; bladder cancer; pancreatic cancer; colon cancer; stomach cancer; other gastrointestinal cancers; lung cancer; fibrosarcoma; leiomyosarcoma; liposarcoma; rhabdomyosarcoma; myofibrosarcoma; neurofibrosarcoma; fibrous histiocytoma; retroperitoneal neurogenic sarcoma; fibr-sarcomatous mesothelioma; other soft-tissue sarcomas; leukemia; angiosarcoma; other blood cancers; hepatoma; lymphoma; squamous cell carcinoma of skin; other skin cancers; thyroid cancer; other glandular cancers; cancer of tongue; cancer of hard palate; other cancers of mouth, chronic lymphocytic leukemia; various brain cancers; ischemic heart disease; lung fibrosis; loss of body weight; loss of lymphoid tissue; loss of thymus tissue; sensitivity to infections; immune system disturbances; brain cancer; multiple sclerosis; testicular cancer; DNA disturbances; RNA disturbances; skin eruptions and cysts; slowing of nerve impulses; hypertension; elevated blood lipid levels; elevated cholesterol levels; prediabetic and diabetic states; abnormal cell proliferations; organ enlargements; cellular atrophy; decreased cell proliferation; birth defects in offspring; miscarriages; increased white blood cell counts; elevation of eosinophil; decrease in IgM and IgD; decrease in B-cell and T-cell capabilities; skin rash; scalp tumors; aching muscles; blepharo-conjunctivitis; porphyria. This list is not meant to be total or exclusive.

Defendants' Interrogatory

3. (b) Fully describe each scientific theory upon which you base your contention that the occurrences of the injuries specified in answer to Interrogatory 3(a) support your claims as to the persons referred to in Interrogatory 1.

Plaintiffs' Response

3. (b) See answer to 1(d)

Defendants' Interrogatory

4. Separately as to each illness or injury specified in your answers to Interrogatories 1 and 3(a):

(a) State the minimum amount of a single exposure to and the minimum amount of a single absorption of each component, ingredient or impurity of Agent Orange you contend causes or contributes to such illness or injury;

Plaintiffs' Response

4. (a) This question cannot be answered because it contains an invalid assumption that the amount of the material which produced the harm in any given case was the result of a single exposure and a single absorption. Each plaintiff contends that the totality of the material and/or any part thereof to which he was exposed and which he absorbed was what caused the harm he experienced.

Defendants' Interrogatory

4. (b) State the minimum amount and minimum number of multiple exposures to and the minimum amount and minimum number of multiple absorptions of each such component, ingredient or impurity you contend causes or contributes to such illness or injury;

Plaintiffs' Response

4. (b) This question cannot be answered because it asks for data which has never been satisfactorily investigated, since there has been no true epidemiologic study in humans to determine whether there is a no-effect level for the material. Given the fact that the material appears to bio-accumulate in humans, minimum levels for exposure as to amount or times cannot be given with precision, nor need they be. The same is true with absorptions. Obviously, each plaintiff contends that the total exposure and/or any part thereof he had to the material in South Viet Nam was responsible for the harm caused him.

Defendants' Interrogatory

4. (c) State what you contend is the minimum time interval between exposure to each component, ingredient or impurity of Agent Orange and the onset of such illness or injury;

Plaintiffs' Response

4. (c) This question cannot be answered as phrased, since it asks a medical question in a legal context. The answer will vary depending upon whether the question asks for the first cellular or pathologic illness or injury, or the first diagnosable illness or injury, or the first symptomatic illness or injury of which the individual is aware. If defendants will define what sort of latency period they are referring to, plaintiffs will endeavor to give a more specific response. In any event, such information can be obtained and clarified in the depositions of plaintiffs' experts which will be taken.

12903

Defendants' Interrogatory

4. (d) Fully describe each scientific theory upon which you base your contention that exposure to each component, ingredient or impurity of Agent Orange causes or contributes to each such illness or injury.

Plaintiffs' Response

4. (d) See answer to 2(d).

Defendants' Interrogatory

10. Do you intend to support your claims as to the persons referred to in Interrogatory 1 with evidence that any persons sustained illnesses or injuries by exposure to substances other than Agent Orange? If so:

(a) identify each such person;

(b) specify each injury or illness you contend he or she sustained and the date of its onset;

(c) specify each substance you contend caused each such illness or injury;

(d) state all facts as to the amount, manner, type and dates of exposure of each such person to each such substance;

(e) state all facts as to the amounts and routes of absorption and manner and rates of elimination of each such substance by each such person;

(f) state all facts as to the medical, occupational and (if applicable) military history of each such person;

(g) state what you contend is the minimum time interval between exposure to each such substance and the onset of each such illness or injury;

(h) fully describe each scientific theory upon which you base your contentions that exposure to each such substance caused each such illness or injury;

12905

(i) fully describe each scientific theory upon which you base your contentions that the occurrences of the illnesses or injuries specified in answer to Interrogatory 10(b) support your claims as to the persons referred to in Interrogatory 1.

Plaintiffs' Response

10. (a)-(i) The persons who may be referred to by expert witnesses are again generally part of statistical accumulations of cases and incidents. Plaintiffs simply do not have access to revelant individualizing data. The specific other substances will be set out in the expert witness summaries and by the expert witnesses in their depositions, but include at a minimum all the materials set forth in response to Interrogatory 2(a) above as well as other substances which are chemically and/or structually related thereto and/or produce the same sort of results.

Defendants' Interrogatory

11. Have you determined that any person referred to in Interrogatory 1 or identified in response to Interrogatories 5(b) or 7 was exposed to Agent Orange manufactured by a particular manufacturer? If so, identify each such person and the manufacturer to whose product you have determined he or she has been exposed, and state all the facts upon which that determination was made.

Plaintiffs' Response

11. No such determination has been made.

Defendants' Interrogatory

12. State whether plaintiffs contend that the prevalence rate of any illness identified in response to Interrogatories 1 or 3(a) is greater in persons exposed to Agent Orange than in other persons. If so, set forth:

(a) a complete description of the population you contend was exposed to Agent Orange;

(b) a complete description of the population against which you compare persons exposed to Agent Orange;

(c) the increase in the prevalence of the illness in the population identified in (a) above that in the population identified in (b) which you contend resulted from exposure to Agent Orange;

(d) the facts upon which you base your response to this interrogatory and the method by which you reached your conclusion.

Plaintiffs' Response

12. (a)-(d) Obviously plaintiffs do contend that there is a higher incidence of the stated illnesses in persons exposed to the material than in the general population. General references will be made in the expert witness summaries and any specifics will be furnished in their depositions in response to appropriate questions.

12808

Defendants' Interrogatory

13. State whether plaintiffs, or any persons acting on their behalf or at their request, have performed or are in the process of performing any tests, experiments, studies or analyses of any description that support plaintiffs' position or contentions or which they intend to introduce at trial. If so, for each such test, experiment, study or analysis:

(a) fully describe it and its results;

(b) identify the substance involved, if any, the source from which it was obtained and when it was obtained;

(c) identify each person participating in the test, experiment, study or analysis and state the nature of his or her participation;

(d) identify all documents referring or relating to or resulting from the test, experiment, study or analysis.

Plaintiffs' Response

13. (a)-(d) No such are contemplated.

Defendants' Interrogatory

Plaintiffs' Response

14-16. No questions so numbered.

Defendants' Interrogatory

17. Identify each test, experiment, study or analysis not identified in answer to the preceding interrogatories which you contend supports any fact or contention stated in your answer to any of the preceding interrogatories and specify the fact or contention which the study or analysis supports.

Plaintiffs' Response

17. See second sentence to response to 12(a)-(d).

Defendants' Interrogatory

18. Except to the extent identified in answer to one of the preceding interrogatories, identify all documents that support your answers to the preceding interrogatories, that contain information requested by the preceding interrogatories or that you used or consulted in answering the preceding interrogatories. As to each such document, specify the interrogatory to which pertains.

Plaintiffs' Response

18. Any relevant and appropriate documents as support the preceding answers, to the extent they are not part of general scientific and/or medical literature or publicly available reports will be identified by plaintiffs' experts in response to appropriate questions at their depositions.

Defendants' Interrogatory

19. Identify each person you intend to call as a trial witness to give evidence other than expert opinion as to any of the facts or contentions stated in your answers to these interrogatories. As to each such person:

(a) state the substance of his or her testimony;

Plaintiffs' Response

19. (a) To be supplied in expert witness summaries.

Defendants' Interrogatory

19. (b) identify each document you anticipate will be referred to in his or her testimony.

(The court directed that the information sought in Interrogatory number 19 be provided in connection with the Special Master's planned exchange of witness lists. Special Master's planned exchanges of witness lists. See Tr. of December 12, 1983 at 24-26).

Plaintiffs' Response

19. (b) See answer to 18.

