

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

FILED  
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J. S. DISTRICT COURT E.D. N.Y.

★ JAN 16 1981 ★

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In Re: :  
"AGENT ORANGE" :  
PRODUCT LIABILITY LITIGATION :  
-----:

MDL 381  
(All Cases)  
CV-80-2908  
CV-80-2997  
CV-80-2002  
CV-80-1989  
CV-80-2284  
CV-80-2631

TIME A.M. ....  
P.M. ....

PLAINTIFFS' FIRST WAVE  
OF INTERROGATORIES TO  
DEFENDANTS FOR ELICITING  
POSSIBLE DEONENTS AND  
DOCUMENT DISCOVERY

PLEASE TAKE NOTICE, that pursuant to the Federal  
Rules of Civil Procedure, you are hereby required to  
answer each of the following Interrogatories, under  
oath, within thirty (30) days in accordance with the  
definitions and instructions contained herein.

These Interrogatories are continuing interrogatories.  
If at any time after service of answers hereto defendant  
obtains or becomes aware of additional information pertaining  
to any of the Interrogatories, defendant shall, within 30  
days, and in no event later than 5 days before trial, serve  
supplemental sworn written answers setting forth such  
additional information.

DEFINITIONS AND INSTRUCTIONS

a. "Document" is used in the broadest possible sense  
and means any written or graphic matter of whatever kind  
or nature, or any other means of preserving thoughts or  
expression (including, without limitation, tape recordings,  
and/or transcriptions thereof), and all tangible things from

which information can be processed, or transcribed, whether originals, copies or drafts (including, without limitation, non-identical copies), however produced or reproduced.

Note that a document with handwritten or typewritten notes, editing or other marks, etc., is not and shall not be deemed identical to one without such notes, marks, etc. "Document" also means all graphic, mechanical, or electronic reproductions, representations, recordings, or compilations of data of any kind, including but not limited to, drawings, charts, graphs, motion picture films, microfilms, microfiles, photograph and tape recordings, videotapes, any transcripts or printouts produced therefrom, and all drafts of any of the foregoing.

b. "Draft" means any earlier, preliminary, preparatory, or tentative version of all, or part of the document, whether or not such draft was superseded by a later draft, and whether or not the terms of the draft are the same as, or different from the terms of the final document.

c. "Plaintiff" means any serviceman plaintiff, or in the case of an administrator, executor or personal representative suing on behalf of a deceased serviceman, "plaintiff" means the deceased serviceman.

d. "Phenoxy herbicides" means "2,4,5-T" (2,4,5 - trichlorophenoxyacetic acid) and its ester and amine forms, and means "2,4-D" (2,4 - dichlorophenoxyacetic acid) and its ester and amine forms.

e. "Dioxin" means all polychlorinated dibenzo-p-dioxins (PCDDs), which includes 2,3,7,8 - tetrachlorodibenzo p-dioxin (TCDD).

f. "PCDFs" means polychlorinated dibenzo furan and includes 2,3,7,8 tetrachloro dibenzo furan (TCDF)".

g. "Government" means THE UNITED STATES OF AMERICA and its offices, department, bureaus, agencies, representatives, department heads, agency heads, bureau chiefs, agents, attorney, employees, or any other person, or persons, acting for, or on behalf of THE UNITED STATES OF AMERICA, under the authority or control of THE UNITED STATES OF AMERICA, or any one or more of the foregoing.

h. "Defendant" means the corporate defendant herein to whom the interrogatories are addressed.

i. "Person" means any natural person, individual, partnership, company, corporation, government body or any other entity.

j. "Medical practitioner" means any physician, medical specialist, psychiatrist, dentist, nurse, physical therapist or other psychiatric or medical practitioner.

k. "Medical institution" means any hospital, medical or dental clinic, sanatorium, rest home, counseling service or other institution consulted in connection with any physical or mental condition.

l. "Identify" when used with reference to a natural person, means state:

(a) his full name, present address (or if his present address is not known, his last known address, and telephone number).

(b) his present (or, if his present is not known, his last known) job, position(s), rank, and/or professional

affiliation(s) and, the same information for the time of the act(s) or other matters to which the Interrogatory is addressed; and

(c) if the person is a medical practitioner, his present office address, current medical institution affiliation(s), and medical institution affiliation(s) at the time of the act(s) or other matters to which the Interrogatory is addressed.

m. "Identify" means when used with reference to any person other than a natural person, means state:

- (a) the full name thereof;
- (b) the nature of the activity engaged in;
- (c) the address and principal place of business;

and

(d) if applicable, the jurisdiction under the laws of which it has been organized and the date of such organization.

n. "Identify" when used with reference to a document, means state:

(a) its title, nature (e.g., letter, telegram memorandum, chart, report, list, etc.), date, and identify the author(s) and addressee(s);

(b) identify each person who signed the document and each person who participated in preparing the document;

(c) its substance;

(d) its present (or, if the present is not known, the last known) location and custodian; and

(e) identify each person to whom a copy of the document



was sent, each person who otherwise received or obtained a copy of the document, and each date of transmittal and receipt.

o. "Identify" when used with reference to a communication, warranty or transaction, means state:

(a) its nature (e.g., telephone conversation, face-to-face conversation or meeting, letter, memorandum, etc.);

(b) the date and place thereof (and if a telephone conversation, the place each participant was located);

(c) identify each person participating in, present during, or witness to, all or any part thereof;

(d) the substance thereof, setting forth as fully as possible what each participant or witness said or did; and

(e) the identity of each document in which the communication, warranty or transaction is recorded, described, discussed or otherwise referred to.

p. "Identify" when used with reference to a claim, law suit, or any part of a claim of law of any person against the defendant means:

(a) state separately, as fully as possible, the court and/or agency where filed, all reference numbers necessary to identify the claim or law suit at all stages of proceeding, the circumstances giving rise to it, and

(b) identify separately all facts and documents on which such plaintiff and/or claimant relies, or may rely, in support of each such claim, or that evidence such claim.

q. "Identify" when used with reference to an injury, illness, affliction, disability, or other physical condition

means state its nature, diagnosis, prognosis, symptoms, and the alleged cause(s) thereof, as well as the date of onset and duration of each such symptom.

r. "Identify" when used in any context other than hereinabove set forth means describe the pertinent act, work, situation, event, etc., as fully as possible, and identify each person in any way involved therein and each document or communication in which such act, work, situation event, etc., is recorded, described, discussed or otherwise referred to

s. "Manufacture" means to produce, fashion, and combine chemicals and other substances and materials through various processes to cause phenoxy herbicides to be made, regardless of whether the original chemical, substances and other materials out of which the phenoxy herbicides were made were supplied, manufactured, produced or processed by the defendant. When the original chemicals out of which phenoxy herebicides were made were not supplied, manufactured or produced by the defendant, please state:

- (1) The defendant's supplier(s)
- (2) Name of the chemical
- (3) Part it plays in the making of phenoxy herbicides
- (4) Total amount supplied since 1930
- (5) Dates of all contracts for supply

t. Each Interrogatory that refers to defendants or any other group of persons is to be answered separately and with particularity by each defendant or other member of any such group.

u. As used herein, the singular and masculine forms of noun and pronoun embrace, and shall be read as, the plural of

the feminine or neuter, as the context may require.

v. In lieu of identifying any document whose identity is called for in any Interrogatory, plaintiff may produce a true copy of such document for inspection and copying by the attorneys for defendants together with an explicit reference to the specific Interrogatory to which each such document relates.

w. If the answer to all or any part of an Interrogatory is not now known or defendant is otherwise not able to fully answer, defendant shall so state in response to such Interrogatory or part thereof, shall state the reasons and shall furnish whatever responsive information is now known or otherwise available to defendant.

x. If any privilege is claimed as to any information called for, or as to any document required to be identified, by an Interrogatory:

(a) state the nature of the privilege claimed (e.g., attorney-client, work product, etc.);

(b) state the basis for claiming the privilege as to the specific information or document;

(c) if the privilege is claimed with respect to any information, identify each person who has knowledge of such information, or to whom such information has been communicated in any way, at any time; and

(d) if the privilege is claimed as to any document, identify such document.

PLAINTIFFS' INTERROGATORIES DIRECTED TO  
EACH OF THE CORPORATE DEFENDANTS TO ELICIT  
INFORMATION AS TO THE PERSON(S) ANSWERING  
EACH AND EVERY INTERROGATORY.

1.1. Please identify the person primarily responsible for answering plaintiffs' first wave interrogatories.

1.2. Please state by whose authority you make answer to these interrogatories and/or by what inherent authority you make answer to these interrogatories.

1.3. Please delineate the extent of that authority in terms of whether you have access to highly confidential documents of the defendant, whether you have authority to order document search requests.

1.4. Please identify each and every other person who aided in answering plaintiffs' interrogatories and please indicate which person(s) aided in answering which interrogatory.

PLAINTIFFS' INTERROGATORIES DIRECTED TO  
EACH OF THE CORPORATE DEFENDANTS TO ELICIT  
INFORMATION ON INCORPORATION AND RELATED  
MATTERS.

Unless otherwise specified, the following interrogatories cover the time period of 1960 to the present.

2.1. With respect to the defendant corporation, provide the following information:

- (a) Its correct name;
- (b) Its date of incorporation;
- (c) Its state or states of incorporation;

- (d) The names, addresses, and titles of all officers and directors, including their dates of service.
- (e) The state or states in which the corporation is qualified to do business;
- (f) The state or states in which the corporation, under its correct name or any other names, operates or conducts business in any form whatsoever or has any agent(s) or employee(s).

2.2. For all the states mentioned in the preceeding interrogatory, provide the following information:

- (a) The address of the corporation's principal place of business.
- (b) The names and addresses of all persons authorized to accept service of process on behalf of the corporation in each state.

2.3. Has the corporation ever used, conducted business under, or been known under any name other than the one set forth in the answer to Interrogatory number 2.1(a)? If so, as to each such name, provide the following information;

- (a) The date upon which such name was adopted or first employed.
- (b) The date upon which such name was abandoned and the successor name.
- (c) The state or states in which each such name was used or employed.

2.4. Please attach copies of the defendant's articles of incorporation and bylaws.

PLAINTIFFS' INTERROGATORIES DIRECTED TO  
EACH OF THE CORPORATE DEFENDANTS TO ELICIT  
THE NAMES OF POSSIBLE DEPONENTS.

3.1. Please identify each plant and/or facility, whether wholly owned or partially owned, whether owned to date or owned in the past in which phenoxy herbicides were researched, formulation and/or developed.

3.2. For each plant and/or facility identified in response to interrogatory number 3.1., please identify each division, department or other units which were in whole or in part concerned with the research, formulation and/or development of phenoxy herbicides, and for each such division, department or other unit, please identify the person in charge and the years in which he or she was in charge from 1930 to date.

3.3. For each plant and/or facility identified in response to interrogatory number one (1), please provide organizational charts which indicate the divisions, departments or other units which were, in whole or in part concerned with the research, formulation and/or development of phenoxy herbicides and which indicate changes in organization and the dates thereof, and please provide phone books and/or internal directories for each such plant and/or facility for 1930 and for each year to date in which a subsequent edition was printed.

3.4. Please identify by name, last known home address, last known work address, last known telephone number, and employment record (date hired, date of last employment, description of all jobs held with defendant, addresses of all jobs held with defendant, etc.) each person (exclusive of clerical personnel) who was involved either wholly or in part in the research, formulation and/or development of phenoxy herbicides for the defendant.

3.5. Please identify each person (only by name if more fully identified in response to interrogatory number four (4)) who is now deceased and please specify for each such deceased person the cause of death as shown on the death certificate or as known to the defendant.

3.6. Please identify each person (only by name if more fully identified in response to interrogatory number four (4)) who is now disabled and please specify for each such disabled person the cause of the disability as known to the defendant and whether such person has claimed disability as arising out of his or her employment with the defendant.

3.7. Please identify each person (only by name if more fully identified in response to interrogatory number four (4)) who was a management employee with the defendant and who had direct managerial responsibilities for research, formulation and/or development of phenoxy herbicides and who has left the employment of the defendant for whatever reason during the years 1930 to date.

3.8. Please identify each educational institution, research and development group, company, or corporation with which the defendant contracted and/or to whom the defendant gave any funds in connection with the formulation, research and/or development of phenoxy herbicides and for each such educational institution, research and development group, company or corporation, please identify the work done by each, the documents submitted or otherwise made available by each to the defendant which

concerned phenoxy herbicides, and please identify for each year from 1930 to date, a living person who is, or was at the educational institution, research and development group, company or corporation who would be most knowledgeable about defendant's association with said institution, research and development group, company or corporation.

3.9. Please identify each and every patent or trademark application, made by the defendant whether granted or denied, whether in force or expired, which has any relevance to, or otherwise concerns the formula, research, formulation, development, manufacture, production, sale or distribution, marketing or promotion of phenoxy herbicides or otherwise concerns phenoxy herbicides.

3.10. Please identify each and every plant and/or other facility whether wholly owned or partially owned, whether owned to date or owned in the past, in which phenoxy herbicides were manufactured.

3.11. For each plant and/or facility identified in response to interrogatory number ten (10), please identify each division, department and other units which were in whole or in part concerned with the manufacture of phenoxy herbicides and for each such division, department and other unit, please



identify for the years 1930 to date the person in charge and the years in which he or she was in charge.

3.12. For each plant and/or facility identified in response to interrogatory number ten (10), please provide organizational charts which indicate the divisions, department, and other units which were, in whole or in part concerned with the manufacture of phenoxy herbicides and which indicate changes in organization and the dates thereof, and please provide phone books and/or internal directories for each year to date in which a subsequent edition was printed.

3.13. Please identify by name, last known home address, last known work address, last known telephone number and employment record (date hired, date of last employment, description of all jobs held with defendant, addresses of each such job, etc.) each person (exclusive of clerical personnel) who was involved whether wholly or in part in the manufacture of phenoxy herbicides for the defendant.

3.14. Please identify by name, last known home address, last known work address, last known telephone number and employment record (date hired, date of last employment, description of all jobs held with defendant, addresses of each such job, etc.) each person who was involved either wholly or in part in cleaning and/or maintaining any of the machinery and equipment utilized in the manufacture of

phenoxy herbicides and/or in cleaning the areas in which the machinery and equipment were located.

3.15. Please identify each person (only by name if more fully identified in response to interrogatories number thirteen (13) and fourteen (14)) who is now deceased and please specify for each such deceased person the cause of death as shown on the death certificate or as known to the defendant.

3.16. Please identify each person (only by name if more fully identified in response to interrogatories number thirteen (13) and fourteen (14)), who is disabled and please specify for each such disabled person the cause of the disability as known to the defendant and whether such person has claimed disability as arising out of his or her employment with the defendant.

3.17. Please identify each person (only by name if more fully identified in response to interrogatories number thirteen (13) and fourteen (14)), who was a management employee with the defendant and who had direct managerial responsibility for the manufacture and production of phenoxy herbicides, or the cleaning of equipment and machinery utilized for the production of the same and who has left the employment of the defendant for whatever reason during the years of 1930 to date.

3.18. Please identify each person (only by name if more fully identified in response to interrogatories number four (4), thirteen (13), and fourteen (14)), who the defendant believes has been injured

through exposure to phenoxy herbicides and who was an employee of the defendant.

3.19. Please identify each person (only by name if more fully identified in response to interrogatories numbers four (4), thirteen (13) and fourteen (14)) who is an employee of the defendant and who alleged or claimed injury due to exposure to phenoxy herbicides, and if such claim be in the form of a law suit or a claim for worker's compensation, please fully identify the suit and/or workers' compensation claim.

3.20. Please identify by name, last known home address, last known work address, last known telephone number, each medical practitioner and/or medical institution employed by the defendant, from 1930 to date, to care for the health of the defendant's employees at each of the plants and/or facilities previously identified.

3.21. Please identify which if any of the persons listed in response to interrogatory number twenty (20) were responsible for monitoring, treating and otherwise caring for those exposed to phenoxy herbicides.

3.22. Please identify each plant and/or other facility owned by the defendant, whether wholly owned or partially owned, whether owned in the past or owned to date in which the defendant housed personnel who engaged in and/or were responsible for, making bids to the government for the production and sale of phenoxy herbicides.