12814

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

MICHAEL F. RYAN and MAUREEN RYAN, his
spouse, individually and as parents
and next friends of their child, KERRY
RYAN, a minor; CHARLOTTE BLACKMON, as
surviving spouse and as the personal
representative of ORVILLE B. BLACKMON,
deceased, individually and as mother
and next friend of their children,
REBECCA BLACKMON, BRENT BLACKMON,
VALERIE BLACKMON and KAREN BLACKMON;
CAROLYN CHAMPION, as surviving spouse
and as the personal representative
of THOMAS B. CHAMPION, deceased,
individually and as mother and next
friend of their children, THOMAS B.
CHAMPION, JR., JOY CHAMPION and
DEDRICK CHAMPION; GEORGE EWALT and
SHEILA EWALT, his spouse, individually
and as parents and next friends of
their child, TERA CATHERINE EWALT;
DAVID G. LAMBIOTTE; CAROL QUINN, as
surviving spouse and as the personal
representative of BRIAN T. QUINN,
deceased, individually and as mother
and next friend of their child, KEVIN
QUINN; DAN G. JORDAN and DONNA JORDAN,
his spouse, individually and as
parents and next friends of their
children, CHAD JORDAN and MICHAEL
JORDAN; EARLY ROBINSON and SHEILA ANN
ROBINSON, his spouse, individually
and as parents and next friends of
their child, MICHAEL ANTHONY ROBINSON;
WILLIAM SINGLEY and DIANE SINGLEY, his
spouse, individually and as the sur-
viving parents of their child, WILLIAM;
and STEVE ZARDIS;

on behalf of themselves and all others
similarly situated,

Plaintiffs

-v-

DOW CHEMICAL COMPANY, a Delaware cor-
poration; MONSANTO CORPORATION, a

DOCKET NO. 79 C 747

12915

Delaware corporation; H&B, INC., IN-	6
CORPORATED, a Delaware corporation;	6
T-H AGRICULTURE & NUTRITION COMPANY,	6
INC., a Delaware corporation; DIAMOND	6
SHAMROCK CORPORATION, a Delaware cor-	6
poration; UNIROYAL, INC., a New Jersey	6
corporation; THOMPSON CHEMICAL CORPO-	6
RATION, a Missouri corporation, and	6
THE UNITED STATES OF AMERICA,	6
	6
Defendants.	6

RESPONSE TO THE COURT CONCERNING EXPERT WITNESSES

COME NOW the Plaintiffs in the above entitled and numbered cause and in response to the order of the Court to furnish a list of expert witnesses by the 23rd day of January, 1984, would respectfully show the Court:

I.

The expert witnesses concerning general causation are being furnished under separate cover by the Honorable Tom Henderson, one of the Members of the Plaintiffs Management Committee. The Court should receive the list of those experts, together with initial summaries, under such separate cover.

II.

With respect to the other expert witnesses, your Plaintiffs would show that time and circumstances has made it impossible to finalize the designation of those witnesses and to obtain summaries.

However, your Plaintiffs, since the Court decided in September to set the case for trial on all aspects of the case, have proceeded with due diligence to make arrangements for the designation of such experts, in the categories hereinafter listed, and to have them prepare initial summaries. We hope to be able to conclude our efforts in that regard within the next few days. As the Court knows, our time and attention has presently been occupied with the more pressing matters of designating the Plaintiffs, obtaining the necessary information in order to finalize a designation of Plaintiffs, finalizing the general causation witnesses and other matters to which the Court seems to have given more priority. Therefore, we respectfully request the Court that we be permitted at this time to indicate to the Defendants the various areas of concern relative to which we will probably be designating expert witnesses and to permit us a few additional days in which to actually designate those witnesses and come forward with preliminary reports.

III.

The areas of concern relative to which we will in all probability be designating expert witnesses are as follows:

1. Economist - to testify concerning economic loss with respect to the various Plaintiffs.
2. Clinical Psychologist - to testify with respect to the mental anguish, intangible loss, and psychological effects concerning to the various Plaintiffs.

3. Safety Engineer - to testify with regard to proper safety precautions and types of warnings that would have been proper under the circumstances of this case and other aspects relative to safety.
4. Industrial Hygienist - to testify as to safety aspects of production, distribution and dissemination of such products in general and the kinds of protection that could have been afforded persons on the ground who were exposed to the spraying of the Agent Orange.
5. Human Factor Engineer - this expert will testify with regard to those kind of things that should have been foreseen and/or anticipated by the Defendants in the manufacturing of their product, as to how it would be used, as to any foreseeable misuse, and the other human factor considerations that contribute to the equation of safe or unsafe practices.
6. A team composed of a mechanical engineer, chemist, a botanist, a toxicologist and a chemical engineer to lay out various alternative means of producing a herbicide to accomplish the goal which the government sought, that is the defoliation in Vietnam, without the risk of harm and danger posed by the manufacture and sale of the product sold by the Defendants. This team will in all probability work together to come up

with not only alternative means of defoliation but alternative ways of processing in a safer manner the products specified.

7. An expert on governmental authority, lines of authority and responsibilities. This person will testify with respect to various executive orders, statutes, directives, regulations, and practices of the various government agencies, which relate to the lines of authority and as to who had the ultimate legal authority to make decisions with regard to the use and continued use of Agent Orange in Vietnam and with regard to who had authority to negotiate specifications.
8. Statistician - to provide us with various statistics with regard to exposures, number of veterans serving in Vietnam, and other statistics relevant to the various factors of the case.
9. A expert on exposure - to utilize the Erbst tapes and maps, and other information from the government and put together a profile of what amount of chemicals was sprayed where, at what times and on what occasions - that is to provide the jury and the Court with an organized summary of exposure opportunities.
10. Financial analyst. To testify, concerning punitive damages, about the profits made by the Defendants off

the sale of the Agent Orange to the government and to provide other financial analyses as may be relevant.

11. All medical doctors who may have treated any of the Plaintiffs. It is our understanding that Mr. Henderson will be providing summaries of medical records which will indicate the kinds of treatment and opinions of the various treating doctors. However, to the extent that those are not sufficient we will be specifying in more detail those treating doctors we plan to call as witnesses and providing any further summaries that may be required by the Court in that regard.

12. Employees, past and present, of the Defendants and the Government, who may be able to testify about any of the above matters.

IV.

Plaintiffs recognize their responsibility to provide these names and summaries as soon as possible. Plaintiffs assure the Court that they will be provided in sufficient time for the Defendants to take the depositions of these various experts and to obtain counter-experts of their own if it is their desire to do so. Plaintiffs would show that no prejudice will be sustained by either party to allow an additional reasonable time in which to provide the names of these expert witnesses and summaries in regard thereto.

WHEREFORE, Plaintiffs urge the Court to grant such extension of time.

Respectfully submitted,

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By: 
Benton Musslewhite

12922

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing pleading was forwarded, via Courier, on this the 21st day of January, 1984, to the following:

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Benton Musslewhite

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

-----X
In re

"AGENT ORANGE"

MDL No. 381

Product Liability Litigation
-----X

PRESENT LIST OF PLAINTIFFS'
CAUSATION WITNESSES
WITH ATTACHED SUMMARIES
IN ACCORDANCE WITH FRCP 26(b)(4)(A)(i)

1. Charles Baron, M.D.	Exhibit "A"
2. Deborah Anne Barsotti, Ph.D.	Exhibit "B"
3. Ronald Codario, M.D.	Exhibit "C"
4. Arthur W. Galston, Ph.D.	Exhibit "D"
5. John Garofalo, M.D.	Exhibit "E"
6. Lennart Hardell, M.D.	Exhibit "F"
7. Maureen C. Hatch, Ph.D.	Exhibit "G"
8. Alastair W.M. Hay, Ph.D.	Exhibit "H"
9. Herbert Kay, Ph.D.	Exhibit "I"
10. Ronald H. Kerman, Ph.D.	Exhibit "J"
11. Marvin S. Legator, Ph.D.	Exhibit "K"
12. Alan Scott Levin, M.D.	Exhibit "L"
13. Peter Orris, M.D., M.P.H.	Exhibit "M"
14. Marvin A. Schneiderman, Ph.D.	Exhibit "N"
15. Ellen K. Silbergeld, Ph.D.	Exhibit "O"
16. Raymond Singer, Ph.D.	Exhibit "P"
17. Theodor D. Sterling, Ph.D.	Exhibit "Q"
18. Biostatistician/Mathematician (Additional)	Exhibit "R"

PLAINTIFFS' MANAGEMENT COMMITTEE

By Thomas W. Henderson
Thomas W. Henderson, Esquire

12925

Dr. Charles M. Baron, M.D., is a physiatrist practicing in Philadelphia, Pennsylvania. His curriculum vitae will be supplied.

Dr. Baron will testify as to the performance and interpretation of various tests in the veterans. These will include an eltroencephalogram on both sleep and waking states with nasopharyngeal leads. He will also perfrom electromyograms, nerve conduction velocity tests, and somato sensory evoked potentials of the upper and lower extemities.

Dr. Baron will then testify as to the mechanisms by which toxins produce the changes noted in the tests and what the various tests are capable of determining as to the medical status of the patient.

Then he will relate the results obtained in the testing of each plaintiff examined, give opinions as to the causation of those results where possible from the evidence revealed by the tests, and state the prognosis for the individual plaintiff for further deterioration in test results and/or for the individual's condition as a whole.

Dr. Deborah Anne Barsotti is an Assistant Professor of Toxicology in the Department of Pharmacology and Toxicology of the Philadelphia College of Pharmacy and Science in Philadelphia, Pennsylvania. Her curriculum vitae is attached.

Dr. Barsotti is a toxicologist who has done substantial personal investigative work with halogenated aromatic hydrocarbons. This category of chemicals includes various biphenyls and dioxins, and specifically includes tetrachlorodibenzo-p-dioxin (TCDD). She will testify as to the relative chemical stability and lipophilicity of these chemicals as well as their resistance to degradation, and will testify that these qualities are what account for the perceived and documented bioaccumulation of the chemicals in the human system. Dr. Barsotti will emphasize the difference in results between chronic and acute exposures to these chemicals, testifying as to the varying types of responses to acute and chronic exposures.