3.23 For each plant and/or facility identified in response to interrogatory number twenty-two (22), please identify each division, department, and other units which were in whole or in

part concerned with developing and/or making bids to the government for the production and sale of phenoxy herbicides to the government, and for each such division, department and other unit, please identify the person in charge and the years in which he or she was in charge for the years 1930 to date.

3.24. For each plant and/or other facility identified in response to interrogatory number twenty-two (22) please provide organizational charts which indicate the divisions, department, and other units which were in whole or in part concerned with developing and/or making bids to the government for the production and sale of phenoxy herbicides to the government and which indicate changes in organization and dates thereof, and please provide phone books and/or internal directories for each such plant and/or facility for 1930 and for each year to date in which a subsequent edition was printed.

3.25. Please identify by name, last known home address, last known work address, last known telephone number and employment record (date hired; date of last employment; description of all jobs held with defendant; addresses of all jobs held with defendant, etc.) each person (exclusive of clerical personnel) who was involved either wholly or in part in making and or developing bids to the government for the production and sale of phenoxy herbicides to the government.

3.26. Please identify (by name only if more fully identified in response to interrogatory number 3.25) each person who was involved either wholly or in part in the development and/or making of bids to the government for the production and sale of phenoxy herbicides and who is presently alive and who no longer works for the defendant for whatever reason.

3.27. Please identify the government agency, division, department, section and other unit to which the defendant submitted bids for the production and sale of phenoxy herbicides.

3.28. Please identify the persons in charge of the agency, division, department, section and other units to which the defendant submitted bids for the production and sale of phenoxy herbicides from 1930 to date and please give the years in which each person was in charge.

3.29. Please identify the government agency, division, department, section and other unit which solicited the defendant's bid for the production and sale of phenoxy herbicides and please identify the persons in charge of the government agency, division, department, section and other unit from 1930 to date and please give the years in which each person was in charge.

3.30. Please attach a copy of the government's solicitation to bid on the production and sale of phenoxy herbicides and please attach a copy of the defendant's bid.

3.31. Please identify each person who signed the solicitation by the government to produce and sell phenoxy herbicides and please

identify each person who signed the defendant's bid.

3.32. Please identify each of the defendant's employees, servants, and/or agents who negotiated with the government a contract for the production and sale of phenoxy herbicides.

3.33. Please identify each of the government's employees, servants, and/or agents who negotiated with the defendant a contract for the production and sale of phenoxy herbicides.

3.34. Please identify the custodian of any and all records, meetings, documents, drafts, notes, etc. which record the substance of any and all negotiations.

3.35. Please attach copies of any and all contracts between the defendant and the government for the production, sale and distribution of phenoxy herbicides.

3.36. Please identify the signatories on any and all contracts for the production, sale and distribution of phenoxy herbicides entered into by the defendant and government regardless of whether copies of said contracts have been attached.

3.37. For each of the sub-categories below, please identify each of the defendant's employees, servants and/or agents who contacted the government prior to the government's solicitation of bids for the production and sale of phenoxy herbicides for the purposes of:

(a) Informing or otherwise educating the government as to the availability of phenoxy herbicides, their actual and potential uses and/or

(b) Informing or otherwise educating the government as to

the chemical composition of phenoxy herbicides and/or

(c) Informing or otherwise educating the government as to the specifications for the manufacture of phenoxy herbicides and/or

(d) Informing or otherwise educating the government as to the dangers to life forms (e.g., but non-exclusive, hearings before Department of Agriculture, Food and Drug Administration, Environmental Protection Agency Senate and House committees).

3.38. Please identify the custodian of any and all documents which the defendant's employees, servants and/or agents utilized in performing any of the activities described in interrogatory number 3.37(a) - (d).

3.39. For each of the sub-categories below, please identify each of the government's employees, servants and/or agents who contacted the defendant prior to the governments solicitation of bids for the production, sale and distribution of phenoxy herbicides who was concerned with

- (a) The availability of phenoxy herbicides, their actual and potential uses and/or
- (b) the chemical composition of phenoxy herbicides and/or
- (c) The specifications of the manufacture of phenoxy herbicides and/or
- (d) The dangers phenoxy herbicides posed to life forms.

3.40. Please identify the defendant's custodian of any and all documents transmitted or otherwise received by the defendant from the government concerning the subject matter of interrogatory 3.39(a)-(d).

3.41. If the defendant contends that it was compelled to produce, sell and distribute phenoxy herbicides to the government, please identify the government agency, division, department, section and other unit which so compelled the defendant and for each agency, division, department, section and other unit please identify the persons in charge and the dates on which they were in charge during the period of compulsion.

3.42. If the defendant contends that it was compelled to produce, sell and distribute phenoxy herbicides to the government, please identify each government employee, servant and/or agent who commanded the defendant to produce, sell and distribute phenoxy herbicides to the government and please identify any and all government employees, servants and/or agents (excluding clerical staff) who communicated in any manner such a command to the defendants.

3.43. If the defendant contends that it did not formulate the specifications for the manufacture of phenoxy herbicides, please identify, the government agency, division, department, section and other unit which the defendant contends formulated the specifications and for each agency, division, department, section and other unit please identify the person in charge when the specifications were formulated and please give the dates



of formulation and the dates in which the person was in charge.

3.44. If the defendant contends that it did not formulate the specifications for the manufacture of phenoxy herbicides, please identify each of the governments employees, servants, and/or agents who transmitted or conveyed in any manner the specifications for the manufacture of phenoxy herbicides to the defendant.

3.45. If the defendant contends that it did not formulate the specifications for the manufacture of phenoxy herbicides, please identify any and all of the defendant's employees, servants, and/or agents who provided the government scientific, technical and/or any other aid in formulating the specifications for the manufacture of phenoxy herbicides.

3.46. Please identify the custodian of any and all documents wherein the defendant contends that the government conveyed or otherwise transmitted to the defendant the specifications for the manufacture of phenoxy herbicides

3.47. Please attach copies of all documents in which the defendant contends that the government conveyed to the defendant the specifications for the manufacture of phenoxy herbicides and please identify the signatories to all such documents regardless of whether copies of the documents are attached.

3.48. If the defendant had to alter its machinery and/or other processes to accommodate the specifications which it con-

tends were formulated by others than the defendant, please identify the person who altered the machinery and/or other processes.

3.49. If after the initial alteration, if any, referred to in interrogatory number 3.48., the defendant found it necessary to alter its machinery and/or processes for the manufacture of phenoxy herbicides, please identify the persons who made all subsequent alterations, and state the nature of the alteration, the reason for the alteration and the date of the alteration.

3.50. Please identify each division, department, section and other unit which was responsible for:

- (a) The policy decisions as to whether or not the containers of the defendant's domestically used phenoxy herbicides were to contain warning labels
- (b) The policy decision as to whether or not the containers of the defendant's phenoxy herbicides which were distributed to the government were to contain warning labels
- (c) The content of any warning labels which were placed on any container which held the defendant's phenoxy herbicides.

and for each of the defendant's divisions, departments, sections or other units listed in response to (a), (b), and (c) above, please identify for the years 1930 to date each person who was in charge and the years in which he was in charge.

3.51. Please provide a phone books and/or internal directories for each of the defendant's divisions, departments, sections and other units listed above in response to interrogatory 3.50.(a), (b)

and (c) for the year 1930 and for each year in which a subsequent edition was printed.

3.52. If the defendant contends that the government prohibited it from placing any warning on the containers of the defendant's phenoxy herbicides which were distributed to the government, please identify each of the defendant's managerial employees, servants and/or agents who would have had primary responsibility for formulating a warning had there been no prohibition and who are alive and please indicate those who no longer work for the defendant for whatever reason.

3.53. If the defendant contends that the government prohibited it from placing any warning on the containers of defendant's phenoxy herbicides which were distributed to the government, please identify the government agency, division, department, section and other unit that established that prohibition, and please identify the persons in charge of the agency, division, department, section and other unit when the prohibition was established and the dates in which they were in charge.

3.54. Please identify each and every government employee, servant, and/or agent who transmitted or otherwise conveyed to the defendant the prohibition against placing warning labels on the herbicide which was to be distributed to the defendant.

3.55 Please identify the custodian of any documents which the defendant claims contained the government generated prohibition against placing warning labels on containers of phenoxy herbicide which were to be distributed to the government.

3.56. Please attach copies of the documents referred to in Interrogatory number 3.55. and please identify the signatories to each and every document regardless of whether the documents are attached.

3.57. Please identify the custodian of any and all warning labels which have been contemplated and/or utilized on containers of phenoxy herbicides regardless of where sold.

3.58. Please identify each of the defendant's employees, servants, and/or agents who had on-line and managerial responsibility for quality control in the manufacture of phenoxy herbicides from 1930 to date.

3.59. Please identify the defendant's division, department section and other unit which was responsible for quality control in the manufacture of phenoxy herbicide and for each division, department, section and other unit, please identify for the years 1930 to date the persons in charge and the date on which they were in charge.

3.60. Please provide organizational charts of the defendant's divisions, departments, sections and other units identified in response to interrogatory number 3.59. which indicate changes in organization and the dates thereof and please provide phone books and/or internal directories for each division, department, section and other unit identified for the year 1930 and for each subsequent year in which a new edition was printed.

3.61. Please identify (by name only if more fully identified in response to interrogatory numbers 3.58. and 3.59) each of the

defendant's quality control personnel who are now deceased and please state the cause of death on the death certificate or as otherwise known by the defendant.

3.62. Please identify (by name only if more fully identified in response to interrogatory numbers 3.58. and 3.59.) each of the defendant's quality control personnel who are now disabled and please state the cause of the disability and if a claim or law suit has been brought against the defendant by the disabled person please identify the claim and/or law suit.

3.63. Please identify (by name only if more fully identified in response to interrogatory numbers 3.58 and 3.59) each of the defendant's quality control personnel who had either on-line and/or managerial responsibility for the quality of the phenoxy herbicides manufactured and who are living but no longer employed by the defendant.

3.64. Please identify each government employee, servant and/or agent to whom the defendant's quality control personnel sent documents concerning the quality and/or nature of the phenoxy herbicides manufactured by the defendant.

3.65. Please identify the custodian of any and all samples of phenoxy herbicide which were manufactured by the defendant from 1930 to date.

3.66. Please identify the custodian of any and all documents concerning quality control of the manufacture of phenoxy herbicides and/or concerning any test done to determine the

quality of the phenoxy herbicide.

3.67. Please identify each of the defendant's managerial employees, servants and/or agents who were responsible either in whole or in part for the formulation of warranties of whatever nature which were contemplated to be given or which were actually given with the offer and/or sale of the defendant's phenoxy herbicides.

3.68. Please identify the custodian of any and all documents which contain warranties of whatever nature which were contemplated to be given or were actually given in conjunction with the offer and/or sale of the defendant's phenoxy herbicides.

3.69. Please identify each government agency, division, department, section and other unit and each employee, servant and/or agent of the same which received a warranty from the defendant which concerned phenoxy herbicides.

3.70. Please identify each of the defendant's divisions, departments, sections and other units which was responsible for advertising phenoxy herbicides from 1930 to the present and for each division, department, section and other unit, please identify the persons in charge and give the dates in which they were in charge.

3.71. Please identify each and every publication and other media medium in which or through which the defendant has advertised the availability and sale of its phenoxy herbicides and for each publication or other medium, please give sufficient infor-

mation to readily allow plaintiffs to find any particular advertisement.

3.72 Please identify the custodian of each and every document which contains any and all advertisements ever contemplated or actually utilized which concerned the defendant's phenoxy herbicides.

3.73. Please identify each and every trade association to which the defendant belongs.

3.74. Please identify each and every trade publication in which phenoxy herbicides are discussed and please identify those particular articles in which defendant's phenoxy herbicides are discussed or to which the defendant contributed materials and research.

3.75. Please identify each and every trade association meeting at which phenoxy herbicides were discussed.

3.76. Please identify the custodian of any and all documents which record the discussion, positions and papers submitted at the trade association meetings identified in response to interrogatory number 3.76.

3.77. Please identify each and every corporate meeting wherein phenoxy herbicides were discussed and please identify the custodian of the minutes of any such meeting.

3.78. Please identify the defendant's liability insurer for each year since 1930.

3.79. Please identify the person or persons at your liability insurer through which the defendant conduct most of its insurance related business.

3.80. Please identify the following documents:

- (a) Any and all documents sent to the liability insurer which were to be or were utilized for determining the defendant's liability exposure in general
- (b) Any and all documents sent to the liability insurer which were to be or were utilized to determine the liability of the defendant as a defense contractor.
- (c) Any and all document which were sent to the insurer which were to be or were used to determine the liability of the defendant as a producer and seller of phenoxy herbicides.

and please identify each and every document which was sent by the insurer to the defendant describing or explaining the defendant's liability exposure and/or describing the defendant's insurance rates with or without reasons therefor which fall in category (a), (b) or (c) above.

3.81. Please identify the insurer's custodian of any and all documents identified above.

3.82. Please identify the defendant's custodian of any and all document identified above.



PLAINTIFFS' INTERROGATORIES DIRECTED  
TO EACH CORPORATE DEFENDANT TO DISCLOSE  
THE EXISTENCE, LOCATION AND CUSTODIAN  
OF DOCUMENT

---

4.1 Identify each document and draft prepared or used by your company which relates to the following:

- (a) the formulation of phenoxy herbicides
- (b) the manufacture of phenoxy herbicides
- (c) the production of phenoxy herbicides

4.2 Identify any documents concerning warranties, representations, assurances, and/or promises made by your company concerning the use and/or safety of phenoxy herbicides.

4.3 Identify any documents concerning any quality control or quality assurance programs of the company with respect to phenoxy herbicides.

4.4 Identify each document submitted by your company to the Government from 1935 to date with respect to phenoxy herbicides.

4.5 Identify each document stating the policy of your company with respect to the formulation, manufacture, and production of phenoxy herbicides, as well as such documents which embody intermediate recommendations prior to final approval of such policy or policies.

4.6 Identify each document relating to the analysis, examination, testing, and results of any medical complaints by employees at your chemical plants which manufactured and produced phenoxy herbicides.

4.7 Identify any documents concerning the dates, times, places, and effects attributable to exposure of human beings

to phenoxy herbicides.

4.8 Identify each document and draft prepared or used by your company concerning the results of animal tests involving exposure to phenoxy herbicides.

4.9 Identify each document received by your company relating to medical complaints by employees at your chemical plants which manufactured and produced phenoxy herbicides.

4.10 Identify each document received by your company relating to medical complaints by purchases and users of the phenoxy herbicides manufactured and produced at your chemical plants.

4.11 Identify each document concerning your company's responses to the medical complaints referred to in Interrogatories (9) and (10).

4.12 Identify all documents concerning any communications relating to phenoxy herbicides between:

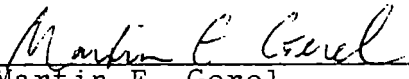
- (a) employees of your company
- (b) your company and the other defendants
- (c) your company and purchasers of phenoxy herbicides
- (d) your company and prospective purchasers of  
phenoxy herbicides

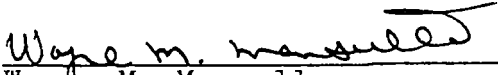
4.13 Identify all documents and drafts prepared or used by you concerning the health effects of phenoxy herbicides.

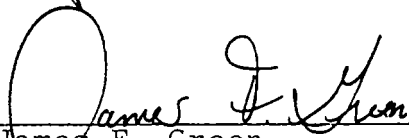
4.14 Identify each document relating in any way to phenoxy herbicides passing between your company and any officer, agent, employee or other person acting or purporting to act on behalf of any other defendants or any nondefendant company engaged in the manufacture and/or sale of phenoxy herbicides.

Respectfully Submitted,

Dated: January 15, 1981.

  
Martin E. Gerel

  
Wayne M. Mansulla

  
James F. Green

  
John E. Sutter

  
Robert A. Taylor Jr.  
Counsel for Plaintiffs  
Representative for Associated Counsel  
Suite 700  
2000 L Street, N.W.  
Washington, D.C. 20036  
(202) 783-6400

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

In re

"AGENT ORANGE"

Product Liability Litigation

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

☆ JAN 15 1981 ☆

MDL No. 381

(All Cases)

TIME A.M. ....  
P.M. ....

-----X

INTERROGATORIES TO DEFENDANTS  
(FIRST WAVE)

Pursuant to Pretrial Order No. 26 of this Court dated December 29, 1980 and §1.50 of the Manual for Complex Litigation, the Plaintiffs request that the Defendants answer, under oath, in accordance with Rule 33 of the Federal Rules of Civil Procedure, within such time as may be fixed by the Court, the following interrogatories:

INSTRUCTIONS

All documents identified should be segregated and identified by each numbered request to which they are responsive.

All documents required to be "identified" should be identified in form sufficient to satisfy the requirements of a subpoena.

DEFINITIONS

The definitions of certain terms used in the Interrogatories follow. Where such definition is broader than the defini-

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tion of such term, as used in the Federal Rules of Civil Procedure, it is intended that the broader definition apply and that the Defendants comply both with the definition in the Rules and the broader definition set forth in the Appendix.

(a) "Defendant" shall mean the defendant corporation itself, its predecessors and successors, its subsidiaries, divisions, affiliates, and other organizational or operating units and all of its predecessors and successors, and each of its employees, agents, or representatives and all persons acting or purporting to act on its behalf for any purpose whatsoever.

(b) "Document" is used in the broadest possible sense and means not only the definition contained in Rule 34a of the Federal Rules of Civil Procedure, but also any written or graphic matter of whatever kind or nature, or any other means of preserving thoughts or expression (including, without limitation, tape recordings and/or transcriptions thereof), and all tangible things from which information can be processed, or transcribed, whether originals, copies or drafts (including without limitation, non-identical copies), however produced or reproduced. Note that a document with handwritten or typewritten notes, editing or other marks, etc., is not and shall not be deemed identical to one without such notes, marks, etc. "Document" also means all graphic, mechanical, or electronic reproductions, representations, recordings, or compilations of data of any kind, including but not limited to, drawings, charts, graphs, motion picture

films, microfiles, photograph and tape recordings, videotapes, any transcripts or printouts produced therefrom, and all drafts of any of the foregoing. "Documents" shall also include all information claimed by any defendant to be proprietary information; and shall also include all information disclosed by the defendant in compliance with any federal statute such as the Federal Insecticide, Fungicide and Rodenticide Act, and the regulations promulgated thereunder.

"Documents" relevant to risk of dioxin includes defendants' records of claims or complaints by defendants' employees allegedly caused by exposure to dioxin filed under occupational safety health laws and regulations, or company procedures, and scientific and technical papers authored by persons employed by, under contract with, funded by, or known to the defendants, relating to occupational health, epidemiological, clinical, animal experiment, or other scientific studies concerning the toxicity of dioxin.

The term "document" or "documents" also includes all scientific studies, experiments, analyses, and investigations relative to the formulation, production and manufacturing 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).

(c) "Author of Document" means any person who wrote or participated in the writing of a document or contributed information used, considered or rejected in the preparation of such document.

(d) "Agent Orange Herbicide" means any phenoxy herbicides manufactured, produced, formulated or marketed by defendants that are claimed to have caused the injuries alleged in the Complaint and includes 2,4,5-Trichlorophenoxy Aliphatics containing but not limited to the synthetic organic chemical 2,3,7,8-Tetrachloro Dibenzo-p-dioxin (TCDD or "Dioxin") and other herbicides containing Polychlorinated Dibenzo-p-dioxins (PCDDs) and Polychlorinated Dibenzo furans (PCDFs).

(e) "Dioxin" means all polychlorinated dibenzo-p-dioxins (PCDDs) and Polychlorinated Dibenzo furans (PCDFs).

(f) "Design" means any military specifications, formula, formulation, or mixture which were incorporated in, the subject of, or required by the government contracts entered into by the defendants.

(g) "Person" shall mean any individual, partnership, firm, association, corporation, joint venturer, or other business or any other public or private legal entity.

(h) "Government", "United States" and "United States Government" shall mean the government of the United States including the executive, legislative, and judicial branches and shall also include the Department of Defense, Department of Army, Department of Air Force, Department of Navy, Veterans Administra-

tion, and any other organization within the Government of the United States of America charged with the prosecution of the war in Vietnam beginning 1961 through 1971.

(i) "Production" means the method of manufacture or process used by the defendants in producing the Agent Orange herbicides and also includes quality control/quality assurance, inspections, testing, sampling, marking, labelling, packaging, or containerizing, shipping, and transportation of the Agent Orange herbicides.

(j) "Contract" means the contract itself, specifications, and other terms incorporated therein physically or by reference, and contract-related documents including each of the following: correspondence between the defendants and the government, notes and minutes of meetings and conferences, telephone conversations, and all other written and oral communications between the defendants and the government, and the defendants with each other, records and reports concerning design and production of the Agent Orange herbicides, results of inspections and testing, defendants' cost of production, the purchase price and all payments for compensation received by the defendants from the government as a result of the government contract. The contract and contract-related documents shall cover the period from the inception of defendants' negotiations with the United States Government for the procurement, purchase and supply of Agent Orange herbicides to date.



(k) "Proprietary information" means any information concerning with the design or production of the Agent Orange herbicide which any defendant claims is privileged against disclosure by reason of trade secret, patent, or other privilege.

(l) "Division of a defendant company" means the division or divisions concerned with research and development, design, production, engineering, operations, sales, finance or other transactions related to the Agent Orange herbicide.

The Names and Locations of Witnesses

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

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.

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:

- (i) Negotiations and contract with the United States Government for the sale of the Agent Orange herbicide for use in South-east 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.
- (ii) Design of the Agent Orange herbicide which was the subject of the government contract.
- (iii) The production of the Agent Orange herbicide which was the subject of the government contract.
- (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.

- (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.
- (vi) Warning to the United States Government, if any, with regard to the matters stated in the preceding item (v).
- (vii) The manufacturing process proposed to be utilized or utilized in the production of Agent Orange.

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-Tetracholor Dibenzo p-dioxin (TCDD or "Dioxin") and other herbicides containing Polychlorinated Diben-

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

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

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.

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.

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:

- (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.
- (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.
- (iii) Warning to the United States Government, if any, with regard to the matters stated in the preceding item (ii).
- (iv) The process utilized or proposed to be utilized by defendant to manufacture Agent Orange.

Existence, Location and Custodian of Documents and other Physical Evidence

4. 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:

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".

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.

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.

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

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

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

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.

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.

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

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.

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

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.

M. The company's knowledge of the existence of Dioxin in the production, manufacture, distribu-



tion, sale, marketing, and promotion of phenoxy herbicides.

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.

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, or phenoxy herbicides.

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

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.

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.

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.

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.

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.

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.

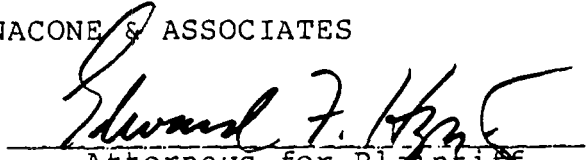
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6. Identify the name, title, address and telephone number of those persons employed by or under contract with, or otherwise related to the Defendants, who were authors of said documents and those persons who are familiar with such documents.

January 15 , 1981

YANNACONE & ASSOCIATES

By:

  
Attorneys for Plaintiff

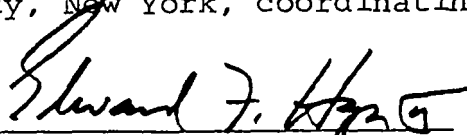
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STATE OF NEW YORK)

ss.:

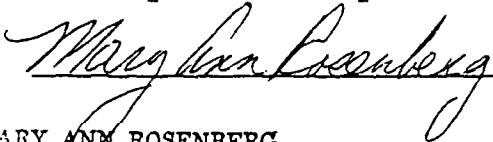
COUNTY OF NASSAU )

EDWARD F. HAYES, III, being duly sworn, says that on the 15 day of January, 1981, he served the within First Wave Interrogatories of Plaintiffs by delivering " true copies of same to Rivkin, Leff & Sherman, 100 Garden City Plaza, Garden City, New York, coordinating counsel for defendants.



Edward F. Hayes, III

Sworn to before me this  
15 day of January, 1981



MARY ANN ROSENBERG  
Notary Public, State of New York  
No. 30-4688083  
Qualified in Nassau County  
Commission Expires March 30, 1982

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UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

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

★ JAN 15 1981 ★

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In re : MDL No. 381  
"AGENT ORANGE" : DEFENDANTS' PHASE I  
Product Liability Litigation : FIRST WAVE INTERROGATORIES  
(FIRST SET)  
-----x

PLEASE TAKE NOTICE that, pursuant to Rule 33 of the Federal Rules of Civil Procedure and Pretrial Order No. 26, filed December 29, 1980, the undersigned defendants demand that the United States of America and each plaintiff herein serve and file answers to each of the following Interrogatories under oath on or before February 13, 1981, in accordance with the definitions and instructions attached hereto and made a part hereof.

INTERROGATORIES

A. RESEARCH, DEVELOPMENT, TESTING  
AND EVALUATION OF HERBICIDES

1. Identify separately each unit of the United States, as defined herein, including those listed on Appendix A hereto, that engaged during the period prior to January 1, 1972 in any activities relating to the research, development, testing or evaluation of herbicides for potential use in connection with military activities, and as to each such unit, describe:

a. The nature and extent of its involvement in such activities; and

b. The duration of its involvement in such activities.

2. As to each separate unit of the United States identified in the response to Interrogatory 1, identify each

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person in charge of or with responsibility for any of its activities relating to the research, development, testing or evaluation of herbicides for potential use in connection with military activities.

3. Give an organization chart for each separate unit of the United States identified in the response to Interrogatory 1 for each period prior to January 1, 1972 during which it was involved in activities relating to the research, development, testing or evaluation of herbicides for potential use in connection with military activities.

4. Identify each communication, meeting, contract or other transaction between the United States and any of the defendants herein, or any officer, agent, employee or other person acting or purporting to act on behalf of a defendant, that concerns or relates to any research, development, testing or evaluation of herbicides prior to January 1, 1972 for potential use in connection with military activities.

5. Identify each document constituting, memorializing, disclosing, referring or relating to each communication, meeting, contract or other transaction identified in the response to Interrogatory 4.

6. Identify each project concerning the research, development, testing or evaluation of herbicides for potential use in connection with military activities, including those projects listed on Appendix B hereto.

7. As to each project identified in the response to Interrogatory 6, identify each document that constitutes, memorializes, discloses, refers or relates to the results of research,

development, testing or evaluation that was conducted pursuant to that project.

B. SPECIFICATION, SELECTION, PURCHASE,  
PROCUREMENT, PRODUCTION, SHIPMENT  
AND DELIVERY OF HERBICIDES

8. Identify separately each unit of the United States, as defined herein, including those listed on Appendix A hereto, that engaged during the period prior to January 1, 1972 in any activities relating to the specification, selection, purchase, procurement, production, shipment or delivery of herbicides for potential use in connection with military activities, and as to each such unit, describe:

a. The nature and extent of its involvement in such activities; and

b. The duration of its involvement in such activities.

9. As to each separate unit of the United States identified in the response to Interrogatory 8, identify each person in charge of or with responsibility for any of its activities relating to the specification, selection, purchase, procurement, production, shipment or delivery of herbicides for potential use in connection with military activities.

10. Give an organization chart for each separate unit of the United States identified in the response to Interrogatory 8 for each period prior to January 1, 1972 during which it was involved in activities relating to the specification, selection, purchase, procurement, production, shipment or delivery of herbicides for potential use in connection with military activities.



11. Identify each communication, meeting, contract or other transaction between the United States and any of the defendants herein, or any officer, agent, employee or other person acting or purporting to act on behalf of a defendant, that concerns or relates to the specification, selection, purchase, procurement, production, shipment or delivery of herbicides prior to January 1, 1972 for potential use in connection with military activities.

12. Identify each document constituting, memorializing, disclosing, referring or relating to each communication, meeting, contract or other transaction identified in response to Interrogatory 11.

13. Identify each herbicide used or tested by the United States prior to January 1, 1972 for potential use in connection with military activities, and with respect to each such herbicide:

a. State the dates during which it was used and/or tested;

b. Identify each geographical location at which it was used and/or tested; and

c. Identify the suppliers and/or manufacturers, and state the amounts contracted for by the United States and the amounts delivered to the United States by each such supplier and/or manufacturer.

14. For the period from January 1, 1961 to January 1, 1972, identify each person in charge of, with responsibility for, or who participated in or was consulted with respect to:

a. Selecting, contracting with or making changes in suppliers and manufacturers of herbicides for potential use in

connection with military activities;

b. Preparing, evaluating, selecting, modifying or approving technical specifications for each herbicide selected, purchased or procured by the United States for potential use in connection with military activities;

c. Preparing, evaluating, selecting, modifying or approving labeling specifications for each herbicide selected, purchased or procured by the United States for potential use in connection with military activities; and

d. Preparing, evaluating, selecting, modifying or approving shipping and financial specifications for each herbicide selected, purchased or procured by the United States for potential use in connection with military activities.

15. For the period from January 1, 1961 to January 1, 1972, identify each document that describes, refers or relates to:

a. The selection of, contracts with, or the making of changes in suppliers and manufacturers of herbicides for potential use in connection with military activities;

b. The preparation, evaluation, selection, modification or approval of technical specifications for each herbicide selected, purchased or procured by the United States for potential use in connection with military activities;

c. The preparation, evaluation, selection, modification or approval of labeling specifications for each herbicide selected, purchased or procured by the United States for potential use in connection with military activities; and

d. The preparation, evaluation, selection, modification or approval of shipping and financial specifications for each herbicide selected, purchased or procured by the United States for potential use in connection with military activities.

16. For the period from January 1, 1961 to January 1, 1972, identify each person in charge of, with responsibility for, or who participated in or was consulted with respect to:

a. Contacting and negotiating with suppliers and manufacturers concerning contracts for, and the purchase or procurement of herbicides for potential use in connection with military activities;

b. Evaluating, considering or determining conformity or compliance by suppliers and manufacturers with technical specifications for each herbicide selected, purchased or procured by the United States for potential use in connection with military activities;

c. Evaluating, considering or determining conformity or compliance by suppliers and manufacturers with labeling specifications for each herbicide selected, purchased or procured by the United States for potential use in connection with military activities;

d. Evaluating, considering or determining conformity or compliance by suppliers and manufacturers with shipping and financial specifications for each herbicide selected, purchased or procured by the United States for potential use in connection with military activities; and

e. Evaluating, considering or determining performance by suppliers and manufacturers of any contracts for herbicides selected, purchased or procured by the United States for potential use in connection with military activities.

17. For the period from January 1, 1961 to January 1, 1972, identify each document that describes, refers or relates to:

a. Contracts and negotiations with suppliers and manufacturers concerning contracts for, and the purchase or

procurement of herbicides for potential use in connection with military activities;

b. The evaluation, consideration or determination of conformity or compliance by suppliers and manufacturers with technical specifications for each herbicide selected, purchased or procured by the United States for potential use in connection with military activities;

c. The evaluation, consideration or determination of conformity or compliance by suppliers and manufacturers with labeling specifications for each herbicide selected, purchased or procured by the United States for potential use in connection with military activities;

d. The evaluation, consideration or determination of conformity or compliance by suppliers and manufacturers with shipping and financial specifications for each herbicide selected, purchased or procured by the United States for potential use in connection with military activities; and

e. The evaluation, consideration or determination of performance by suppliers and manufacturers of any contracts for herbicides selected, purchased or procured by the United States for potential use in connection with military activities.

18. For the period from January 1, 1961 to January 1, 1972, identify each person in charge of, with responsibility for, or who participated in or was consulted with respect to:

a. The implementation, application or use of the Defense Production Act of 1950, the Defense Materials System, or any regulations, orders, procedures, directives or priority ratings issued or available pursuant thereto, in connection with the production, procurement, purchase or shipment of herbicides for use in connection with military activities.

19. For the period from January 1, 1961 to January 1, 1972, identify each document that:

a. Discusses, refers or relates to the implementation, application or use of the Defense Production Act of 1950, the Defense Materials System, or any regulations, orders, procedures, directives or priority ratings issued or available pursuant thereto, in connection with the production, procurement, purchase or shipment of herbicides for use in connection with military activities; and

b. Contains a reference to the Defense Production Act of 1950, the Defense Materials System, or any regulations, orders, procedures, directives or priority ratings issued or available pursuant thereto, and which was prepared in connection with the production, procurement, purchase or shipment of herbicides for use in connection with military activities.