Dr. Barsotti will discuss her own work as well as review the literature in these areas, noting differences in routes of administration, and in the species and genetic strain of the animals involved. She will explain these variations and where they permit extrapolation of results from animals to humans. In particular, Dr. Barsotti will also testify as to the similarities in response to these chemicals by rhesus monkeys and by humans, and will explain how the similarities permit extrapolation in this instance.

Dr. Barsotti will also discuss reproductive toxicity,

teratology and post-natal toxicity, including instances where no gross or clinical signes of maternal toxicity could be detected.

CURRICULUM VITAE

DEBORAH ANNE BARSOTTI

ADDRESS: Home - 4818 Trinity Place
Phila., PA 19143
215-724-5387

Business - Phila. College of Pharmacy & Science
Dept. of Pharmacology & Toxicology
43rd & Kingsessing Mall
Phila., PA 19104
215-596-8978

CITIZENSHIP: USA

BIRTHDATE: September 14, 1949

MARITAL STATUS: Married; no children

EDUCATION: Humboldt State University
Arcata, California - 1967-1972
Bachelor of Arts
Biology-Medical Technology

Humboldt State University
Arcata, California - 1972-1973
Graduate School
Coursework: Electron microscopy
Endocrinology
Instrumentation

University of Wisconsin
Madison, Wisconsin - 1973-1980
Doctor of Philosophy
Pathology
Thesis Title: Gross, Clinical & Reproductive Effects
of Polychlorinated Biphenyls (PCBs) in
the Rhesus Monkey

EXPERIENCE: Phila. College of Pharmacy & Science
Phila., PA - January, 1983 to Present
Asst. Professor, Dept. of Pharmacology/Toxicology
Instruct Biological Methods in Toxicology, Toxicology
III & Techniques in Electron Microscopy
Advise undergraduate students
Faculty advisor for Tox Club
Member, Advisory Committee for four graduate students
Conduct independent research

Assistant Scientist - July, 1982 to January, 1983
Project Associate - June, 1980 to June, 1982
University of Wisconsin
Dept. of Pathology
Madison, Wisconsin

Coordinated multifaceted research projects involving over 120 rhesus monkeys exposed to low levels of toxins (halogenated aromatic hydrocarbons) and integrated the clinical data and observations with the residue analyses of tissues and fluids obtained by gas chromatography (GC) and confirmed by mass spectrometry (MS).

Supervised the clinical and reproductive evaluations as well as the care of laboratory animals.

Developed data management and word processing systems utilizing on-site computers and tie-ins to a Sperry Univac 1100 to sort, collate and statistically evaluate data.

Conducted gross necropsies and microscopic evaluations and prepared necropsy reports.

Research Assistant - 1976-1980
University of Wisconsin
Dept. of Pathology
Madison, Wisconsin

Conducted radioimmunoassays for serum progesterone and estradiol for use in evaluating the reproductive parameters in rhesus monkeys.

Performed clinical assessments on lab. animals including hematology and clinical chemistries.

Supervised and evaluated data and prepared reports for contractual work.

Separated cellular fractions of tissue homogenates by ultracentrifugation and assayed homogenates and resultant fractions for content of various components.

Provided animal husbandry for rhesus monkey and rat colonies

Supervised unit members on protocols for experimentation and proper methods of conducting basic laboratory analyses.

Pre-Doctoral Fellow - 1974-1976
University of Wisconsin
Dept. of Pathology
Madison, Wisconsin

Stocked and organized a laboratory for the clinical and reproductive analyses of laboratory animals.

12930

Prepared protocols for long-term feeding studies in the laboratory animals including those for gross, clinical and reproductive assessments.

Developed radioimmunoassay procedures for serum progesterone and estradiol.

Conducted metabolism and distribution studies in rats and rhesus monkeys using radiolabeled isomers of halogenated aromatic hydrocarbons and other chemicals.

Laboratory Assistant - 1970-1972
Humboldt State University
Student Health Center
Arcata, California

Duties included assisting in routine clinical laboratory practices involved in urinalysis, gonococcal screening, VDRLs, heterophiles for mononucleosis, throat cultures and pregnancy tests.

AWARDS/HONORS: National Sea Grant Graduate Student of the Year - 1976.

PROFESSIONAL SOCIETIES:

American Society for Primatologists
Mid-Atlantic Chapter, Society of Toxicology

SEMINARS/MEETINGS:

Participant - Federation of American Societies for Experimental Biology (FASEB), Atlantic City, NJ, April, 1976. Topic: "Effects of polychlorinated biphenyls on reproduction in the primate".

Participant - American Association of Pathologists and Bacteriologists, Boston, MA, March, 1976. Topic: "The Association of Transplacental and Mammary Movement of PCBs with Infant Morbidity and Mortality".

Invited Speaker - 9th Annual Sea Grant Association Meeting, Los Angeles, CA, November, 1976. Topic: "Toxicology of PCBs in the Adult and Infant Rhesus Monkey".

Participant - FASEB, Chicago, IL, April, 1977. Topic: "Effects of polychlorinated biphenyls in nonhuman primates".

Participant - American Chemical Society, 11th Great Lakes Regional Meeting, Stevens Point, WI, June, 1977. Topic: "Responses of infant primates to interuterine and neonatal exposure to polychlorinated biphenyls".

Invited Speaker - Community Meeting on PCBs, University of Wisconsin, Parkside, March, 1977.

Participant - International Symposium on Pathobiology of Environmental Pollutants, Storrs, CT, June, 1977. Topics: "Pathology of rhesus macaques (*Macaca mulatta*) exposed to tetrachlorodibenzo-p-dioxin (TCDD)" and "Exposure of polychlorinated biphenyl (PCB) to infant rhesus macaques (*Macaca mulatta*)".

Invited Speaker - Community Meeting on PCBs, Door County, WI, September, 1977.

Invited Speaker - 45th Annual Convention of Association of Midwest Fish and Wildlife Agencies, Milwaukee, WI, July, 1978. Topic: "Consequences of dietary PCB consumption in rhesus monkeys".

Invited Consultant - Symposium on PBB Litigation, Traverse City, MI, July, 1978. Topic: "PBB toxicity in the rhesus monkey".

Invited Speaker - Smerkee's Conservation Club, Sheboygan, WI, February, 1979. Topic: "PCBs and their effects on rhesus monkeys".

Participant - FASEB, Dallas, TX, April, 1979. Topic: "Residual effects of polychlorinated biphenyls on adult nonhuman primates and their offspring".

Expert Witness - State of North Carolina, Halifax County; testimony on toxicity of PCBs, June, 1979.

Participant - Sea Grant Symposium on Toxic Materials and their Effects on Marine Resources, Madison, WI, July, 1979.

PUBLICATIONS:

Barsotti, D. A. and Van Miller, J. P.: Reproductive assessments of rhesus monkeys housed in climate controlled conditions. Amer. J. Primatol., submitted 1983.

Barsotti, D. A.: Long term reproductive assessment of rhesus monkeys exposed to chlorinated biphenyls (Aroclor 1248). Fd. Cosmet. Toxicol., submitted 1983.

Barsotti, D. A. and Van Miller, J. P.: Accumulation of a commercial polychlorinated biphenyl mixture (Aroclor 1010) in adult rhesus monkeys and their nursing offspring. Toxicology. In press.

Bowman, R. E., Heironimus, M. P. and Barsotti, D. A.: Locomotor hyperactivity in PCB-exposed rhesus monkeys. Neurotoxicol. 2:251-268, 1981.

Barsotti, D. A., Abrahamson, L. J., Marlar, R. J. and Allen, J. R.: The effect of climate controlled housing on the reproductive potential of the rhesus monkey. J. Reprod. Fertil. 59:15-20, 1980.

- Barsotti, D. A. and Allen, J. R.: Health implications of Aroclor 1016 on nursing rhesus monkey infants. *Toxicol. Appl. Pharmacol.* 52:135, 1980 (Abstract).
- Allen, J. R., Barsotti, D. A. and Carstens, L. A.: Residual effects of polychlorinated biphenyls on adult nonhuman primates and their offspring. *J. Toxicol. Environ. Hlth.* 6:55-66, 1980.
- Allen, J. R., Barsotti, D. A. and Van Miller, J. P.: Toxicological effects of Aroclor 1016 on nonhuman primates. EPA Report #68-02:2464, 1980.
- Barsotti, D. A., Abrahamson, L. J. and Allen, J. R.: Hormonal alterations in female rhesus monkeys fed diets containing 2,3,7,8-tetrachlorodibenzo-p-dioxin. *Bull. Environ. Contam. Toxicol.* 21:463-469, 1979.
- Barsotti, D. A., Carstens, L. A. and Allen, J. R.: Residual effects of polychlorinated biphenyls on adult nonhuman primates and their offspring. *Fed. Proc.* 38:1119, 1979 (Abstract).
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12333

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Dr. Ronald Corderio, M.D., is an internist practicing in Philadelphia, Pennsylvania. His curriculum vitae will be supplied.

Dr. Corderio will testify that he is currently engaged in the private practice of medicine as an internist. He will testify that he personally has examined and/or treated over five hundred Vietnam veterans for complaints related to Agent Orange. He will testify as to the type of interview he has conducted with each veteran, the type of tests that each veteran should have performed, and the clinical significance of positive or negative findings on each of those tests. He will also discuss how toxins, and specifically Agent Orange, can cause changes in each of the tests and what such changes portend for the individual.

Dr. Corderio will next discuss some of the available medical literature in both animals and humans to further validate his own work.

Dr. Corderio will then outline in detail the results obtained from his own extensive investigation into Agent Orange toxicity based upon his examination of more than five hundred veterans, and will present those conclusions which he feels are reasonably appropriate based upon an analysis of his investigative work.

With this material as background, Dr. Corderio will then proceed to present the test results which have been obtained for each court-approved representative veteran plaintiff. He will

interpret each of the test results in terms of those individual plaintiffs.

Finally, he will testify on generic causation and specific proximate causation in relation to each representative veteran plaintiff. He will also testify as to prognosis for each representative veteran plaintiff.

ARTHUR W. GALSTON, Ph.D.

Dr. Galston is Eaton Professor of Botany, Department of Biology, at Yale University. His Curriculum Vitae will be supplied.

Dr. Galston is a plant physiologist and has personally observed the effect of the spraying of Agent Orange on the Vietnam ecosystem, i.e. the devastation of the Vietnamese countryside. Dr. Galston has been in Vietnam on four occasions between 1971 and 1982, and will describe those observations while in Vietnam, with such pictorial evidence as is available.

Dr. Galston will testify to the potential and actual effects of phenoxy herbicides and their contaminants, both in Vietnam and elsewhere, including the United States and Sweden, and other places. The testimony will include the chemistry and the mechanisms of action of such chemicals on plant life.

In addition, Dr. Galston will testify to the fate of Agent Orange and other phenoxy herbicides and their contaminants, especially TCDD, in the environment generally and in Vietnam in particular. Dr. Galston will testify to the persistence of such chemicals on plants, in water, and in soil, such that exposure to the phenoxy herbicides and their contaminants, especially TCDD, by the veterans in sprayed areas in Vietnam is presumed.

The bases or grounds for Dr. Galston's testimony as to any facts and opinions expressed are a review of the scientific literature and his personal research and experience.

Dr. John Garofalo is a immunologist practicing in Philadelphia, Pennsylvania. His curriculum vitae will be supplied.

Dr. Garofalo will testify to the performance of certain tests on the veteran plaintiffs and their wives and children and to the interpretation of those test results. Specifically, he will be conducting phenotyping assay tests for, among others, B-lymphocytes, K cells, T-lymphocytes, T-helper cells, T-cytotoxic cells, and T-suppressor cells. The purpose of these tests is to determine antigen levels, antibody levels, and the presence of a viral defenses and immune surveillance systems, and to identify various types of cells that may be indicators of and/or precursors of malignancy. Not only will the tests determine the presence of such factors, but they will also include functional assays of each.

LENNART HARDELL, M.D.

Dr. Hardell is employed by the University Hospital in its Department of Oncology in Umeå, Sweden, where he specializes in internal medicine and oncology. His work includes diagnosis, treatment, and evaluation of possible causes of cancer, and education of medical students.

Dr. Hardell will testify to several epidemiological studies which he and colleagues have conducted in Sweden. This research includes investigations concerning the relationship between the risk for different types of cancer and exposure to phenoxy herbicides and chlorophenols. The research has been published in the medical and scientific literature.

These studies utilized the case-control study as the vehicle for investigation. Certain methodological aspects, such as selection of cases, selection of controls, assessment of exposure, and statistical methods, were considered; and then utilization was based upon thoroughly considered aspects of bias, all of which were well controlled.

Specifically, these studies, four in number, involved soft tissue sarcomas, malignant lymphomas, and colon cancer. Highly statistically significant risks of soft tissue sarcomas and malignant lymphoma were found, whereas no association was found for colon cancer. In point of fact, the negative finding for colon cancer strongly supports the statistical significance of the increased risk demonstrated for soft tissue sarcomas and malignant lymphomas, i.e. a presumed causal relationship between exposure to phenoxy herbicides and human cancer particularly of soft tissue sarcoma and malignant lymphoma.

Dr. Hardell has also seen in his clinical practice basal cell carcinoma of persons previously exposed to phenoxy herbicides, with no other known confounding variables.

With respect to those cases with soft tissue sarcoma, malignant lymphoma, and basal cell carcinomas, Dr. Hardell will testify that the presumed exposure to Agent Orange caused, in significant part, such neoplastic processes.

The bases for Dr. Hardell's testimony as to various facts and opinion include: educational background; professional training and experience; review of the applicable medical and scientific literature; personal research; and a review of the pertinent medical data of the relevant representative plaintiffs.

MAUREEN C. HATCH, Ph.D.

Dr. Hatch is Assistant Professor of Epidemiology at Columbia University, School of Public Health, in New York City. Her Curriculum Vitae will be supplied.

The subject matter about which Dr. Hatch will testify is reproductive toxicology and its specific applicability to miscarriages and congenital malformations (birth defects) in the wives and children of Vietnam veterans.

Dr. Hatch will testify at length to the data collected in Vietnam regarding untoward pregnancy outcomes. Dr. Hatch is one of two investigators who are to publish that portion of the International Symposium held in Ho Chi Minh City in January, 1983 having to do with reproductive toxicology as a result of exposure to Agent Orange and other phenoxy herbicide spraying in Vietnam.

The results of these data demonstrate a statistically significant increase in certain congenital malformations, e.g. cleft palate, limb deformities, and anencephaly, as a result of paternal mediated reproductive effects. The exposure of the fathers was to the spraying of Agent Orange in Vietnam. The mothers were not exposed.

These human data are coupled with positive, consistent animal data. For example, such studies where males were exposed indicate the following; the male gonads are a target site of 2,3,7,8-TCDD action; at the endocrinological level, there has been demonstrated a major effect, i.e., AHH receptor in male gonads; which very nicely provides a mechanistic linkage; and finally, abnormal biochemical and morphologic characteristics of the sperm have been likewise demonstrated.

19011

ALASTAIR W.M. HAY, Ph.D.

Dr. Hay is a lecturer on Chemical Pathology, Department of Chemical Pathology, Old Medical School, University of Leeds, Leeds, England. His partial Curriculum Vitae is attached.

Dr. Hay will testify to a broad spectrum of matters related to Agent Orange, phenoxy herbicides, and their contaminants, including dioxins, especially 2,3,7,8-TCDD.

Dr. Hay will discuss in detail his knowledge of the various phenoxy herbicides and their contaminants, including but not limited to the various aspects of: chemistry; biochemistry; manufacture and/or production; fate in the environment, animals, and humans; modes of exposure, i.e. absorption, ingestion and inhalation, specifically by the veterans who served in Vietnam; toxicity; and the state of the medical and scientific literature at various times since at least 1957 forward.

The medical and scientific literature, attendance and participation in various symposia, review of various documents of certain defendants, personal research, and experience form the bases of whatever facts and opinions to which Dr. Hay will testify.

Dr. Hay's testimony regarding the medical and scientific literature will include an exposition of the definitions and explanations, and their applicability to the troops exposed in Vietnam, of the phenoxy herbicides and their contaminants, in the following areas: plant physiology; toxicology; neuro-toxicology. both neurological and psychological; epidemiology; immunology; mutagenicity; teratology; reproductive toxicology; and carcinogenicity.

More specifically, the phenoxy herbicides, including Agent Orange, 2,4-D and 2,4,5-T, and their contaminants, including dioxins, especially TCDD are highly toxic, neuro-toxic, immuno-suppressive, teratogenic, potentially mutagenic, and certainly carcinogenic. As a carcinogen, e.g. TCDD, it has no safe level and indeed any single exposure may prove to result in human cancer many years later; said in another way, there is no "no effect" level that can be established.

Dr. Hay will testify to examples of the grounds which support the above, including: knowledge of spraying Agent Orange, especially its effect on the Vietnamese countryside; the purpose and historical tracing of the animal studies; historical tracing of the human data, including the various industrial incidents since 1949; references to specific documents, such as the EPA Dioxin document (presently in Draft form); various cancer epidemiology; pertinent teratology epidemiology; various studies of the Vietnamese, especially in area of reproductive toxicology; and those reports of the symptoms and diagnoses of the U.S. Vietnam veterans.

12943

Name: Alastair Watt Macintyre HAY
 D.O.B.: 21 April 1947
 Marital Status: Married
 Children: 1 son (Tom)
 Place of Birth: Glasgow, Scotland
 Nationality: British
 Degrees: B.Sc. (Hons), Chemistry IIA - London 1969
 Ph.D., Biochemistry, London 1973
 Home Address: School House,
 Arthington Lane,
 Arthington,
 Leeds LS21 1PE
 England.
 Work Address: Department of Chemical Pathology,
 Old Medical School,
 University of Leeds,
 Leeds LS2 9NL
 England.
 Place of Secondary Education: Gifford Technical High School,
 Bulowayo,
 Zimbabwe (formerly Rhodesia)
 Present Appointment: University lecturer in Chemical Pathology
 since April 1979 (University of Leeds)
 Leeds, England.
 Former Appointments: Research Fellow - Zoological Soc. of London
 September 1972 - November 1977
 Research Fellow - University of Leeds,
 Department of Animal Physiology and Nutritic
 December 1977 - March 1979

PUBLICATIONS

Books

- (i) Alastair Hay. The Chemical Scythe: Lessons of 2,4,5-T and Dioxin. Plenum Press. 265pp. August 1982
- (ii) Sean Murphy, Alastair Hay and Steven Rose. No Fire: No Thunder. The threat of chemical and biological warfare. Pluto Press. (To be published in January 1984). 135pp.