C. USE, APPLICATION AND  
DISPOSAL OF HERBICIDES

20. Identify separately each unit of the United States, as defined herein, including those listed on Appendix A hereto, that engaged during the period from January 1, 1961 to January 1, 1972 in any activities relating to the use, application (i.e., dispersal) or disposal of herbicides in connection with military activities in Southeast Asia, and as to each such unit, describe:

a. The nature and extent of its involvement in such activities; and

b. The duration of its involvement in such activities.

21. As to each separate unit of the United States identified in the response to Interrogatory 20, identify each

person in charge of or with responsibility for any of its activities relating to the use, application or disposal of herbicides in connection with military activities in Southeast Asia.

22. Give an organization chart for each separate unit of the United States identified in the response to Interrogatory 20 for each period between January 1, 1961 and January 1, 1972 during which it was involved in activities relating to the use, application or disposal of herbicides in connection with military activities in Southeast Asia.

23. Identify each communication, meeting or other transaction between the United States and any of the defendants herein, or any officer, agent, employee or other person acting or purporting to act on behalf of a defendant, that concerns or relates to the use, application or disposal during the period from January 1, 1961 to January 1, 1972 of herbicides in connection with military activities in Southeast Asia.

24. Identify each document describing, referring or relating to each communication, meeting or other transaction identified in the response to Interrogatory 23.

25. Identify each person in charge of, with responsibility for, or who participated in or was consulted with respect to:

a. Evaluating, considering or determining whether and the purposes for which herbicides would be used in connection with military activities in Southeast Asia;

b. Evaluating, considering or determining which herbicides would be used in connection with military activities in Southeast Asia;

c. Developing, considering, evaluating, selecting, modifying, issuing and approving procedures, guidelines, instructions, directives, orders or rules and regulations relating to the time, place and manner of application of each herbicide used in connection with military activities in Southeast Asia;

d. Developing, considering, evaluating, selecting, modifying, issuing and approving procedures, guidelines, instructions, directives, orders or rules and regulations relating to the conditions for and all other considerations pertaining to the application of each herbicide used in connection with military activities in Southeast Asia;

d. Evaluating, considering or determining the effectiveness, usefulness and tactical or strategic value of each herbicide used in connection with military activities in Southeast Asia; and

e. Evaluating, considering or determining whether to suspend, modify or discontinue the application of any herbicide used in connection with military activities in Southeast Asia.

26. Identify each document that constitutes, memorializes, discloses, describes, refers or relates to:

a. The evaluation, consideration or determination of whether and the purposes for which herbicides would be used in connection with military activities in Southeast Asia;

b. The development, consideration, evaluation, selection, modification, issuance and approval of procedures, guidelines, instructions, directives, orders or rules and regulations relating to the time, place and manner of application of each herbicide used in connection with military activities in Southeast Asia;

c. The development, consideration, evaluation, selection, modification, issuance and approval of procedures, guidelines, instructions, directives, orders or rules and regulations relating to the conditions for and all other considerations pertaining to the application of each herbicide used in connection with military activities in Southeast Asia;

d. The evaluation, consideration or determination of the effectiveness, usefulness and tactical or strategic value of each herbicide used in connection with military activities in Southeast Asia; and

e. The evaluation, consideration or determination of whether to suspend, modify or discontinue the application of any herbicide used in connection with military activities in Southeast Asia.

D. HEALTH EFFECTS AND DIOXIN

27. For the period prior to January 1, 1972, identify each person in charge of, with responsibility for, or who participated in or was consulted with respect to:

a. Evaluating, considering or determining the toxicity or health effects of dioxin, 2,4,5-trichlorophenoxyacetic acid, 2,4-dichlorophenoxyacetic acid or any of the herbicides involved in this action;

b. Evaluating, considering or determining matters relating to the synthesis, analysis, identification, origin, destruction or removal of dioxin; and

c. Evaluating, considering or determining matters relating to the presence or possible presence of dioxin in 2,4,5-trichlorophenoxyacetic acid, 2,4-dichlorophenoxyacetic acid or any of the herbicides involved in this action.



28. For the period prior to January 1, 1972, identify each document that discusses, mentions, refers or relates to:

a. The toxicity or health effects of dioxin, 2,4,5-trichlorophenoxyacetic acid, 2,4-dichlorophenoxyacetic acid or any of the herbicides involved in this action;

b. The synthesis, analysis, identification, origin, destruction or removal of dioxin; and

c. The presence or possible presence of dioxin in 2,4,5-trichlorophenoxyacetic acid, 2,4-dichlorophenoxyacetic acid or any of the herbicides involved in this action.

#### DEFINITIONS AND INSTRUCTIONS

1. The following definitions apply herein:

a. "Dioxin" means all polychlorinated dibenzo-p-dioxins (PCDDs) and all polychlorinated dibenzofurans (PCDFs).

b. "Document" is used in the broadest possible sense and means any written or graphic matter of whatever kind or nature, or any other means of preserving thoughts or expression (including, without limitation, tape recordings and/or transcriptions thereof), and all tangible things from which information can be processed or transcribed, whether originals, copies or drafts (including without limitation, non-identical copies), however produced or reproduced. Note that a document with handwritten or typewritten notes, editing or other marks, etc., is not and shall not be deemed identical to one without such notes, marks, etc. "Documents" also means all graphic, mechanical, or electronic reproductions, representations, recordings, or compilations of data of any kind, including but not limited to, drawings, charts, graphs, motion picture films, microfilms, microfiles, photographs, tape recordings,

videotapes, any transcripts or printouts produced therefrom, and all drafts of any of the foregoing.

c. "Draft" means any earlier, preliminary, preparatory or tentative version of all, or part of the document, whether or not such draft was superseded by a later draft, and whether or not the terms of the draft are the same as, or different from the terms of the final document.

d. "Herbicide" means any substance containing 2,4,5-trichlorophenoxyacetic acid, 2,4-dichlorophenoxyacetic acid, or an ester, amine, salt or other form thereof, including Agent Orange, Agent Pink, Agent Purple, Agent Green and any other herbicide involved in this action.

e. "Identify" when used with reference to a natural person means state:

- (i) his full name and present address (or if his present address is not known, his last known address); and
- (ii) his present (or, if his present is not known, his last known) job, position, rank, and/or professional affiliations, and the same information for the time of the acts or other matters to which the Interrogatory is addressed.

f. "Identify" when used with reference to any person other than a natural person means state:

- (i) the full name thereof;
- (ii) the nature of the activity engaged in;
- (iii) the address and principal place of business; and
- (iv) if applicable, the jurisdiction under the laws

of which it has been organized and the date of such organization.

g. "Identify" when used with reference to a document means state:

- (i) its nature (e.g., letter, telegram, memorandum, chart, report, list, etc.), date, and the identity of the author and addressees;
- (ii) the identity of each person who signed the document and each person who participated in preparing the document;
- (iii) its title or heading;
- (iv) its substance; and
- (v) its present (or, if the present is not known, the last known) location and custodian.

h. "Identify" when used with reference to a communication, meeting or transaction means state:

- (i) its nature (e.g., telephone conversation, face-to-face conversation or meeting, letter, memorandum, etc.);
- (ii) the date and place thereof (and if a telephone conversation, the place each participant was located);
- (iii) the identity of each person participating in, present during, or witness to, all or any part thereof; and
- (iv) the substance thereof.

i. "Identify" when used with reference to a herbicide means state its full chemical formulation and any trade or other names by which it is known.

of which it has been organized and the date of such organization.

g. "Identify" when used with reference to a document means state:

- (i) its nature (e.g., letter, telegram, memorandum, chart, report, list, etc.), date, and the identity of the author and addressees;
- (ii) the identity of each person who signed the document and each person who participated in preparing the document;
- (iii) its title or heading;
- (iv) its substance; and
- (v) its present (or, if the present is not known, the last known) location and custodian.

h. "Identify" when used with reference to a communication, meeting or transaction means state:

- (i) its nature (e.g., telephone conversation, face-to-face conversation or meeting, letter, memorandum, etc.);
- (ii) the date and place thereof (and if a telephone conversation, the place each participant was located);
- (iii) the identity of each person participating in, present during, or witness to, all or any part thereof; and
- (iv) the substance thereof.

i. "Identify" when used with reference to a herbicide means state its full chemical formulation and any trade or other names by which it is known.

j. "Identify" when used with reference to a project or military operation means state any names by which it was known, its purpose or goal, the dates it began and ended, the locations at which it was conducted, and identify separately persons:

- (i) who approved or authorized its undertaking;
- (ii) who were responsible for operational management; and
- (iii) who were responsible for evaluating its results.

k. "Identify" when used in any context other than hereinabove set forth means describe the pertinent act, work, situation, event, etc., as fully as possible, and identify each person in any way involved therein and each document or communication in which such act, work, situation, event, etc., is recorded, described, discussed or otherwise referred to.

l. "Labeling specifications" means those portions of contract specifications for a product that direct what markings shall be made on the product or its container.

m. "Person" means any natural person, individual, partnership, company, corporation, government body or any other entity.

n. "Shipping and financial specifications" means those portions of contract specifications for a product that direct the packing and manner of shipping for the product and that pertain to the price and payment terms.

o. "Technical specifications" means those portions of contract specifications that detail the chemical or other composition, performance and production standards of the product.

p. "United States" means THE UNITED STATES OF AMERICA and its offices, departments, bureaus, agencies, representatives, department heads, agency heads, bureau chiefs, agents, attorneys, employees, or any other persons, acting or purporting to act for, or on behalf of THE UNITED STATES OF AMERICA, under the authority or control of THE UNITED STATES OF AMERICA, or any one or more of the foregoing.

q. "You" means the United States, as defined above, and each plaintiff herein.

2. Each Interrogatory is to be answered to the extent of all information available to you, including all documents and other sources of knowledge within your possession, custody or control, or within the possession, custody or control of your attorneys, wherever located, and including your documents placed in independent storage facilities.

3. Unless otherwise indicated, each Interrogatory requests information for the period prior to January 1, 1972, including all information available from documents dated, prepared, sent or received, in whole or in part, prior to January 1, 1972. In addition, however, when any document refers or relates to the period prior to January 1, 1972, you should include the information from that document in your response without limitation as to when the document was dated, prepared, sent or received.

4. Each Interrogatory that refers to any group of persons is to be answered separately and with particularity as to each member of any such group.

5. Each Interrogatory that refers to herbicides is to

be answered separately and with particularity as to each applicable herbicide.

6. Except where explicitly indicated otherwise, each Interrogatory herein should be construed independently and not by reference to any other paragraph for the purpose of limitation.

7. If the answer to all or any part of an Interrogatory is not now known or you are otherwise not able to answer fully, so state in response to such Interrogatory or part thereof, state the reasons, and furnish whatever responsive information is now known or otherwise available.

8. If any privilege is claimed as to any information called for, or as to any document required to be identified by an Interrogatory:

- (i) state the nature of the privilege claimed (e.g., attorney-client, work product, etc.);
- (ii) state the basis for claiming the privilege as to the specific information or document;
- (iii) if the privilege is claimed with respect to any information, identify each person who has knowledge of such information, or to whom such information has been communicated in any way, at any time; and
- (iv) if the privilege is claimed as to any document, identify such document.

9. Certain of the Interrogatories herein seek disclosure that goes beyond the issues defendants contend should be tried in Phase I. Defendants have nevertheless included such Interrogatories because the issues for Phase I trial have not yet

been defined by the Court. Defendants reserve their right to modify or supplement these Interrogatories to the extent required by the Court's determinations as to the standards and elements of the government contract defense.

10. "And" as well as "or" shall be construed either disjunctively or conjunctively as necessary to bring within the scope of the specification all responses which might otherwise be construed to be outside its scope. "Each" shall be construed to include the word "every" and "every" shall be construed to include the word "each". "Any" shall be construed to include the word "all" and "all" shall be construed to include the word "any". "Including" shall be construed to include the phrase "without limitation".

Dated: New York, New York  
January 15, 1981

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TO: MDL SERVICE LIST

APPENDIX A

EXECUTIVE BRANCH

I. Department of Defense

A. Defense Supply Agency

1. Defense General Supply Center  
Richmond, Virginia
  - a. Directorate of Procurement  
and Production
2. Contract Administration Services
  - a. Office of Contracts Compliance
  - b. Offices of Contract Administration  
Services Regions

B. Defense Advanced Research Projects Agency

C. Department of the Army

1. Fort Detrick, Maryland
  - a. Biological Laboratories
2. Edgewood Arsenal, Maryland
  - a. Weapons Development and Engineering  
Laboratories - Chemical Process Laboratory
  - b. Office of Procurement and Production
3. Camp Drum, New York
4. Dugway, Utah Proving Grounds

D. Department of the Air Force

1. Eglin Air Force Base, Florida
  - a. Armament Development and Test Center
2. Brooks Air Force Base, Texas
  - a. Occupational and Environmental Health  
Laboratory
3. Wright-Patterson Air Force Base, Ohio
  - a. Aerospace Research Laboratories
  - b. Air Force Logistics Command

- 4. Directorate of Aerospace Fuels
  - a. Kelly Air Force Base, Texas
  - b. Aerospace Fuels Field Offices -  
Transportation Branch

5. Surgeon General

6. Operation RANCH HAND

E. Department of the Navy

- 1. Naval Construction Battalion Center  
Gulfport, Mississippi

F. Military Assistance Command in Vietnam

- 1. "203 Committee"

G. Institute for Defense Analyses

- 1. Project AGILE

II. Department of Commerce

A. Business and Defense Services Administration

- 1. Chemicals and Allied Products Division
- 2. Office of Industrial Mobilization

III. Department of Agriculture

A. Office of Science and Education

- 1. Agricultural Research Service
  - a. Pesticide Regulation Division
  - b. Crop Research Division -  
Crops Protection Research Branch
  - c. Texas and Puerto Rico operations
  - d. Plant Industry Station  
Beltsville, Maryland

B. Advisory Committee on 2,4,5-T

C. Forest Service

IV. Department of Health, Education and Welfare

A. Public Health Service

- 1. National Institute of Environmental Health  
Sciences
  - a. NIEHS Laboratories  
Research Triangle, North Carolina

2. Food and Drug Administration

V. Department of State

- A. American Embassy, Republic of Vietnam

VI. Department of the Interior

VII. Executive Office of the President

- A. Office of Civil and Defense Mobilization  
B. Council on Environmental Quality  
C. National Security Council  
    1. Central Intelligence Agency  
D. Office of Science and Technology  
    1. Panel on Herbicides of the President's Science  
       Advisory Committee

INDEPENDENT AND QUASI-OFFICIAL AGENCIES

VIII. National Academy of Sciences

- A. "ABC Committee" (a committee to investigate biological and chemical warfare)  
B. Committee on the Effects of Herbicides in Vietnam

IX. National Research Council

X. Environmental Protection Agency

- A. Advisory Committee on 2,4,5-T

MISCELLANEOUS

XI. Department of War

- A. War Research Service

APPENDIX B

1. Projects concerning the testing of herbicides for potential use during World War II;
2. Projects undertaken after World War II which were conducted in greenhouses and/or Puerto Rico;
3. Projects conducted at or involving Fort Detrick, Maryland, Eglin Air Force Base, Florida and Camp Drum, New York;
4. Projects rendering assistance to or undertaken in cooperation with foreign nations, including specifically the United Kingdom;
5. Projects undertaken pursuant to or in connection with a request by the Department of Defense in or about May 1961 to determine the feasibility of herbicide operations in Vietnam;
6. Projects concerning the possible manufacture of herbicides by or under the direct control of the United States at Weldon Springs, Missouri, Muscle Shoals, Alabama or elsewhere;
7. Operation HADES;
8. Operation RANCH HAND; and
9. Project AGILE.

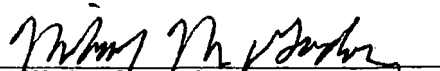
AFFIDAVIT OF SERVICE

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

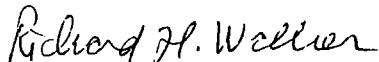
MICHAEL M. GORDON, being duly sworn, deposes and says:

1. I am not a party to this action, am over 18 years of age and reside at 29 West 85th Street, New York, New York 10024.

2. On January 15, 1981, I served the annexed Defendants' Phase I First Wave Interrogatories (First Set) 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.

  
Michael M. Gordon

Sworn to before me this  
15<sup>th</sup> day of January, 1981



Notary Public  
RICHARD H. WALKER  
Notary Public, State of New York  
No. 31-4059J27  
Qualified in New York County  
Commission Expires March 30, 1981

In re: "AGENT ORANGE" MDL-381  
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UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

docket

-----X

In Re

"Agent Orange"

Product Liability Litigation

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

AFFIDAVIT

STATE OF NEW YORK )  
COUNTY OF NASSAU )

SS.:



DEC 15 1980



79-C-1195

TIME A.M.  
P.M.

MDL 381

Leonard L. Rivkin, being duly sworn deposes and  
says:

1. I am a member of the firm of Rivkin, Leff & Sherman, attorneys for defendant and third-party plaintiff The Dow Chemical Company ("Dow"), and, as such, am fully familiar with the facts and proceedings herein. I submit this affidavit in support of Dow's Memorandum in Response to Plaintiffs' Motion to Amend their Fourth Amended Verified Complaint.

2. Plaintiffs seek in their proposed amended complaint to sue certain agencies and agents of the United States. Dow has already brought the United States into this law suit as a third-party defendant, and we believe the United States is a proper party to this action. We take no position on the legal merit of permitting plaintiffs' claims against the government at this time.

3. Plaintiffs' motion professes to be grounded on evidence of governmental knowledge regarding Agent Orange proffered by Dow, apparently referring to my affidavit of October 13, 1980 wherein I submitted to this Court a copy of an article by Drs. Jones and Krizek and an article by Kimmig and Schulz.

10558

4. These articles were submitted to demonstrate to this Court that:

- "a) the United States knew as early as 1962 that dioxin was produced during the manufacture of 2,4,5-T, an ingredient of Agent Orange;
- b) the United States knew as early as 1962 that dioxin was potentially toxic;
- c) the United States knew that dioxin was a highly active acnegen;
- d) the United States knew of a test--the 'rabbit ear test'--which was used to detect the existence of acne causing agents in chemical products; and
- e) the United States knew of reports that dioxon in certain doses could conceivably cause liver damage in animals and loss of appetite, debility, and other symptoms."

Rivkin Affidavit of Oct. 13, 1980, para. 12.

5. Although all formal discovery procedures in the "Agent Orange" product liability litigation matter have been stayed, we have recently uncovered further evidence of the United States Government's continued interest in and concern with the possibility of dioxin contamination of 2,4,5-T.

6. A Freedom of Information request was made on September 23, 1980. In response, a copy of a project protocol on a study proposed by David N. Groth, M.D., Chief of the

Pathology Section, Division of Biomedical and Behavioral Science of the Public Health Service of the Department of Health, Education and Welfare was received. The proposal and its accompanying Project Development and Approval form are annexed hereto as Exhibit "A."

7. The annexed proposed study is evidence that, in February of 1965, the United States Department of Health, Education and Welfare through its Public Health Service was concerned about the suspected contamination of 2,4,5-T with 2,3,7,8 tetrachlorodibenzo-P-dioxin (TCDD).

8. Dr. Groth sought funding in the amount of some \$16,000 to separate commercial 2,4,5-T into its component ingredients by get chromatography. He then proposed to test each component for acnegenic and liver damaging effects by painting the component onto the skins of rabbits. He also proposed to test 2,3,7,8 TCDD orally on dogs and then to test the dogs for liver damage and for urinary prophyrics. Dr. Groth sought to positively identify the toxic factor which he suspected was present in 2,4,5-T.

9. In his description of the problem the proposed study sought to address, Dr. Groth reports, albeit erroneously, that there were "many reports of people developing chloracne and serious liver damage secondary to accidental over exposure to this compound (2,4,5-T) in industry." He further reports some incredible findings of a Dr. George Lawton, an intern training at the Occupational Health and Research Training facility. Apparently, in 1964 Dr. Lawton believed 2,4,5-T to be a potent chloracnegan as well as a potent hepatotoxin. Dr. Lawton never

published his findings; they were known only to the U. S. Government. The validity of his findings are not at issue; what is important is that the Department of Health, Education and Welfare believed his information to be correct.

10. Dr. Groth's search of the literature led him to suspect 2,3,7,8 TCDD as the potential contaminant in 2,4,5-T. He estimated that TCDD was probably present in commercial 2,4,5-T "in very small amounts - estimated at 0.01%" (Dr. Groth's Proposal Par. 4). Dr. Groth's concern about the potent toxicity of 2,3,7,8 TCDD led him to seek funds to positively determine whether or not TCDD was a contaminant in 2,4,5-T.

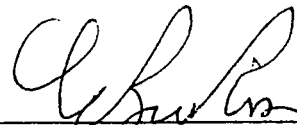
11. The annexed project proposal adds significantly to the evidence presented in my October 13, 1980 affidavit. This new evidence demonstrates not only U. S. knowledge of dioxin as a potential contaminant, but demonstrates in addition that the Chief of Pathology of the U. S. Department of Health, Education and Welfare

- a) was concerned about dioxin contaminating 2,4,5-T and sought funds for further study;
- b) was concerned because the contaminant had been purportedly linked to chloracne and serious liver damage;



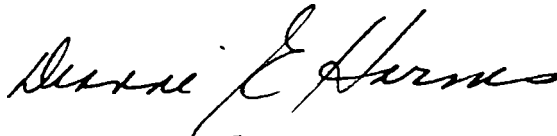
- c) believed the contaminant to be  
2,3,7,8 trichlorodibenzo-P-dioxin  
(TCDD); and
- d) believed that TCDD was "probably  
present" in commercial 2,4,5-T in  
very small amounts, estimated at 0.01%.

Nevertheless, in its contracts with Dow, despite its knowledge and concern that dioxin could be present in the herbicide Agent Orange, the United States never specified any limits on the dioxin content of the herbicide it purchased. The annexed project proposal therefore is but one more piece of evidence demonstrating that the United States Government is a proper party to this law suit.



LEONARD L. RIVKIN

Sworn to before me this  
15<sup>th</sup> day of December, 1980



DIANNE E. HARMS  
Notary Public, State of New York  
No. 30-4522145  
Qualified in Nassau County  
Commission Expires March 30, 1982

# PROJECT DEVELOPMENT AND APPROVAL

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                   |                                                 |                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------------|--------------------------------------------------------|
| 1. TITLE<br>Identification of the toxic factor in <del>2,4,5 trichlorophenoxyacetic acid</del><br>2,4,5 trichlorophenoxyacetic acid (2,4,5T)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   | 2. NUMBER<br>6.5.                               |                                                        |
| 3. <input checked="" type="checkbox"/> REGULAR EMP. <input type="checkbox"/> RADIOLOGICAL HEALTH <input type="checkbox"/> AIR POLLUTION CONTROL <input type="checkbox"/> OTHER _____<br><input checked="" type="checkbox"/> LAB RESEARCH <input type="checkbox"/> FIELD INVEST. <input type="checkbox"/> EQUIP. DEVEL. <input type="checkbox"/> ANALYT. OR METHOD. <input type="checkbox"/> OTHER _____<br><input type="checkbox"/> CLINICAL <input type="checkbox"/> DERMAT. <input type="checkbox"/> TOXICOL. <input type="checkbox"/> ENGIN. <input checked="" type="checkbox"/> OTHER Pathology                                                                                                    |                   |                                                 |                                                        |
| 4. WHAT IS THE PROBLEM?<br>There have been many reports of people developing chloracne and liver damage from exposure to 2,4,5 trichlorophenoxyacetic acid (2,4,5T) in industry. It has been suggested in the literature that the toxic effects were not due to 2,4,5T but to some <del>other</del> contaminant. It is necessary to identify the toxic compound or compounds in commercial 2,4,5T as a means of solving this occupational health problem. (see Appendix)                                                                                                                                                                                                                               |                   |                                                 |                                                        |
| 5. WHY IS IT IMPORTANT?<br>The herbicide 2,4,5T is produced and widely used in large quantities, and several cases of illness have resulted from contact with the compound. If the toxic compound is 2,4,5T, but some <del>other</del> contaminant, then the manufacturing process <del>could</del> be altered some way to eliminate the hazardous compound.                                                                                                                                                                                                                                                                                                                                           |                   |                                                 |                                                        |
| 6. PROPOSED METHOD OF ATTACK: <span style="float:right">Chromatography</span><br>The commercially available 2,4,5T will be separated by gel electrophoresis into its separate components, and each component will be tested for its acrogenic and liver damaging effect by painting it onto the skins of rabbits. Skin biopsies, blood chemistry function tests, tests for urinary porphyrins, liver biopsies, autopsies, histology, electron microscopy will be done. An available amount of 2,3,7,8 tetrachlorodibenzo-p-dioxin will also be tested orally on dogs, using all the above mentioned tests. Chemistry of the compounds will be determined by their U-V and infrared absorption spectra. |                   |                                                 |                                                        |
| 7. RELATIONSHIP TO OTHER ORGANIZATIONS<br><br>None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                                                 |                                                        |
| 8. SPECIAL EQUIPMENT, FACILITIES OR PERSONNEL NEEDED<br>Gel electrophoresis apparatus<br>International centrifuge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                   |                                                 |                                                        |
| 9. ESTIMATED DURATION (Years)<br>1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                   | 10. OPERATIONS COULD BEGIN<br>February 1, 1965  |                                                        |
| 11. ESTIMATED COST<br>(In thousands of \$)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | TOTAL<br>\$16,035 | 1ST YEAR<br>\$16,035                            | 2D YEAR<br>3D YEAR<br>4TH YEAR<br>5TH YEAR<br>6TH YEAR |
| 12. PROJECT WILL BE CONDUCTED BY<br>David H. Groth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   | UNDER GENERAL SUPERVISION OF<br>Gunter E. Kraus |                                                        |
| APPROVED BY:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                                                 |                                                        |
| <del>Chromatography</del> Pathology Unit<br>Gunther E. Kraus, Sup. Res. Vet.<br>CHIEF, OCC. HEALTH FIELD RECS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | DATE              | PROJECT REVIEW COMMITTEE                        | DATE                                                   |
| CHIEF, OCC. HEALTH FIELD RECS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | DATE              | CHIEF, OCC. HEALTH PROGRAM                      | DATE                                                   |

1-12-65

Proposed Method

Chloracne

A. The compound 2,3,7,8 tetrachlorodibenzo-p-dioxin will be given daily to three groups of dogs orally in three different doses,  $0.1 \mu \text{ g/Kg}$ ,  $1.0 \mu \text{ g/Kg}$  and  $10 \mu \text{ g/Kg}$ . The compound must first be diluted to a concentration of  $10 \mu \text{ g/cc}$  in 10% ethyl alcohol. Three control dogs who will receive only the diluent will also be used. The mongrel dogs will weigh between 10 and 15 Kg.

The following laboratory tests will be performed twice before administration of the pesticide and at least twice before administration of the pesticide and at least twice weekly after the administration has begun: SGOT, SGPT, BSP, lipase, amylase, BUN, sugar, WBC, hct., <sup>h</sup>egb., and differential blood counts. Urine will also be collected for analysis of urinary porphyrins.

Liver biopsies will be performed once on each animal before pesticide administration and on the 1st, 8th, 15th and 22nd days of administration or more often, if the laboratory tests show evidence of extensive liver damage. Some of the biopsies will be processed for electron microscopy, particularly the pre-administration biopsies and the 24 hour biopsies.

Autopsies will be performed on all animals that die, and at 30-60 days of the experiment. Tissues, will be submitted for histological evaluation.

B. The commercially available (impure) 2,4,5 trichlorophenoxyacetic acid iso-octyl ester will be separated into its suspected five or more fractions by thin-layer gel electrophoresis. This compound will be obtained from Thompson-Hayward Chemical Company.

1-12-65

The whole compound and the individual fractions will then be tested for their chloracnegenic properties by diluting them in acetone and painting them on the shaven scalps of rabbits in three divided doses. Total doses of 1 mg, 10 mg, and 100 mg will be used for each compound on each of six rabbits. All six rabbits in each group will have the following lab. tests - SGOT, SGPT, BSP, lipase, amylase, BUN, sugar, WBC, Hct, Hgb and differential blood counts. Urine will be collected for analysis of porphyrins.

On three of the six animals in each group liver biopsies will be performed on the 1st, 8th, 15th and 22nd days of administration.

The blood tests, urinary porphyrins and liver biopsies will be done before administration of the compounds as well as on 10 controls.

Example

|                                | <u>Dose 1</u> | <u>Dose 2</u> | <u>Dose 3</u> | <u>Control</u> |
|--------------------------------|---------------|---------------|---------------|----------------|
| Blood Tests Urinary Porphyrins | 3             | 3             | 3             | 5              |
| Blood Tests Liver Biopsies     | 3             | 3             | 3             | 5              |

It is anticipated that 28 animals will be used for each compound.

1-12-65

*of the Toxic factor*

1. Identification and Evaluation of the Biologically Toxic Compounds Present

In the Commercial Herbicide, 2,4,5 Trichlorophenoxyacetic acid.

2. E.5.5

3. Lab Research

4. What is the Problem? For several years 2,4,5 trichlorophenoxyacetic acid (2,4,5T) has been used as a herbicide in large quantities. There have been many reports of people developing chloracne and other reports of serious liver damage secondary to accidental over-exposure to this compound in industry. In 1964 Dr. George Lawton partially evaluated the effects of the commercial 2,4,5T and found it to be a potent chloracnogen as well as a potent hepatotoxin. In 1957 a German dermatologist Dr. Kimizig, published a paper stating that the toxic effects were not due to 2,4,5T, but probably due to some contaminant produced in its manufacture. As yet no one has separated out the contaminant, but it is thought to be 2,3,7,8 tetrachlorodibenzo-dioxin. This compound was found by Jones and Krizek to be the most potent chloracnogen, producing chloracne in doses of 1 microgram. Kimizig found it hepatotoxic in a dog after an oral dose of only 50 micrograms. This compound is probably present in the commercial 2,4,5T in very small amounts, estimated at 0.01%. The problem then is to identify the toxic compound or compounds in commercial 2,4,5T by electro-phoretic separation, biologic testing and determination of their U-V absorption spectra.

1. Unpublished data.

2. Kimizig, J. and Schulz, K.H. Occupational Acne Caused by Aromatic Cyclic Ethers. Dermatologica 115: 540-46, 1957.

3. Jones, E.L. and Krizek, H. A Technique for Testing Acnegenic Potency in Rabbits, J. Invest. Derm. 39: 511, 1962. *Applied in the Patent Acnogen, 2,3,7,8-Tetrachlorodibenzo-dioxin*

1-12-65

5. Why is it Important? The herbicide 2,4,5T is produced and widely used in large quantities, and several cases of illness have resulted from contact with the compound. If the toxic compound is not 2,4,5T, but some contaminant, then the manufacturing process might be altered in some way to eliminate the hazardous compound.

6. Proposed Method of Attack: The commercially available 2,4,5T will be separated by gel electrophoresis into its separate components, and each component will be tested for its acnegenic and liver damaging effect by painting it onto the skins of rabbits. Skin biopsies, blood liver function tests, tests for urinary porphyrin, liver biopsies, autopsies, histology and electron microscopy will be done. An available amount of 2,3,7,8 tetrachlorodibenzo-p-dioxin will also be tested orally on dogs, using all the above mentioned tests. The chemistry of the compounds will be determined by their U-V and infra-red absorption spectra.

7. Relationship to other Organizations: None

|                              |                               |           |
|------------------------------|-------------------------------|-----------|
| 8. Special Equipment needed: | Gel Electrophoresis apparatus | \$ 421.50 |
|                              | International Centrifuge      | 1050.00   |
|                              | Gels                          | 30.00     |
|                              | Animals                       | 600.00    |
|                              | Material for blood tests      | 200.00    |

No additional personnel needed.