Scientific Papers

Some 50 scientific papers including:

12344

- (i) Hay, A.W.M., Mawer, E.B., Hassan, A.G., Crawford, M.A., & Stevens, P.A. The role of essential fatty acids in vitamin dependent calcium absorption in the intestine. Proc. of 5th Vitamin D Workshop. Williamsburg USA now in Vitamin D, Chemical, Biochemical and Clinical Endocrinology of Calcium

- Metabolism. Walter de Gruyter. Berlin. 1982 pp309-311.
- (ii) Hay, Alastair. Vitamin D: Sunlight and precursors. Nature. 297, 364 (1982)
 - (iii) Hay, A. Herbicides, Trichlorophenols and soft tissue sarcomas. Lancet I, 1240, (1982).
 - (iv) Hay, A. It kills weeds, but what about people? New Scientist. 94, No.1314. pp158-161 (1982).
 - (v) Hay, A., Murphy, S., Robinson, J.P., and S. Rose. The poison cloud hanging over Europe. New Scientist. 93, No.1296 pp6 635 (1982).
 - (vi) Hay, Alastair. New Pathways for chlorinated dioxins. Nature, 294, 514-515 (1981).
 - (vii) Hay, A. Experimental Toxicology and cytogenetics: an overview. In "Herbicides and War" to be published by Stockholm International Peace Research Institute. (1984) A. Westing, Ed.
 - (viii) Hay, A. The Mutagenic properties of 2,3,7,8-Tetrachloro-dibenzo-p-dioxin in "Chlorinated Dioxins and Dibenzofurans in the Total Environment. Vol II" Edit. by Keith, L.H. et al to be published in 1984.

Other Publications

I have written some 90 odd articles for the News, News and Views and books review section of the scientific journal Nature since 1976.

Dr. Herbert Kaye, Ph.D., is a psychologist in the Department of Psychology at the State University of New York at Stonybrook, Long Island and a visiting Associate Professor in the Department of Psychiatry at New York University Medical Center. His curriculum vitae will be supplied.

Dr. Kaye will testify concerning the significance of a battery of quantitative neurophysiological tests called neurometrics will which be performed on the veteran, wife and children plaintiffs. The procedures were developed in part by Dr. Kaye in conjunction with medical and psychological researchers from this and other countries. He will testify that neurometrics, on which he has written extensively, is a sophisticated battery of electrical tests in use for about fifty years, which are highly efficient in determining cortical EEG and evoked responses.

Dr. Kay will explain the model used in the computerization against which the test results are compared and will explain how deviations from normal produce certain effects.

Dr. Kaye will also discuss the mechanism by which toxins produce these altered responses, and what effect those altered responses have upon the individual veterans at present, and the prognosis for any additional changes or deterioration in the future based upon an assumed bioaccumulation of the toxic materials in the system. In doing so, he will rely on his experience in diagnosing many Vietnam veterans exposed to Agent Orange.

RONALD H. KERMAN, Ph.D.

Dr. Kerman is Associate Professor, and Chief, Cellular Immunology, Clinical Immunology Laboratories, the University of Texas Medical School at Houston. His Curriculum Vitae is attached.

Dr. Kerman will testify that 2,3,7,8-TCDD in particular causes, among others, immuno-suppressive effects, as reported in the literature regarding the various animal species studies. Specifically, TCDD has been demonstrated to suppress T-cell mediated immunity in such species. This effect likewise has been demonstrated in humans by Bekesi, specifically an alteration of mature T-cells.

Dr. Kerman will testify that the special scientific discipline involved is immuno-toxicology which has been defined as "the undesirable effects of an inappropriate response of the immune system". The bases for the facts and opinions to which Dr. Kerman will testify include a review of the applicable medical and scientific literature, his educational and professional background, and his work in connection with the Texas Agent Orange Study.

Dr. Kerman will discuss the following in his testimony: the immune system, with its organic, cellular, and humoral components - most especially with regard to the latter, T-helper cells, B-cells, plasma cells and immunoglobulin production; immune response, both beneficial and harmful; the various experimental studies, particularly those demonstrating atrophy of the thymus, weight loss, depletion of lymphoid organs, lymphopenia, cutaneous type delayed hypersensitivity (skin thickness) and altered bacterial immunity.

Dr. Kerman will testify that on the basis of the above a person exposed to TCDD might have increased predisposition to increased infection and neoplasm (cancer).

CURRICULUM VITAE

Ronald H. Kerman, Ph.D.

DATE OF BIRTH: June 10, 1943

PLACE OF BIRTH: Chicago, Illinois

NATIONALITY: U.S. Citizen

SEX: Male

EDUCATION:

1965 University of Illinois, B.S. (with Honors)
1967 University of Illinois, M.S.
1969 University of Illinois, Ph.D. in Immunology

HONORS:

1965 Bachelor of Science with General Honors in the College
1967-1969 Recipient of Public Health Service Predoctoral Traineeship
1967 Phi Sigma National Biological Honorary
1969-1971 Recipient of Public Health Service Postdoctoral Traineeship
1970 Society of Sigma Xi

RESEARCH AND PROFESSIONAL EXPERIENCE:

1983- Associate Professor
Department of Pathology, and Chief, Cellular Immunology, Clinical Immunology Laboratories, The University of Texas Medical School at Houston

1981- Associate Professor
Department of Surgery, and Head, Histocompatibility and Immune Evaluation Laboratories, Division of Organ Transplantation, The University of Texas Medical School at Houston

1977- Member, Program in Immunology, Graduate School of Biomedical Sciences, The University of Texas Health Science Center at Houston

1977-1980 Assistant Professor
Department of Surgery, and Head, Histocompatibility and Immune Evaluation Laboratories, Division of Organ Transplantation, The University of Texas Medical School at Houston

1974-1977 Assistant Professor
Department of Surgery, Loyola University Stritch School of Medicine, Maywood, Illinois

1973-1977 Research Immunologist
Chief, Immunobiology Research Laboratory, Research Service, V. A. Hospital, Hines, Illinois

1972-1973 Assistant Professor
Department of Microbiology, Jefferson Medical College

1969-1971 Postdoctoral Fellow, (Immunology)
Children's Hospital of Philadelphia and The University of Pennsylvania School of Medicine

12349

**PROFESSIONAL
SOCIETIES:**

The Transplantation Society (Editorial Board, Transplantation and Member, Symposium Committee)
American Association of Immunologists
American Association for Cancer Research
New York Academy of Sciences
American Society of Transplant Physicians (Member, and Vice Chairman, Scientific Studies Committee)
Society for Experimental Biology and Medicine
International Society for Heart Transplantation
American Association for the Advancement of Science
American Society for Histocompatibility and Immunogenetics (Chairman, Finance and Audit Committee, and Member, Laboratory Accreditation Committee)

**RESEARCH
INTERESTS:**

Immunologic response to allotransplantation and malignancy
Evaluation of immunocompetency

RESEARCH SUPPORT:

1974-1978	Co-principal Investigator: Bronchogenic Carcinoma: Immunologic Profile, Radio and Immunotherapy - V.A. Medical Research Grant No. MRIS-8121-08. \$213,000
1976-1979	Co-principal Investigator: Immunotherapy Adjuvant to Radiotherapy of Head and Neck Cancer - V.A. Medical Research Grant No. MRIS-8121-06. \$78,814
1976-1980	Co-principal Investigator: Factors Influencing Immunocompetence in Human Transplantation - V.A. Medical Research Grant No. MRIS-3068. \$68,770
1977-1978	Principal Investigator: Functional and Surface Receptor Differences of Human T-lymphocyte Subpopulations - General Research Support Funds, The University of Texas Medical School at Houston. \$5,000
1977-	Principal Investigator: The Role of HLA Typing in Renal Transplantation, ESRD Program, No. 450068. \$377,400 (last year)
1977-	Principal Investigator: Immune Monitoring for the Diagnosis of Renal Allograft Rejection, ESRD Program, No. 450068. \$544,800 (last year)
1983-1984	Principal Investigator: Immune Evaluation of Veterans Exposed to Agent Orange. Texas Veterans Agent Orange Assistance Program, IAC(83-84)1266. \$93,352

OTHER ACTIVITIES:

Special Consultant in Immunology to the Epidemiology and Disease Control Study Section, NIH
Consultant in Immunology and Histocompatibility Testing to the Department of Laboratory Medicine, M.D. Anderson Hospital and Tumor Institute
Editorial Board, Transplantation
Review of manuscripts for the journal Human Immunology
Review of manuscripts for the journal Transplantation
Review of manuscripts for the journal Heart Transplantation
Book reviewer for Journal of American Medical Association
Literature Reviewer for The American Association of Clinical Histocompatibility Testing -- AACHTion News

Grant Reviewer for the Kidney Foundation of Canada
Grant Reviewer in Transplantation Immunology for The
March of Dimes - Birth Defects Foundation
Outside Reviewer of Research Proposals in Immunology for
the Research and Development Committee, The Veter-
ans Administration Research Service
Invited Participant (as a testing laboratory) in The Third
American HLA Workshop
Invited Participant (as a testing laboratory) in The Eighth
International Histocompatibility Workshop "Relevance of
DR typing to renal allograft survival"
Invited Participant (as a testing laboratory) in The Inter-
national Transfusion and Transplantation Workshop
Invited Participant (as a testing laboratory) for the Ninth
International Histocompatibility Workshop
Invited Presenter at an NIH Workshop, "The Biological
Relevance of Immune Suppression as Induced by Genetic,
Therapeutic and Environmental Factors"
Invited Participant (as a testing laboratory) in the Inter-
national Collaborative Transplant Study
Laboratory Inspector for Clinical Laboratory Accreditation
in Histocompatibility for The American Society for His-
tocompatibility and Immunogenetics and The College of
American Pathologists
Chairman, Finance and Audit Committee for The American
Society for Histocompatibility and Immunogenetics
Member, Symposium and Affiliations Committee, The
Transplantation Society
Member and Vice-Chairman, Scientific Studies Committee,
American Society of Transplant Physicians
Member, Acquired Immune Deficiency Syndrome (AIDS)
Working Group for the Houston Area
Chairman, Organizing Committee and Host for The Fourth
International Immune Monitoring Symposium: Im-
munological Evaluation and Monitoring of the Transplant
Recipient (1983)
Member, Organizing Committee for the International Sym-
posium on Relevant Immunological Factors in Clinical
Kidney Transplantation, Heidelberg, West Germany, 1985

Member, UTMSH Admissions Interview Committee
Member, UTMSH Admissions Committee
Member, Medical Review Board, Organ Transplantation
Center, UTMSH
Member, Committee on Subject Selection for The University
of Texas System Agent Orange Study
Member, Steering Committee, Program in Immunology,
UT-GSBS
Chairman, By-Laws Committee, Program in Immunology,
UT-GSBS
Course Director, "Methods in Cellular Immunology," a Pro-
gram in Immunology Course, UT-GSBS

BIBLIOGRAPHY

Ronald H. Kerman, Ph.D.