2,301.50

9. Duration 6 months - 1 year.

10. Begin: Feb. 1, 1965

11. Estimated Cost:

|                         |        | <u>% of time</u> |
|-------------------------|--------|------------------|
| David Groth, M.D.       | 3,150  | 30%              |
| Marcus Key, M.D.        | 1,650  | 10%              |
| Karl Zobel, M.S.        | 2,210  | 20%              |
| R.E. Kupel,             | 1,435  | 10%              |
| Vern Perone             | 3,175  | 30%              |
| Biochemistry Technician | 2,165- | 40%              |

Equipment and Supplies \$2,200

12. Project Leader: Dr. David H. Groth

1370

16,085

10567

## APPENDIX

### 4. WHAT IS THE PROBLEM?

For several years 2,4,5 trichlorophenoxyacetic acid (2,4,5T) has been used as a herbicide in large quantities. There have been many reports of people developing chloracne and other reports of serious liver damage secondary to accidental over-exposure to this compound in industry. In 1965 Dr. George Lawton<sup>1</sup> partially evaluated the effects of the commercial 2,4,5T and found it to be a potent chloracnegen as well as a potent hepatotoxin. In 1957 a German dermatologist, Dr. Kim<sup>2</sup>, published a paper stating that the toxic effects were not due to 2,4,5T, but probably due to some contaminant produced in its manufacture. As yet no one has separated out the contaminant, but it is thought to be 2,3,4,8-tetrachlorodibenzo-p-dioxin. This compound was found by Jones and Krizek<sup>3</sup> to be the most potent chloracnegen known, producing chloracne in doses of 1 microgram. Kim<sup>2</sup> found it hepatotoxic in a dog after an oral dose of only 50 micrograms. This compound is probably present in the commercial 2,4,5T in very small amounts estimated at 0.01%. The problem then is to identify the toxic compound or compounds in commercial 2,4,5T by electrophoretic separation, biologic testing, and determination of their U-V absorption spectra.

## B I B L I O G R A P H Y

1. Dr. George Lawton's unpublished data while he was doing internship training at the Occupational Health Research and Training Facility.
2. Kimmig, J., and Schulz, K. H.: Occupational Acne Caused by Aromatic Cyclic Ethers. Dermatologica, Vol. 115, No. 4, pp 540-546, October 1957.
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26. Bleiberg, ~~et al.~~ <sup>industrially</sup> Acquired porphyria due to 2, 4, 5 trichlorophenol and 2, 4-dichlorophenol. Arch. Dermat. 89: 793, 1964.
27. Shelley, W.B. & Kligman, A.M. The experimental production of acne by penta- and hexachloronaphthalenes. A.M.A. Arch. Derm. 75: 689, 1957.
28. Gregory, R.P. Jr., et al. Experimental production of bovine hyperkeratosis with a feed concentrate exposed to ~~use of~~ *a highly chlorinated naphthalene.* J. Am. Vet. Med. 125: 244, 1954.
29. Vlahos, R., et al. Destruction and restoration of epidermis in a bovine experimentally produced with highly chlorinated naphthalene. Cornell Vet. 45: 178, 1955.

30. *Greenberg, L., et al. (about liver disease & chlorinated hydrocarbons).*

31. *Greenberg, L., et al. J. Industr. Hyg. 21: 29, 1939.  
(3 deaths caused by liver damage).*

32. *Narisade, M. Infrared absorption spectra  
of aromatic ether compounds II Characteristic  
bands of dibenzo-p-dioxin derivatives.  
Yakugaku Zasshi 79: 183, 1959; Chem  
Abstr. 53: 10467, 1959.*

STATE OF NEW YORK       )  
                              ) SS:  
COUNTY OF NASSAU       )

MYRA POLLACK,       being duly sworn, deposes and says:

That deponent is not a party to the action, is over 18 years of age and resides at East Northport, New York.

That on the 15th day of December 1980, deponent served the within Affidavit and accompanying Memorandum of Law

upon the attorneys below set forth representing the parties, as indicated, at the addresses shown, said addresses being designated by said attorneys for that purpose.

ATTORNEY:

(SEE ATTACHED 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 Post Office Department within the State of New York.

Sworn to before me this  
15th day of December 1980.

*Dianne E. Harms*

*Myra Pollack*  
\_\_\_\_\_  
MYRA POLLACK

DIANNE E. HARMS  
Notary Public, State of New York  
No. 30-4522145  
Qualified in Nassau County  
Commission Expires March 30, 1982

10573

In re: "AGENT ORANGE" MDL-381  
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Counsel for Amicus Curiae  
The Counsel of Vietnam Veterans:

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Washington, D. C. 20002

Copies of all Documents must be  
Sent to:

Clerk of the Panel  
Judicial Panel on Multidistrict  
Litigation  
320 Executive Building  
1030 15th Street, N. W.  
Washington, D. C. 20005

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK  
----- x

"AGENT ORANGE"

MDL NO. 381

PRODUCT LIABILITY LITIGATION  
----- x

(ALL CASES)

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

★ SEP 24 1980 ★

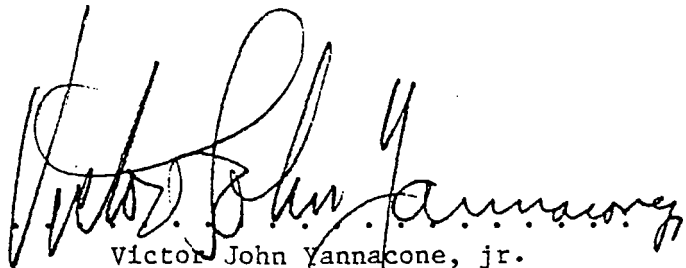
TIME A.M. \_\_\_\_\_  
P.M. \_\_\_\_\_

PLAINTIFF VETERANS'  
MEMORANDUM OPPOSING  
DOW APPLICATION for  
PROTECTIVE ORDER

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(area code 516) 654-2299

September 22, 1980

MEMORANDUM OPPOSING DOW APPLICATION FOR PROTECTIVE ORDER

-page 1-

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PLAINTIFF VETERANS'  
MEMORANDUM OPPOSING  
APPLICATION BY DEFENDANT DOW  
FOR A PROTECTIVE ORDER

Plaintiffs in certain actions (Lombardi, et al., CV 80-1989, transferred from D/Md.; Brooks, et al., CV 80-2002 transferred from D/DC; and Angelo, et al., not yet transferred, from D/Md) and the United States of America rightly oppose the motion of counsel for corporate defendant Dow pursuant to Rule 26(c) of the Federal Rules of Civil Procedure for an order restricting disclosure of certain alleged trade secrets and confidential information. However, such opposition rests on unduly narrow grounds and blindly accepts, without warrant, the premise that some type of protective order is permissible under the circumstances of the "Agent Orange" litigation.

There are several serious threshold defects in the Dow position which lead the majority of the plaintiff veterans and their families to totally reject the concept that any protective order restricting discovery is appropriate at this time.

Apart from the conclusory assertion of their counsel in this litigation, Dow's papers do not establish that the materials to be disclosed contain trade secrets or confidential information. Dow relies simply on their attorneys' unsubstantiated assertion that discovery will reveal trade secrets or confidential information. This is insufficient to warrant a protective order. (Sacks v. Frank H. Lee Co., 18 F.R.D. 500, S.D.N.Y. 1955).

10577



I.

ANY TRADE SECRETS HAVE BEEN ABANDONED

There is no factual showing that Dow has a property right in some process or formula which is secret or that the information for which disclosure is sought has been imparted to certain persons in confidence. Absent such a showing, there is no trade secret privilege. Black, Sivalls & Bryson v. Keystone Steet Fab. 584 F.2d 946, 951 (1978, CA10); Mixing Equipment Co. v. Philadelphia Gear, Inc. 436 F.2d 1308 (1971 CA3); National Starch Products v. Polymer Industries, 273 App. Div. 732, 79 N.Y.S.2d 357, reargument and appeal denied, 274 App. Div. 822, 81 N.Y.S.2d 278 (1948 AD1); Sachs v. Cluett, Peabody & Co., 265 App. Div. 597, 39 N.Y.S.2d 853 (AD1), aff'd 291 N.Y. 772 (1942). Since Dow has not shown that any of the materials sought to be discovered contain trade secrets or confidential information, it can not be entitled to the relief authorized by F.R.Civ.P. 26(c)(7).

Dow's contract to supply the government with phenoxy herbicides constituted a public disclosure of any trade secrets involved and may be viewed presumptively, if not conclusively, as an abandonment of any claims of secrecy. By entering into such contracts and supplying a product paid for by the American taxpayer, Dow made a voluntary disclosure of its process or formula. Even if Dow had once held a property right in some secret processs or formula or information which was confidential in the documents whose discovery has been requested, Dow abandoned such property right when it provided phenoxy herbicides to the United States of America pursuant to contracts authorized by the

Defense Production Act (50 U.S.C. §2061, et seq.). Dow has made no showing that the facts pertaining thereto were not within the general knowledge of the chemical industry.

Dow makes no showing that its disclosures to the government were limited in scope, made under a claim of protectible interest, or otherwise made under confidential circumstances which required the government to maintain the secrecy of the divulged information. See annot., 92 A.L.R.3d 138, "Disclosure of Trade Secret as Abandonment of Secrecy," M. & T. Chemicals, Inc. v. International Business Machines Corp., 403 F. Supp. 1145, 1975 (D. Conn. 1975), aff'd without opinion 542 F.2d 1165, (1976 CA2) cert. dism. 429 U.S. 1030 (1977).

## II.

### DOW FAILED TO SEEK STATUTORY PROTECTION OF "SECRETS"

Dow presents no evidence of compliance with the provisions of 7 U.S.C. §136h(a) dealing with protection of trade secrets and other information. §136h(a) required Dow to mark clearly any data submitted to the United States government which, in Dow's opinion, contained trade secrets at that time. The statutory policy governing pesticide control clearly recognizes the desirability of full disclosure and that manufacturing and quality control processes may be disclosed if disclosure is necessary to protect against an unreasonable risk of injury to health, (7 U.S.C. §136h(d)(1)); a judgment which is ultimately entrusted to the District Court (7 U.S.C. §136h(d)(3)).

Under these circumstances, Dow abandoned any property right in trade secrets or confidential information. (National Starch Products, supra; Sachs, supra).

The contract, military specifications, and purchase descriptions for the "Agent Orange" herbicides supplied by Dow to the United States Department of Defense attached to the Dow Motion for Summary Judgment (MDL381 Docket ##198, 199, 23 March 1980) contained no reservation with respect to any trade secrets or confidential information.

### III.

#### ANY DOW PRIVILEGE MUST GIVE WAY IN THE SEARCH FOR TRUTH

The veterans must be permitted to discover Dow's documents and examine Dow's witnesses, whether or not they contain trade secrets or confidential information, if they are to obtain the information necessary to establish the liability of the corporate defendants. (Drake v. Herrman, 261 N.Y. 414 (1933); Hyman v. Revlon Products Corp., 277 App. Div. 1118, 100 N.Y.S.2d 937 (1950 AD2)).

Dow's interests in the protection of its trade secrets must yield to plaintiffs' right to discover the full truth of the facts involved in the issues of the case. Melori Shoe Corp. v. Pierce & Stevens, Inc., 14 F.R.D. 346 (D.Mass 1953).

10530

IV.

THE PUBLIC INTEREST REQUIRES FULL DISCLOSURE

There is no absolute privilege for trade secrets and similar confidential business information. Federal Open Market Committee v. Merrill, 99 S.Ct. 2800 (1979). Nor, as we have shown, does Dow have any qualified privilege superior to the veterans' right to discover the full truth germane to the issues. Apart from plaintiffs rights, however, there is also a public interest in full disclosure to which Dow's claim of privilege must yield. The public interest is frequently, and quite rightly, considered in determining claims of confidentiality. For example, The Publicity in Taking Evidence Act, (15 U.S.C. ]30 requires that all depositions in anti-trust actions be open to the public as freely as are trials in open court. The public concern about phenoxy herbicides is hardly less than its concern over commercial monopolies.

The scholarly community of scientists and historians, and this Court, as well as journalists and the public, must be afforded unrestricted access to all the facts surrounding the development, production, and use of phenoxy herbicides in this case so that a thorough assessment of the issues of fault, causation, and damages can be made. The plaintiff veterans and their families are not mere business competitors seeking access to trade secrets or industrial intelligence for commercial gain. The veterans have been grievously injured.

10531

Their plight is a matter of national concern. The issues presented by their claims require an open public investigation which should not be hampered by Dow's profit-motivated desire to conceal relevant information.

IV.

RESTRICTIONS ON DISCOVERY WOULD BE PREMATURE

The mere assertion by an attorney for Dow that information is confidential is no basis for objection to discovery. Dow has not even identified the documents it seeks to "classify." Neither has it specified how disclosure of such information could prejudice Dow. The record is insufficiently developed by Dow to permit the Court to determine:

- a) Whether Dow has any trade secrets involving the phenoxy herbicides used in Southeast Asia;
- b) The impact of disclosure upon Dow, if any;
- c) The effect of Dow's claim of privilege upon the veteran's right to full disclosure.

Put simply, would Dow be damaged more by disclosure than plaintiffs would be damaged by non-disclosure?

10582

On the basis of the skimpy papers submitted by counsel for Dow there is no justification for any protective order at this time. There is no excuse for further procrastination by the corporate defendants.

There are better procedures for dealing with protection of trade secrets or confidential information than those suggested by Dow. There is no justification for prior restraint on disclosure. If the time should arrive when a particular document deserves protection, such document can be submitted to the court for in camera inspection. Hunter v. International Systems and Controls Corp., 51 F.R.D. 251 (W.D. Mo. 1970). Cf. U.S. v. Reynolds, 345 U.S. 1, 11 (1953); Freeman v. Seligson, 405 F.2d 1326, 1339 n. 65 (1968); Boeing Airplane Co. v. Cogheshall, 280 F.2d 654, 662, (1960); O'Keefe v. Boeing Co., 38 F.R.D. 329, 336 (S.D.N.Y. 1965); Machin v. Zuckert, 316 F.2d 336, 341 cert. denied, 375 U.S. 896 (1963).

That time has not arrived.

#### CONCLUSION

Dow has presented no facts justifying departure from the established standards governing disclosure of alleged trade secrets or confidential information. Dow has failed to demonstrate that any trade secrets or confidential information would be disclosed by discovery or that its property rights in such information outweigh plaintiffs rights to full disclosure.

10583

Withholding of Dow's alleged trade secrets under circumstances where it is material and relevant as here, in ascertaining the facts:

"might amount practically to a legal sanction of the wrong if the Court conceded to the alleged wrongdoer, the privilege of keeping his doings secret from judicial investigation."

VIII Wigmore on Evidence, 12212,

Dow's motion, if granted, would deny public scrutiny of the full extent of its culpability for supplying contaminated phenoxy herbicides for use in Southeast Asia. In 1933, a prescient New York Court of Appeals stated ,

"There can, of course, be no legal sanction for the circulation of poison throughout the community, and if this product does include inherently dangerous substances, the secrecy of its manufacture ought not to be protected."

Drake v. Herrman, 261 N.Y. 414, 418,

If Dow had a "secret" manufacturing process which produced dangerously contaminated herbicides, the secrecy of its manufacture is undeserving of protection.

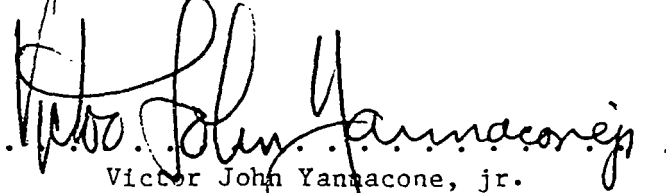
DATED: Patchogue, New York  
22 September 1980

Respectfully submitted,

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UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

-----X

In Re

"AGENT ORANGE"

Civil Action No.  
79 C 1195

PRODUCT LIABILITY LITIGATION

-----X

**FILED**  
IN CLERK'S OFFICE  
U. S. DISTRICT COURT E.D. N.Y.  
★ AUG 18 1980 ★

MEMORANDUM OF TIME A.M. \_\_\_\_\_  
LAW P.M. \_\_\_\_\_  
IN SUPPORT OF DOW'S MOTION  
FOR A PROTECTIVE ORDER

RIVKIN, LEFF & SHERMAN  
ATTORNEYS AND COUNSELLORS AT LAW  
100 GARDEN CITY PLAZA, GARDEN CITY, N.Y. 11530

10786  
374

We submit this memorandum on behalf of defendant-third-party plaintiff The Dow Chemical Company ("Dow") in support of Dow's motion for a protective order.