Publications

1. Kerman, R., Segre, D. and Myers, W.L.: Altered response to pneumococcal polysaccharide in offspring of immunologically paralyzed mice. *Science* 156:1514, 1967.
2. Kerman, R., Segre, D. and Myers, W.L.: The role of immune and natural specific antibodies in immunologic paralysis and immunity of mice to pneumococcal polysaccharide Type III. *J. Immunol.* 104:655, 1970.
3. Kerman, R. and Segre, D.: Anti-pneumococcal polysaccharide Type III hemolytic plaques in mice: Cellular response in immunity and immunologic paralysis. *J. Immunol.* 104:1262, 1970.
4. Kerman, R. and Harris, T.N.: Resistance to denaturation by periodate of a dialyzable histocompatibility antigen. *Proc. Soc. Exp. Biol. Med.* 141:179-183, 1972.
5. Kerman, R.H., Harris, T.N. and Harris, S.: Preparation of a dialyzable histocompatibility antigen from balb/c mice. *Proc. Natl. Acad. Sci.* 69:223-227, 1972.
6. Smith, R.A., Kerman, R., Ezdinli, E. and Stefani, S.: A modified assay for the detection of human adult active rosette forming cells. *J. Immunol. Meth.* 8:175-184, 1975.
7. Kerman, R. and Stefani, S.: Immunological evaluation of patients with solid tumors before and after radiotherapy. In Crispen, R.G. (ed.): Neoplasm Immunity: Mechanisms, pp. 109-120. University of Illinois Press, 1976.
8. Stefani, S., Kerman, R. and Abbate, J.: Immune evaluation of lung cancer patients undergoing radiation therapy. *Cancer* 37:2792-2796, 1976.
9. Stefani, S., Kerman, R. and Abbate, J.: Serial studies of immunocompetence of patients undergoing radiotherapy for malignancies of the head and neck. *Am. J. Roentgenol.* 126:880-886, 1976.
10. Kerman, R.H. and Geis, W.P.: Total and active T-cell kinetics in renal allograft recipients. *Surgery* 79:398-407, 1976.
11. Kerman, R., Smith, R., Stefani, S. and Ezdinli, E.: Active T-rosette forming cells in the peripheral blood of cancer patients. *Cancer Res.* 36:3274-3278, 1976.
12. Kerman, R., Smith, R., Ezdinli, E. and Stefani, S.: Unification and technical aspects of total T, active T and B lymphocyte rosette assays. *Immunol. Comm.* 5(7-9):685-694, 1976.
13. Dodson, M.G., Kerman, R.H., Lange, C.F., Stefani, S. and O'Leary, J.A.: T and B cells in pregnancy. *Obstet. Gynecol.* 49:299-302, 1977.

14. Kerman, R.H. and Stefani, S.: PHA stimulation of lymphocytes from patients with lung cancer. *Oncology* 34:10-12, 1977.
15. Kerman, R.H. and Stefani, S.: Radio and immunotherapy of lung cancer: A preliminary report. In Crispen, R.G. (ed.): Neoplasm Immunity-Solid Tumor Therapy, pp. 29-35. Franklin Institute Press, 1977.
16. Stefani, S. and Kerman, R.H.: Lymphocyte response to PHA before and after radiation therapy in patients with carcinomas of the head and neck. *J. Laryngol. Otol.* 91:605-609, 1977.
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18. Marshack, M., Toto, P. and Kerman, R.H.: Delayed hypersensitivity in the hamster cheek pouch. *J. Immunol. Meth.* 15:325-330, 1977.
19. Marshack, M., Toto, P. and Kerman, R.H.: Immunotherapy of chemically-induced tumors in the hamster cheek pouch with dinitrochlorobenzene. *J. Dental Res.* 57:625-630, 1978.
20. Stefani, S. and Kerman, R.: Prognostic significance of pre-therapy delayed hypersensitivity and T-cell levels in patients with lung cancer. In Nieburgs, H.E. (ed.): Proceedings of the Third International Symposium on the Detection and Prevention of Cancer, Vol. 1, Part II, pp. 785-797. Marcel Dekker, Inc., 1978.
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26. Kerman, R.H. and Stefani, S.S.: Effect of BCG immunotherapy on the active T and total T-RFC in patients with lung cancer. *Cancer Immunol. Immunother.* 4:41-47, 1978.
27. Kahan, B.D., Kerman, R.H. and McConnell, R.: Combination of immunological and radionuclide techniques to diagnose allograft rejection. *Surgical Forum.* 29:364-366, 1978.

28. Stefani, S. and Kerman, R.H.: Prognostic value of the immunologic profile in inoperable lung cancer patients treated by radiation. In Muggia, F. and Rozenzweig, M. (eds.): Lung Cancer (Progress in Cancer Research and Therapy), Vol. 11, pp. 465-470. Raven Press, Inc., New York, 1979.
29. Kerman, R.H.: Identification of human T and B lymphocytes. In Natelson, S., Pesce, A.J. and Dietz, A.A.: Clinical Immunochemistry: Chemical and Cellular Bases and Applications in Disease, pp. 12-20. American Association for Clinical Chemistry, 1979.
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Abstracts and Presentations

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4. Kerman, R., Stefani, S. and Geis, W.P.: Total and active T-cell dynamics in renal allograft recipients. Abstracts of the American Society Transplant Surgeons, Chicago, Illinois, May 1976.
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8. Geis, W.P., Vaz, A.L. and Kerman, R.H.: Steroid sparing effect of ATG in high risk renal allograft survival. Presented at the American Society of Transplant Surgeons Meeting, Chicago, Illinois, May 1976.
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11. Kerman, R. and Geis, W.P.: T-RFC monitoring of CMI events in renal allograft recipients. Presented at the Sixth International Congress of the Transplantation Society Special Session Immunological Monitoring of Transplant Recipient, New York, August 1976.
12. Kerman, R. and Stefani, S.: Radio and immunotherapy of lung cancer: A preliminary report. Presented at the 1977 Chicago Symposium: Immunotherapy of Solid Tumors, Chicago Illinois, February 24-25, 1977.

13. Stefani, S. and Kerman, R.H.: Relevance of immunologic analysis for patients with inoperable lung cancer treated by radiotherapy. Presented at an NCI sponsored Symposium "The Second Conference on Lung Cancer Treatment," at Airlie House, Virginia, May 22-24, 1977.
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22. Kerman, R.H.: Invited speaker to a special workshop "Immunological Monitoring of the Transplant Patients", VII International Congress of The Transplantation Society, Rome, Italy, September 1978.
23. Kahan, B.D., Kerman, R. and McConnell, R.: Combination of immunological and radionuclide techniques diagnoses allograft rejection. Presented at the American College of Surgeons, San Francisco, California, October 1978.
24. Michelson, J., McConell, Kerman, R. and Kahan, B.: Association of acute rejection episodes in renal transplant patients with scored results of computer analyzed data. Presented at the Southwest Society of Nuclear Medicine Meeting, March 16, 1979, San Antonio, Texas.

25. Kerman, R.H., Macek, C. and Kahan, B.D.: Increase in 3 different E-rosette markers on human T cells following PHA activation. Fed. Proc. 38 (No. 3, Part II):1282. Presented at the Annual Meeting of The American Association of Immunologists, Dallas, Texas, April 1979.
26. Kerman, R.H.: Immunological considerations in renal transplantation. Clinical Oncology Grand Rounds, M.D. Anderson Hospital and Tumor Institute, September 1979.
27. Kerman, R.H. and Kahan, B.D.: Assessment of immune parameters of transplant recipients on immunosuppressive therapy. Presented at an NIH Workshop on "The Biological Relevance of Immune Suppression as Induced by Genetic Therapy and Environmental Factors," Williamsburg, Virginia, November 1979.
28. Invited participant in a working cadre for the NIH to develop a "Consensus On Immunotoxicology" for the National Toxicology Program, November 1979, Research Triangle Park, N.C., NIEHS, NIH.
29. Kerman, R.H.: Histocompatibility testing in transplantation. Pathology Grand Rounds, St. Luke's Hospital, January 1980.
30. Van Buren, C.T., Kerman, R.H. VanBuren, D. and Kahan, B.D.: Correlation of immune responsiveness with nutritional indices in chronic renal failure patients. Presented at the American Society for Parenteral and Enteral Nutrition, Annual Meeting, Chicago, Illinois, January - February 1980.
31. Kerman, R.H.: Immune monitoring of renal allograft recipients. Surgical Grand Rounds, University of Miami School of Medicine, March 1980.
32. Kerman, R.H.: Pre- and postoperative immune monitoring of allograft recipients. Medical Grand Rounds, Division of Dialysis and Transplantation, Children's Hospital of Los Angeles, April 1980.
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41. Kerman, R., Floyd, M., Van Buren, C.T. and Kahan, B.D.: Prolonged allograft survival of strong pretransplant immune responders treated with ATG. Presented at the VIIIth International Congress of The Transplantation Society, Boston, Massachusetts, June 1980.
42. Kerman, R., Floyd, M., Van Buren, C.T. and Kahan, B.D.: Prediction of renal allograft survival based on pretransplant non-specific immunocompetence. Presented at The Second International Symposium on Immunological Monitoring of the Transplant Recipient, Leiden, The Netherlands, September 1980.
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44. Kerman, R.H. and Kahan, B.D.: Increased expression of the active T-RFC receptor as a measure of allosensitization following in vitro stimulation of recipient lymphocytes by soluble donor HLA antigens. Presented at The Second International Symposium on Immunological Monitoring of the Transplant Recipient, Leiden, The Netherlands, September 1980.
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50. Schoenberg, L.P., Kahan, B.D. and Kerman, R.H.: The use of Cyclosporin A as immunosuppressive medication in renal transplantation. Presented at The National Kidney Foundation, Inc., Washington, D.C., November 1981. Amer. J. Kidney Diseases, Program for Clinical Dialysis and Transplantation Forum, p. 29.
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52. Flechner, S., Boileau, M., Payne, W., Van Buren, C., Kerman, R. and Kahan, B.: The use of Cyclosporin A in strong immune responder, high risk renal transplant recipients. American Urological Association, Kansas City, Kansas, 1982.
53. Kerman, R., Van Buren, C., Payne, W., Flechner, S., Agostino, G., Conley, S., Brewer, E. and Kahan, B.: Influence of blood transfusions on immune responsiveness. Presented at The Transfusion and Transplantation Conference, Los Angeles, California, January - February 1982.
54. Agostino, G., Kahan, B.D. and Kerman, R.H.: Suppression of mixed leucocyte culture using mononuclear leukocytes from normals, uremics and allograft recipients. Presented at the Annual Meeting of The American Association of Immunologists, FASEB, New Orleans, Louisiana, April 1982.
55. Agostino, G.J., Kahan, B.D. and Kerman, R.H.: Measurement of suppressor cell status in potential allograft recipients. Presented at the Annual Meeting of The American Association of Clinical Histocompatibility Testing, San Francisco, California, April 1982.
56. Kerman, R.H.: Invited presenter at two workshops on 1) Immune monitoring of allograft recipients and 2) The effect of transfused blood and blood products on uremic hosts. Presented at the Annual Meeting of The North American Transplant Coordinators Organization, San Antonio, Texas, May 1982.
57. Kerman, R.H., Van Buren, C., Flechner, S., Agostino, G., Conley, S., Brewer, E. and Kahan, B.D.: The influence of pretransplant blood transfusions from random donors on immune parameters affecting cadaveric allograft survival. Presented at The Annual Meeting of The American Society of Transplant Surgeons, Chicago, Illinois, June 1982.

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59. Kerman, R.H.: Invited presenter at a workshop on "Human T lymphocyte subpopulations: Their role in rejection and immunosuppression." Presented at the International Congress of The Transplantation Society, Brighton, England, August 1982.
60. Kerman, R.H.: Invited presenter at a workshop on "Mechanisms responsible for blood transfusion effects." Presented at The International Congress of The Transplantation Society, Brighton, England, August 1982.
61. Ettenger, R.B., Kerman, R., Jordan, S.C., Warshaw, B.L., Harris, R. and Fine, R.: Sensitization after donor-specific transfusions for live-related renal transplantation. Presented at The International Congress of The Transplantation Society, Brighton, England, August 1982.
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67. Kahan, B.D., Kerman, R., Payne, W.D., Flechner, S. and Van Buren, C.T.: Immunopharmacologic studies of cyclosporine-treated renal allograft recipients. Fifth Tripartite Meeting, Society of University Surgeons, Salzburg, Austria, September 1982.

68. Kerman, R.H., Flechner, S., Van Buren, C.T., Payne, W., and Kahan, B.D.: Cyclosporine improves allograft survival in immunologically high-risk renal allograft recipients. Presented at the Third International Immunological Monitoring Symposium, Key Biscayne, Florida, November 1982.
69. Kerman, R.H., Van Buren, C.T., Payne, W., Flechner, S., and Kahan, B.D.: Detection of host presensitization to donor alloantigens utilizing a comprehensive immune crossmatch. Presented at the Third International Immunological Monitoring Symposium, Key Biscayne, Florida, November 1982.
70. Kerman, R.H., Payne, W., Van Buren, C.T., Flechner, S., and Kahan, B.D.: Immune monitoring of renal allograft recipients treated with cyclosporine or azathioprine using donor-specific and nonspecific assays as well as monoclonal T cell reagents. Presented at the Third International Immunological Monitoring Symposium, Key Biscayne, Florida, November 1982.
71. Kerman, R.H.: Invited plenary speaker at the First Annual Meeting of The American Society of Transplant Physicians, "Optimizing immunosuppression: Mode of action of cyclosporine." Chicago, December 1982.
72. Kerman, R.H., Van Buren, C.T., Payne, W., Flechner, S., and Kahan, B.D.: Cyclosporine improves allograft survival in immunologically high-risk renal allograft recipients. Presented at The Annual Meeting, National Kidney Foundation, Clinical Dialysis and Transplant Forum, Chicago, December 1982.
73. Kerman, R.H.: Role of immune evaluation in clinical medicine. Clinical Immunology Grand Rounds, The Children's Memorial Hospital, Chicago, Illinois, December 1982.
74. Kerman, R.H.: Immunologic effects of toxic materials. Presented at Toxicology - Clinical Update, University of Texas Medical Branch, Galveston, Texas, January 1983.
75. Kerman, R.H.: Cyclosporine improves allograft survival in immunologically high risk renal allograft recipients. Presented at Pathology Grand Rounds, University of Pittsburgh School of Medicine, February 1983.
76. Kerman, R.H.: Immune evaluation of renal failure patients and allograft recipients. Presented at Surgical Grand Rounds, St. Louis University Medical Center, St. Louis, Missouri, March 1983.
77. Kerman, R.H.: Immunological evaluation of hemophiliacs. Presented at a Symposium on Current Problems in the Management of Hemophiliac Complications, Houston, Texas, April 1983.
78. Flechner, S., Kerman, R.H., Van Buren, C.T., Payne, W., and Kahan, B.D.: Successful transplantation of high mixed lymphocyte culture haplo-identical living related donors using cyclosporine and prednisone. Presented at the Annual American Urological Association, Las Vegas, Nevada, April 1983.
79. Kerman, R.H., Flechner, S., Van Buren, C.T., Payne, W., and Kahan, B.D.: Immunological monitoring of renal allograft recipients treated with cyclosporine. Presented at The First International Congress on Cyclosporine, Houston, Texas, May 1983.

80. Van Buren, C., Kerman, R., Agostino, G., Flechner, S., Payne, W.D., and Kahan, B.: Effect of cyclosporine on immunoregulatory cells of renal allograft recipients. Presented at The First International Congress on Cyclosporine, Houston, Texas, May 1983.
81. Kahan, B.D., Van Buren, C., Flechner, S., Payne, W.D., and Kerman, R.: Improved outcome of 150 renal allografts in immunologically high risk recipients treated with cyclosporine. Presented at The First International Congress on Cyclosporine, Houston, Texas, May 1983.
82. Flechner, S.M., Van Buren, C., Kerman, R.H., and Kahan, B.D.: The nephrotoxicity of cyclosporine in renal transplantation. Presented at The First International Congress on Cyclosporine, Houston, Texas, May 1983.
83. Flechner, S.M., Van Buren, C.T., Kerman, R., and Kahan, B.D.: The effect of conversion from cyclosporine to azathioprine immunosuppression for intractable nephrotoxicity. Presented at The First International Congress on Cyclosporine, Houston, Texas, May 1983.
84. Kerman, R.H., Flechner, S., Van Buren, C.T., Payne, W., and Kahan, B.D.: Cyclosporine immunosuppression overcomes immunologic risk factors for recipients of cadaveric renal allografts. Presented at the Annual Meeting of The American Society of Transplant Physicians, Chicago, Illinois, June 1983.
85. Flechner, S.M., Kerman, R.H., Van Buren, C.T., and Kahan, B.D.: The high risk haploidentical living related recipient: Transplantation without blood transfusions and steroid withdrawal using cyclosporine. Presented at the Annual Meeting of The American Society of Transplant Physicians, Chicago, Illinois, June 1983.
86. Kerman, R.H.: Relationship of immunocompetence of hemophiliac patients and acquired immune deficiency syndrome (AIDS). Presented at the Gulf Coast Hemophilia Chapter Meeting, Houston, Texas, October 1983.
87. Kerman, R., Van Buren, C.T., Flechner, S., and Kahan, B.D.: Correlation of visual, ^{51}Cr -release and flow cytometry crossmatch results to graft survival. Presented at The Fourth International Symposium: Immune Monitoring of The Transplant Recipient, Houston, Texas, November 1983.
88. Rogers, A.J., Kerman, R.H., and Kahan, B.D.: The pharmacokinetic and immunobiological activity of cyclosporine in man. Presented at The Fourth International Symposium: Immune Monitoring of The Transplant Recipient, Houston, Texas, November 1983.
89. Kerman, R.H., Manner, C., Ford, K., and Hoots, K.: Comprehensive immune evaluation of 78 hemophiliacs. Presented at the New York Academy of Sciences Symposium on Acquired Immune Deficiency Syndrome, New York, New York, November 1983.
90. Kerman, R., Van Buren, C.T., Flechner, S.M., and Kahan, B.D.: DRW6 and DR3 phenotypes correlating with immune response. Presented at the Annual Meeting of The American Association for Clinical Histocompatibility Testing, Chicago, Illinois, November 1983.