Preliminary Statement

The facts in support of Dow's motion are set forth in the accompanying affidavit of Leonard L. Rivkin (the "Rivkin Aff't"), to which this Court is respectfully referred.

Briefly, Dow has moved for an order which would protect the confidentiality of Dow documents which contain secret research, development, business and/or commercial information (hereinafter referred to as "Dow's Confidential Documents") and which would provide other related relief. A copy of proposed order is annexed to the Rivkin Aff't as Exhibit A.

With respect to Dow's Confidential Documents, the proposed order simply limits the number of persons who can have access to such documents, requires the parties to use such documents only for purposes of the above-captioned litigation, and prohibits the disclosure of information contained in such documents to anyone not connected with this litigation or bound by the terms and conditions of the order which is ultimately entered by the Court.

With respect to "Dow's Highly Confidential Documents," the proposed order provides that Dow must provide the adverse

party with a statement describing the substance of the document and why its disclosure should be restricted, that Dow must confer with the adverse party and attempt to agree as to the nature and extent of the protection the document should receive; and that should the parties fail to agree, Dow shall petition the Court, with notice to all appropriate parties, for a protective order.\*

These procedures are responsive to the needs of the parties to this lawsuit for access to Dow's documents, and to Dow's legitimate right to preserve the secrecy of confidential business information; hence, no party can claim that it will be prejudiced if the proposed order is entered.

Dow's proposed order also contains two provisions relating to discovery in general, and not just to Dow's Confidential Documents. Thus, the proposed order requires all parties who receive any documents or copies of documents produced by Dow in this litigation to return all such documents or copies to Dow upon the termination of all of the actions consolidated as part of MDL No. 381. In the alternative, at the termination of all such actions, the parties may notify Dow in writing that all such documents or copies have been destroyed. Additionally, the proposed order provides that the production of documents in this litigation by Dow does not

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\*Documents shall be stamped "Highly Confidential" only if their disclosure would be prejudicial to the present and future operation of Dow's business.

constitute a waiver by Dow of its right to assert privileges or otherwise object to the production of any other document or documents.

We respectfully submit that there is ample authority for granting Dow's motion in its entirety.

Point I

Dow's Motion for a Protective  
Order Should Be Granted In  
Its Entirety

Rule 26(c)(7), F.R.Civ.P., empowers a court to order "that a trade secret or other confidential research, development, or commercial information not be disclosed or be disclosed only in a designated way..."

In this motion, Dow has not requested the more drastic of the two remedies contained in Rule 26(c)(7). Dow has not requested that its "Confidential Documents" and "Highly Confidential Documents" not be disclosed at all. Rather, Dow has requested that its "Confidential Documents" and "Highly Confidential Documents" be disclosed only in accordance with specified procedures which will ensure that the confidentiality of the information contained in those documents will be preserved to the greatest extent possible, while at the same time permitting the parties reasonable access to that information.

The limitations and restrictions upon the use and dissemination of Dow's Confidential Documents, as contained in Dow's proposed order, are entirely reasonable and have been imposed by courts in other cases involving the disclosure of secret business information. See generally Wright & Miller, Federal Practice and Procedure: Civil sec. 2043, and cases cited therein, especially at n. 29.

With respect to those provisions in Dow's proposed order which apply to discovery in general, and not simply to Dow's Confidential and Highly Confidential Documents, it is clear that a district court possesses broad discretionary powers to regulate discovery and to enter whatever sort of protective order is called for by the circumstances of the particular case at hand. See generally Wright & Miller, Federal Practice and Procedure: Civil sec. 2036.

At this stage of the litigation, all discovery has been stayed by this Court. Nevertheless, Dow has voluntarily agreed with plaintiffs' attorneys to produce documents notwithstanding this Court's stay order, and a substantial number of documents have already been made available for discovery and inspection by Dow. Under these circumstances, it is entirely appropriate for this Court to enter an order, such as Dow's proposed order, which provides that the voluntary production of documents by Dow does not constitute a waiver by Dow of its right to assert privileges or otherwise object to the production of any other document or documents.

16590

Similarly, in light of the unique nature of the Agent Orange litigation, the complexity of the case, and the amount of publicity that is being generated, it is entirely appropriate for this Court to order that all documents produced by Dow in this litigation must be returned to Dow at the termination of this matter, or destroyed.

Conclusion

For all of the foregoing reasons, we respectfully request that Dow's motion be granted in its entirety.

Respectfully submitted,

RIVKIN, LEFF & SHERMAN  
Attorneys for The Dow Chemical  
Company

Dated: August 14, 1980.

UNITED STATE DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

In Re

MDL No. 381

"AGENT ORANGE"

Product Liability Litigation

**FILED**  
IN CLERK'S OFFICE  
U. S. DISTRICT COURT  
**NOTICE OF MOTION**

★ AUG 18 1980 ★

S I R S :

TIME A.M. ....  
P.M. ....

PLEASE TAKE NOTICE, that upon the annexed affidavit of Leonard L. Rivkin, sworn to on August 14, 1980, upon the accompanying Memorandum of Law, and upon all prior proceedings herein, the undersigned will move this Court before the Honorable George C. Pratt, United States District Judge, at the United States Courthouse, 900 Ellison Avenue, Westbury, New York, on the 3rd day of September, 1980, at 2:00 p.m., or as soon thereafter as counsel can be heard, for an order pursuant to Rule 26(c) of the Federal Rules of Civil Procedure protecting the confidentiality of certain documents of The Dow Chemical Company and providing other related relief.

Dated: August 14, 1980  
Garden City, New York

Yours, etc.,

RIVKIN, LEFF & SHERMAN

By: *[Signature]*  
A Member of the Firm  
Attorneys for Defendant - Third-  
party Plaintiff The Dow  
Chemical Company  
100 Garden City Plaza  
Garden City, New York  
(516) 746-7500

TO: All Counsel

10592

373

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

-----X

In Re

MDL No. 381 (GCP)  
(All Cases)

"AGENT ORANGE"

Product Liability Litigation

AFFIDAVIT

-----X

LEONARD L. RIVKIN, being duly sworn, deposes and  
says:

1. I am a member of the firm of Rivkin, Leff & Sherman, attorneys for defendant-third-party plaintiff The Dow Chemical Company ("Dow"), and, as such, I am familiar with the facts and proceedings herein. I submit this affidavit in support of Dow's motion for an order pursuant to Rule 26(c) of the Federal Rules of Civil Procedure protecting the confidentiality of certain of Dow's documents and providing other related relief. A copy of a proposed order is annexed hereto as Exhibit A.

2. The order sought by Dow is primarily directed at protecting the confidentiality of certain of Dow's documents. In particular, Dow is concerned with protecting the confidentiality of documents containing secret research, development, business and/or commercial information. The proposed order protects the confidentiality of documents containing such information by, among other things, limiting the



number of persons to whom such documents can be disseminated, requiring the parties to use such documents only for purposes of the above-captioned litigation, and prohibiting the disclosure of the information contained in such documents to anyone not connected with this litigation or bound by the terms and conditions of the order which is ultimately entered by the Court.

3. With respect to documents stamped "Highly Confidential," the proposed order provides that Dow must provide the adverse party with a statement describing the substance of the document and why its disclosure should be restricted; that Dow must confer with the adverse party and attempt to agree as to the nature and extent of the protection the document should receive; and that should the parties fail to agree, Dow shall petition the Court, with notice to the appropriate parties, for a protective order. Documents shall be stamped "Highly Confidential" only if their disclosure would be prejudicial to the present and future operation of Dow's business.

4. The above procedures are responsive to the needs of the parties to this lawsuit for access to Dow's documents, and to Dow's legitimate right to preserve the secrecy of confidential business information; hence, no party can claim that it will be prejudiced if the proposed order is entered.

5. Dow's proposed order contains two provisions in addition to those relating to documents containing secret research, development, business and/or commercial information.

Paragraph "1" requires all parties who receive documents or copies of documents produced by Dow in this litigation to return all such documents or copies to Dow upon the termination of all of the actions consolidated as part of MDL No. 381. In the alternative, at the termination of all such actions, the parties may notify Dow in writing that all such documents or copies have been destroyed. Paragraph "2" provides that the production of documents in this litigation by Dow does not constitute a waiver by Dow of its right to assert privileges or otherwise object to the production of any other document or documents. These two provisions apply to all documents produced herein by Dow.

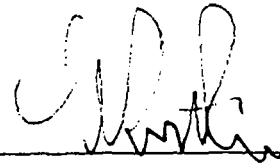
6. Concededly, discovery in this action has been stayed by this Court until further notice. However, the Court has encouraged the parties to proceed with discovery by agreement, and Dow has already made available a substantial number of documents for discovery and inspection. Hence, it is appropriate for this Court to enter a protective order regarding the production of documents by Dow at this time.

7. We have communicated with plaintiffs' counsel regarding the contents of our proposed order, and, as yet, plaintiffs' counsel has not objected to its terms of conditions.

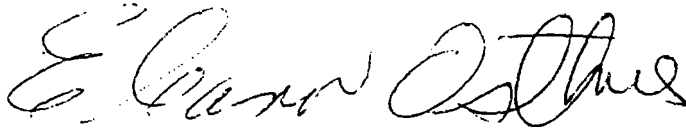
WHEREAS, we respectfully request that our motion  
be granted in its entirety.

Sworn to before me this

14th day of August, 1980.



LEONARD L. RIVKIN



ELEANOR OSTHUS  
Notary Public, State of New York  
No. 38-4657483  
Qualified in Nassau County  
Commission Expires March 30, 1981

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

-----X

In Re

MDL No. 381 (GCP)  
(All Cases)

"AGENT ORANGE"

ORDER

Product Liability Litigation

-----X

1. All documents and copies of documents produced in this litigation by defendant-third-party plaintiff, The Dow Chemical Company ("Dow"), whether in response to discovery requests made pursuant to the Federal Rules of Civil Procedure or by agreement between Dow and one or more parties to this action, remain the exclusive property of Dow. No party to this action or any other person or entity obtains any proprietary interest in any document produced by Dow. Upon the termination of all of the actions consolidated as part of MDL No. 381, all documents produced by Dow and copies made thereof shall be returned to Dow, or, in the alternative, all such documents shall be destroyed, and counsel for Dow shall be notified in writing by counsel for the respective parties that all such documents and copies have been destroyed.

2. The production of documents in this litigation by Dow, whether in response to discovery requests made pursuant to the Federal Rules of Civil Procedure or by agreement between

Dow and one or more parties to this action, does not constitute a waiver by Dow of its right to assert privileges or otherwise object to the production of any other document or documents.

3. Certain documents produced in this litigation by Dow may be deemed confidential due to the developmental, business, research or commercial information contained therein. Dow will stamp all such documents "CONFIDENTIAL" prior to their production, and they shall hereinafter be referred to as "DOW'S CONFIDENTIAL DOCUMENTS."

4. "DOW'S CONFIDENTIAL DOCUMENTS" shall be used solely for the purposes of the instant litigation, will be kept confidential, and will not be exhibited or described to or discussed with anyone not designated as hereinafter described, and said documents and the information contained therein shall not be used for any other purpose.

5. "DOW'S CONFIDENTIAL DOCUMENTS," if filed with the Court, shall be filed under seal.

6. Unless otherwise agreed by the parties hereto or otherwise ordered by the Court, only the following "designated persons" shall have access to "DOW'S CONFIDENTIAL DOCUMENTS:"

- a) Partners, associates and paralegals, if any, of the counsel representing parties to this action;

- b) The parties to this action, except that with respect to the corporate defendants and third-party defendant, United States of America, no more than two (2) employees of each;
- c) Persons retained by counsel for the parties to this action to assist in preparation for trial or to serve as expert witnesses in this litigation; and
- d) A witness to a deposition noticed by any party to this litigation will constitute a designated person provided that:
  - (i) All persons in attendance at the deposition are designated persons, except for the court reporter;
  - (ii) The witness is advised on the record or in writing of the existence and contents of this Order and the witness agrees on the record or in writing to be bound by its terms, or the Court, after motion on notice to all parties, orders such compliance;
  - (iii) Copies of "DOW'S CONFIDENTIAL DOCUMENTS," though identified and numbered as exhibits to the deposition,

will not be made a physical attachment to the transcript of the deposition;

- (iv) Every effort will be made at the deposition to so restrict testimony concerning "DOW'S CONFIDENTIAL DOCUMENTS" that their confidentiality will be preserved on the record to the greatest extent possible; and
- (v) Said depositions shall be filed with the Court, under seal, with access thereto restricted to persons designated herein.

7. No person described in Paragraph 6(a), (b) or (c) hereof shall be given access to any of "DOW'S CONFIDENTIAL DOCUMENTS" until each such person has executed an undertaking in the form annexed hereto as Exhibit "A." Such executed undertaking shall be provided to and maintained by Dow's counsel with respect to each person to whom access to any of "DOW'S CONFIDENTIAL DOCUMENTS" is given.

8. Each and every person present at any deposition or other proceeding wherein any of "DOW'S CONFIDENTIAL DOCUMENTS" are utilized in any manner is hereby enjoined from disclosing to the press or other media any testimony concerning or information involving such documents.

9. Each and every person or party subject to this Order is enjoined from referring in open Court to "DOW'S CONFIDENTIAL DOCUMENTS," or the information contained therein, and any reference or mention of same shall be heard by the Court in camera.

10. Any and all answers to interrogatories which reflect information contained in any of "DOW'S CONFIDENTIAL DOCUMENTS" shall be so designated by the party preparing said answers; shall be distributed only to designated persons as described herein; and shall be filed with the Court under seal.

11. Should Dow desire to restrict disclosure of a document or information contained therein more narrowly than provided for above, it shall:

- a) Type or stamp on its face "HIGHLY CONFIDENTIAL;"
- b) Submit a narrative-type index of the substance of the document and why its disclosure should be restricted;
- c) Confer immediately with counsel for the adverse party or parties and attempt to agree as to the nature and extent of protection which the document or information shall receive;



- d) Within ten (10) days after written confirmation from counsel for the party to whom the document or information is to be produced that the parties have been unable to agree as contemplated in (c) above, the parties seeking to more narrowly restrict disclosure of the document or information shall make application to the Court, with notice to the appropriate parties, for such further protection as is desired;
- e) Any party may at anytime move the Court to remove the "HIGHLY CONFIDENTIAL" protection previously given any document.

12. This Order is primarily directed at the use of "DOW'S CONFIDENTIAL DOCUMENTS" and "DOW'S HIGHLY CONFIDENTIAL DOCUMENTS" during the pretrial stages of this litigation. A separate order will be entered at the appropriate time regarding the use of these documents during the trial or trials of any matter or issue herein.

13. This Order does not in any way prohibit or preclude Dow from objecting to the production of any documents herein on privilege or other grounds, or from moving for a protective order with respect to the production of documents.

14. No modification of this Order will be made except upon written application to the Court, on notice to all parties.

SO ORDERED:

---

U.S.D.J.

EXHIBIT "A"

AGREEMENT CONCERNING CONFIDENTIAL  
DOCUMENTS SUBJECT TO CONFIDENTIALITY  
ORDER ENTERED IN THE UNITED STATES  
DISTRICT COURT FOR THE EASTERN DISTRICT  
OF NEW YORK ON \_\_\_\_\_, 1980

The undersigned hereby acknowledges that he has  
read the Confidentiality Order, dated \_\_\_\_\_, 1980,  
and entered in the United States District Court for the  
Eastern District of New York on \_\_\_\_\_, 1980,  
in the action entitled In Re Agent Orange Product Liability  
Litigation, MDL No. 381 (All Cases) (GCP), understands the  
terms thereof and agrees to be bound by such terms as if he  
were signatory thereto.

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
\_\_\_\_\_  
Business Address

\_\_\_\_\_  
\_\_\_\_\_  
Home Address

STATE OF NEW YORK       )  
                              )  SS:  
COUNTY OF NASSAU       )

Carol M. Samide,       being duly sworn, deposes and says:

That deponent is not a party to the action, is over 18 years of age and resides at East Hills, New York.