91. Van Buren, C.T., Flechner, S.M., Kerman, R.H., Vaughn, W., and Kahan, B.D.: Cyclosporine improves outcome in high risk cadaveric renal allograft recipients. Presented at the First Meeting of The European Society for Organ Transplantation, Zurich, Switzerland, November 1983.
92. Kerman, R.H.: Cyclosporine immunosuppression for renal transplantation. Presented to Sandoz Pharmaceuticals, Inc., East Hanover, New Jersey, December 1983.
93. Kerman, R.H.: New horizons in transplantation: Influence of cyclosporine on renal transplantation. Invited presenter at the Western Dialysis and Transplantation Society, Park City, Utah, January 1984.
94. Sterling, R.P., Bradley, B.B., Khalil, K.G., Kerman, R.H., and Conklin, R.H.: Comparison of biopsy proven pneumocystis pneumonia in acquired immune deficiency syndrome (AIDS) patients versus renal allograft patients. Presented at The Society for Thoracic Surgeons, San Antonio, Texas, January 1984.
95. Rogers, A.J., Kerman, R.H., and Kahan, B.D.: Correlation of immunopharmacokinetic profiles of cyclosporine-treated allograft recipients and rejection. Presented at The Society for University Surgeons - Residents' Meeting, Chicago, Illinois, February 1984.

MARVIN S. LEGATOR, Ph.D.

Dr. Legator is Professor of Environmental Toxicology, University of Texas Medical School at Galveston. His Curriculum Vitae will be supplied.

The subject matter of Dr. Legator's testimony will include: the teratogenic and carcinogenic effects of TCDD, as well as its mutagenic potential; the multi-system effects of TCDD at extremely low concentrations; the demonstrable effects, both gross and more subtle, of TCDD on animals; the extrapolation of the animal studies to humans, that is, the inherent, intended predictive aspects of the animal data to man; and finally to his work as a geneticist with respect to reproductive toxicology, i.e. male (Vietnam Veterans) - mediated birth defects and certain untoward pregnancy outcomes.

Dr. Legator will testify to the extreme toxicity of dioxins, particularly 2,3,7,8-TCDD. Specifically, his testimony will indicate that TCDD is a complete carcinogen based upon certain animal studies, and that as a carcinogen, there is no safe level and does not have therefore a so-called no effect level. With respect to that, Dr. Legator will describe the extraordinary precautions which are taken, and the fears of the researchers, in connection with the laboratory use of TCDD.

In addition, Dr. Legator will testify to the reproductive toxicological effects, i.e. birth defects, and miscarriages of the children and wives of the exposed Vietnam veterans. The animal data in this regard are positive and consistent and provide a mechanistic linkage which confirms the Vietnamese epidemiological study of Hatch and others.

Specifically, therefore Dr. Legator will testify that the miscarriage

of Mrs. Dan G. Jordan and the congenital malformations of the children of Dan G. Jordan, as well as those of Kerry Ryan, daughter of Michael F. Ryan, were caused by the presumed exposure of representative plaintiffs Jordan and Ryan to phenoxy herbicides and dioxins - specifically 2,3,7,8-TCDD -- while serving in Vietnam.

The bases or grounds for such facts and opinions include Dr. Legator's: educational and professional experience; personal researches; review of the applicable medical and scientific literature; and a review of the medical records and/or data of the Jordan and Ryan families.

12968

ALAN SCOTT LEVIN, M.D.

Dr. Levin is engaged in the practice of medicine in San Francisco, His Curriculum Vitae is attached.

Dr. Levin will testify that phenoxy herbicides and their contaminants, including dioxins, most especially 2,3,7,8-TCDD, cause an assortment of immunological responses, i.e. immuno-toxicity, which predispose persons exposed - by absorption and/or ingestion and/or inhalation - to such chemicals to a whole host of adverse health effects, such as: chloracne or other skin rashes; various neuro-toxic effects; reproductive effects; and neoplasm. In connection with the carcinogenic effect, Dr. Levin will state there is no safe level for this or any other carcinogen, and that a single exposure several years earlier can result in human cancer many years later.

The bases for such facts and opinions expressed herein by Dr. Levin include: review of the medical and scientific literature, including both animal and human data; his personal researches; his clinical experiences; and his personal knowledge of the defoliation of Vietnam by such phenoxy herbicides and dioxins, with such chemicals in the presence of the veterans and their presumed exposure thereby; and review of all pertinent medical data of the representative plaintiffs.

Dr. Levin will discuss the following in his testimony: the immune system, with its organic, cellular, and humoral components - most especially with regard to the latter, T-helper cells, B-cells, plasma cells and immunoglobulin production; immune response, both beneficial and harmful; the various experimental studies, particularly those demonstrating atrophy of the thymus, weight loss, depletion of lymphoid organs, lymphopenia, cutaneous type delayed hypersensitivity (skin thickness) and altered bacterial immunity.

In addition, Dr. Levin will discuss the following and their significance: immunology as molecular biology; chemical-induced immune dysregulation; T-cells (lymphocytes from thymus) acting as immune modulators, (for which again there is no "no effect" level); immune surveillance; the similarity of the immune, neurologic, and endocrine systems and their significance in the area of immuno-toxicity; the relationship of immune dysregulation caused by chemicals and carcinogenicity.

Dr. Levin will then testify to the causal relationship of the various Agent Orange/dioxin related adverse health effects of the representative plaintiffs, including: chloracne; neuro-toxic effects, both neurological and psychological; reproductive toxic effects, both miscarriages and birth defects; and such neoplastic processes as soft tissue sarcoma, as here a rhabdomyosarcoma, lymphocytic lymphoma and basal cell carcinoma.

CURRICULUM VITAE

Alan Scott Levin, M.D.

Born: January 12, 1938. Chicago, Illinois.

High School: Austin, Chicago, Illinois

College: University of Illinois, Champaign-Urbana, Illinois
1956-1960 B.S. Chemistry in L.A. with Honors.

Graduate School: University of Illinois (Chicago Medical Center)
M.S. in Biochemistry, 1963.

Masters Thesis: Metabolism of Serum Albumin in Rats with Cirrhosis
of the Liver, 1963.

Medical School: University of Illinois (Chicago Medical Center)
M.D. 1964 Alpha Omega Alpha Honor Medical Society, 1963

Internship: Children's Hospital Medical Center, Boston, Mass.

Fellowships: Traineeship Grant, Harvard Medical School 1964
Research Assistant, Children's Hospital Boston, 1965.

USPHS Hematology Training Grant, University of California
San Francisco, Medical Center 1969-1971 (Pediatric and
General Immunology).

American Cancer Society Faculty Research Award, 1971-1974

Specialty Board
Certifications: 1. Certified Diplomate American Board of Allergy and
Immunology, 1975.

2. Certified Diplomate American Board of Pathology-Clinical
Pathology, 1977.

3. Fellow in the American College of Emergency Physicians.

4. Fellow College of American Pathologists.

5. Fellow American Society of Clinical Pathologists.

6. Member American Academy of Allergy.

7. Member American Association of Clinical Chemists.

Military: USN attached to USMC as Flight Surgeon 1966-1968
Viet Nam Campaign ribbons and unit citation, Navy and
Marine Corps Commendation, First through Fourth Air Medals.
Bronze Star Medal with Combat "V", Silver Star Medal,
Honorable Discharge November 1969.

Marital Status: Married to Vera S. Byers, Ph.D., M.D.
No children.

12371

Academic

Appointments:

Adjunct Instructor in Pediatrics
University of California
San Francisco Medical Center
1971 - 1972

Assistant Professor of Immunology
in Dermatology
University of California
San Francisco Medical Center
1972 - 1978

Adjunct Associate Professor of Immunology
University of California
San Francisco Medical Center
1978 -

Director of Laboratory of Immunology
University of California and Kaiser
Foundation Research Institute Joint
Program Project
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1971 - 1974

Director of Division of Immunology
Western Laboratories
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Oakland, California
1974 - 1977

Medical Director
MML/Solano Laboratories
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Berkeley, California
1977 - 1979

Medical Director
Levin Clinical Laboratories, Inc.
326 6th Street
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1979 - 1981

Private Practice of Medicine
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1981 -

Member, Medical Quality
Review Committee, #4
Board of Medical Quality Assurance
State of California
1982 -

ALAN SCOTT LEVIN, M.D.

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Dr. Peter Orris is an internist practicing in Chicago, Illinois. His curriculum vitae will be supplied.

Dr. Orris will testify as to the clinical aspects of the diseases in the representative plaintiff veterans. His testimony will be based upon a medical records review and an analysis of various test results that will have been performed upon the representative plaintiffs.

Dr. Orris will also testify on generic causation and specific proximate causation in relation to each representative veteran plaintiff. He will also testify as to prognosis for each representative veteran plaintiff