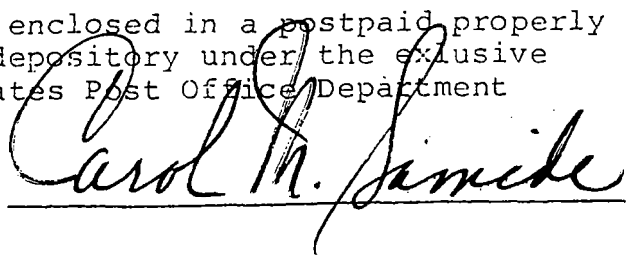
That on the 14th day of August, 1980       , deponent served the within Notice of Motion, Affidavit, Order, and Memorandum of Law

upon the attorneys below set forth representing the parties, as indicated, at the addresses shown, said addresses being designated by said attorneys for that purpose.

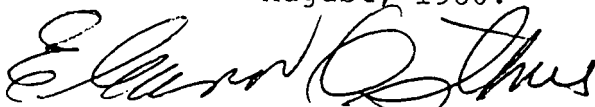
ATTORNEY:

To All Counsel  
(See attached 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 Post Office Department within the State of New York.

  
Carol M. Samide

Sworn to before me this  
14th day of August, 1980.

  
Eleanor Osthues

ELEANOR OSTHUES  
Notary Public, State of New York  
No. 30-4657493  
Qualified in Nassau County  
Commission Expires March 30, 1981

10605

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DAY 6 AGENT ORANGE TRIAL  
MOYER V DOW

10611

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~~EX-1~~

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☆ JUN 30 1983 ☆

TIME A.M. \_\_\_\_\_  
P.M. \_\_\_\_\_

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

- - - - - X

IN RE

MDL NO. 381  
(ALL CASES)

"AGENT ORANGE"  
PRODUCT LIABILITY LITIGATION

PRETRIAL ORDER NO. 54

- - - - - X

PRATT, C.J.:

On May 12, 1983 the court requested special master Sol Schreiber to consider with counsel and make recommendations to the court with respect to a number of pretrial matters. On one of those matters the special master has recommended in his report dated June 21, 1983 that all the material submitted with and referred to in the papers submitted on the summary judgment motions made by seven of the defendants and decided by the court on May 12, 1983 be unsealed. That report is attached as an appendix to this order.

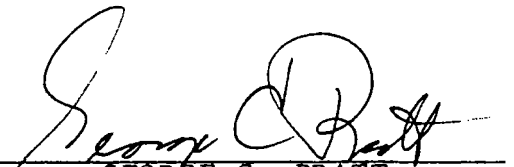
The court has carefully reviewed the special master's thoughtful analysis and recommendation and has carefully considered the defendants' objections thereto. The recommendation is hereby accepted and adopted, and the clerk is directed to unseal on July 5, 1983 all of the materials filed in connection with the summary judgment motions referred to above. This order extends to the summary judgment papers only. It is not intended to modify the

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earlier protective order with respect to any documents or depositions or exhibits, or portions thereof, that were not filed and sealed as part of the summary judgment motions.

SO ORDERED.

Dated: Uniondale, New York  
June 30, 1983.

  
\_\_\_\_\_  
GEORGE C. PRATT  
U. S. CIRCUIT JUDGE\*

10613

\* Of the U. S. Court of Appeals for the Second Circuit,  
sitting by designation.

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

- - - - - x

|                              |   |                                               |
|------------------------------|---|-----------------------------------------------|
| In Re                        | : | MDL No. 381<br>(All Cases)                    |
| "Agent Orange"               | : | <u>SPECIAL MASTER'S RECOMMENDATION</u>        |
| Product Liability Litigation | : | RE: REEXAMINATION OF<br>CONFIDENTIALITY ORDER |

- - - - - x

This multi-district litigation involves thousands of Vietnam veterans who are seeking damages from nine chemical companies for injuries allegedly incurred as a result of their exposure to phenoxyherbicides, notably Agent Orange, which were used by the military during the Vietnam conflict. On May 12, 1983, in ruling on the motions for summary judgment brought by seven of the nine defendants, Judge Pratt dismissed four defendants and directed that the assigned Special Master consider whether some of the restrictions on discovery set forth in the Special Master's recommended order of October 14, 1982 should be lifted. Before examining the matter, a brief review of the events leading up to the issuance of the order and subsequent developments is warranted.

I. Background

On April 29, 1982, Judge Pratt appointed me as Special Master in this case to oversee discovery of the issues leading to the trial of the government contract defense, which at that time was scheduled to be held in June, 1983. At one of the first hearings held before

me, I made an oral ruling barring public disclosure of documents exchanged and depositions taken in this case. I also indicated to the parties that this was a preliminary ruling.

In July, 1982, counsel for CBS, Inc. ("CBS") filed with the Court a written motion for access to non-classified and non-confidential documents which had been produced during discovery. This motion was referred to me for recommendation by Judge Pratt. On September 2, 1982, after hearing extensive argument from counsel for the parties, the government and CBS, I dictated into the record a recommended order prohibiting the parties to this litigation from wholesale disclosure to non-parties of material produced in discovery. This oral opinion was then set forth in a more detailed recommendation, with a supporting memorandum of law, which also outlined the procedures to be used for the dissemination of particular documents. See Special Master's Memorandum Opinion and Protective Order dated October 14, 1982. This order was subsequently appealed by CBS. On January 18, 1983, Judge Pratt approved the Special Master's Recommendation in its entirety, noting "[t]hat the Special Master's protective order is particularly appropriate and suited to the circumstances of this litigation". See 96 F.R.D. 582, 585 (E.D.N.Y. 1983). The October 14, 1982 protective order was prompted in large measure by the need for expediting discovery and the brief time remaining before the trial of the first issue. Depositions had not yet begun and there were sharp disputes

between defendants and government counsel with regard to documentary production.

An earlier protective order entered by Judge Pratt on February 6, 1981 established procedures for the production of defendants' confidential documents and provided that a defendant could elect to adopt one or two procedures for the production of those documents it deemed to contain confidential developmental, business, research or commercial information.

The October, 1982 order, by contrast, placed a blanket of confidentiality over all documents whether produced by the plaintiffs, defendants or the government, pursuant to the discovery rules in this case, regardless of their content. At the time it was issued, trial of the government contract defense, the sole issue for decision in the Phase I trial, was scheduled for June 27, 1983.

Hundreds of thousands, if not millions, of documents which were claimed to be necessary for preparation of the government contract defense had not yet been produced from a vast array of government agencies. The necessity for encouraging cooperation among the parties and the government and the desirability of implementing an efficient and expeditious discovery program constituted, in my judgment, sufficient cause for the issuance of the blanket protective order in October, 1982.



There exists a natural tension between the First Amendment rights of parties and the public's right to know, and the need for some protection to guarantee the right to a fair trial in emotional and highly volatile litigation. In the "Agent Orange" case, both sides have engaged in extensive public comments concerning matters most favorable to their positions. While certain comments may have been excessive, on the whole the parties and counsel have not, in my judgment, poisoned the air with respect to the sensitive issues inherent in this dispute. In addition, leading newspapers, magazines, trade and industry publications have published reviews of the proceedings to date.

Mindful that a blanket protective order raises First Amendment concerns, See In re Halkin, 598 F.2d 176, 190 (D.C.Cir. 1979); cf. In re San Juan Star Co., 662 F.2d 108, 114 (1st Cir. 1981), the October protective order seeks to balance the needs of the parties, in this case to complete discovery of Phase I of a complex, highly charged case, against the desirability of public access to the fruits of that discovery. CBS' argument that the public has a right of access to discovery materials not made part of the public court record was rejected. See, e.g., Zenith Radio Corp. v. Matsushita Elec. Industrial Co., Ltd., 529 F.Supp. 866, 897 n.55 (E.D.Pa. 1981); Times News Ltd., (Gr.Brit.) v. McDonnell Douglas Corp., 387 F.Supp. 189, 196 (C.D.Ca. 1974); Wilk v. American Medical Association, 635 F.2d 1295, 1299 n.7 (7th Cir. 1980). The order does not prohibit the press in any way

from reporting on this case, nor does it infringe upon any party's right to speak about the matters in dispute. Rather, the order sets forth a simple procedure for dissemination of any documents a party wishes to make public. See 96 F.R.D. at 585-87. The net effect of these procedures is to shift the burden of going forward to the party seeking dissemination of specific documents; the ultimate burden rests on the party opposing dissemination to show good cause why the protective order should continue. See id.

In his May 12, 1983 ruling on the motions for summary judgment, Judge Pratt stated that, in addition to continuing discovery on the government contract defense, the parties would also prepare for trial issues encompassing the question of general causation. In light of this, the trial which had been scheduled for June 27, 1983 was adjourned. Judge Pratt's ruling also reaffirmed the authority of the Special Master to continue supervising discovery in this case and to "recommend an appropriate timetable for the remaining discovery, any further motions, preparation of a pretrial order and trial". See Pretrial Order No. 51, dated May 20, 1983, at 40. In addition, Judge Pratt specifically directed the Special Master to consider whether some of the restrictions on public disclosure of discovery materials should be lifted.

At the first hearing after Judge Pratt's decision on the summary judgment motions, I suggested to counsel that the question of the possible lifting of the October protective order really

presents three issues. The first is the lifting of the protective order as it relates to the summary judgment motion papers and exhibits attached thereto submitted by both sides; the second - whether depositions already taken and those which will be taken as discovery on the issues of the government contract defense and general causation proceeds should be made public; and third, the general status of other documents produced by the parties and the government in the litigation. This recommendation addresses the issue of whether a need exists for continuation of the restrictions on public disclosure of documents and other papers submitted in support of the various parties' positions on the summary judgment motions. Recommendations examining the second and third issues will follow, shortly.

On May 16, 1983 and again on May 23rd, counsel for the plaintiffs and defendants argued before me the question of lifting the October protective order as it relates to the summary judgment motion papers. Plaintiffs' counsel has requested the lifting of the entire protective order. In turn, counsel for defendant Dow Chemical Company, joined by other defendants' counsel objected to the lifting of any part of the order. In the view of the defendants' counsel nothing has changed in this case since the protective order was entered on October 14, 1982; therefore, all the documents produced through discovery thus far should remain under the order for the same reasons on the basis of which the order was originally entered. Dow's counsel further suggested that publicity attending the unsealing

of any of these documents would damage its chances of receiving a fair trial. See transcript of May 16, 1983 hearing at 5176, 5179 and Transcript of May 23, 1983 Hearing at 5183 (comments by counsel for defendant Monsanto).

With Judge Pratt's decision on the summary judgment motions, this case has entered a new phase. Judge Pratt, in reexamining the need for a separate trial on the government contract defense, held that the issue of the relative extents of knowledge of the government and the defendants on hazards of Agent Orange and the issues presented by general causation questions should be tried together in one trial; the trial scheduled to take place on June 27, 1983 was adjourned. Further, discovery on the government contract defense is nearing completion. Huge numbers of documents have been produced by the government and the defendants; more than 125 depositions have been held. The Special Master has reviewed hundreds of documents, highly sensitive to the national security, which the government had argued were not relevant to the trial. The exigencies of commencing discovery and preparing an as then not well-focused affirmative defense for trial in the relatively short period of eight months from the issuance of the protective order, simply do not exist today. The order has served well to expedite discovery; the question now is whether in view of the many changes in the posture of this case, and in particular, the status of the documents submitted with the summary judgment motions and considered by the court, a need to restrict public disclosure continues to exist.

## II. Discussion

It is undisputed that under the common law the public has a right of access to inspect and copy judicial records. In re Application of National Broadcasting Company v. United States, 635 F.2d 945, 949 (2d.Cir. 1980). See United States v. Mitchell, 551, F.2d 1252, 1258 (D.C.Cir. 1976), rev'd on other grounds sub nom. Nixon v. Warner Communications, 435 U.S. 589, 98 S.Ct. 1306 (1978). The right of inspection is fundamental to a democratic form of government, serving as a check on possible abuses by the court system, and helping to produce an "informed and enlightened public opinion". United States v. Mitchell, 551 F.2d at 1257-58, quoting Grosjean v. American Press Company, 297 U.S. 233, 247, 56 S.Ct. 444 (1936).

What is less clear than the public right to inspect and copy judicial records, however, is the standard to be used in determining what constitutes a judicial record. See Zenith Radio v. Matsushita Electric Industrial Co., Inc., 529 F.Supp. 866, 897-98 (E.D.Pa. 1981). At what point do various documents, memoranda and other material developed during the pretrial stage of litigation become part of the judicial record such that the public right of access applies to it?

The October protective order was based on the premise that the public right of access to court records and proceedings does not usually include access to discovery material. See Special Master's

Memorandum Opinion and Protective Order, dated October 14, 1982. See also, Times News Ltd. (Gr.Brit.) v. McDonnell Douglas Corp., 389 F.Supp. 189 (C.D.Ca. 1974). Discovery material, merely because it is produced pursuant to the judicial process, is not necessarily part of the public record. See e.g., Zenith Radio Corp. v. Matsushita, 529 F.Supp. at 897; Wilk v. American Medical Association, 635 F.2d 1295, 1299 n.7 (7th Cir. 1980). The court in Wilk noted that "unless and until introduced into evidence, the raw fruits of discovery are not in the possession of the court", and therefore, the common law right of public access does not attach. Id.

While documents produced through the discovery process and not yet submitted to the court are not necessarily part of the public record, New Times Ltd. (Gr.Brit.) v. McDonnell Douglas Corp., 387 F.Supp. 189 (C.D.Ca. 1974), documents which, like those attached to the summary judgment motions in this case, are submitted to the court for its consideration must, of necessity, lose their status of being "raw fruits of discovery". See Zenith Radio Corp. v. Matsushita, 529 F.Supp. at 901; Cianci v. New Times Publishing Co., 88 F.R.D. 562, 565 (S.D.N.Y. 1980). The question at this time then is whether the documents submitted under seal, pursuant to the protective order, to support the parties papers on the summary judgment motions are part of the court record and therefore entitled to the presumption that the public has a right to inspect and copy them.

Defendants' counsel argue that the fact that the parties submitted documents to support the summary judgment motion papers should not lead to the lifting of the protective order. According to defendants' counsel, "the presumption in favor of public inspection and access to items entered into evidence at a public session of trial does not apply to the Agent Orange summary judgment papers supplied under seal". See letter dated June 10, 1983 to Special Master Schreiber from Marjorie Mintzer, Esq. In support of this argument counsel quotes from Judge Newman's decision in In re Application of National Broadcasting Co., 635 F.2d 945 (2d.Cir. 1980): "If, for justifiable reasons, a particular item were entered into evidence under seal, the presumption [of public right of access] would obviously not apply, because with respect to that item of evidence the session of Court was not public." Id. at 952 n.4. This argument begs the very question before the Special Master at this time; that is, do justifiable reasons for maintaining a seal on these documents exist? In effect, defendants would have the court continue the protective order as it relates to these documents on the basis that the documents were filed under seal. That fact alone, however, does not preclude reconsideration of the order. See, e.g., Zenith Radio Corp. v. Matsushita, 529 F.Supp. at 897-98. The mere fact that a document was submitted under seal does not protect it forever from disclosure.

As Judge Becker pointed out in Zenith, "portions of documents that are read into the record in an open proceeding enter the public domain, without regard to whether the documents were originally filed on the public record, under seal, or were not filed with the clerk". Id. at 898.

Nor can the parties here contend that disclosure of these documents would prejudice them because the admissibility of these materials has not been ruled upon. Since the parties submitted these documents to the court and the court has evaluated them in order to reach its decision on the motions, it is difficult to see how the parties would be prejudiced by their release to the public.

In Zenith Radio Corp. v. Matsushita Elec. Industrial Co., Inc., the court considered plaintiffs' motion for wholesale declassification of documents which had been exchanged in discovery under a broad order of confidentiality. See Zenith Radio Corp. v. Matsushita, 529 F.Supp. 866 (E.D.Pa. 1981). Decision of the motion followed the court's grant of summary judgment in favor of defendants on all of plaintiffs' claims. Id. at 876. In deciding which documents to declassify the court separated the various categories of documents to which the right of access attached in varying degrees: (1) discovery materials (2) documents on which there had been evidentiary rulings (3) material referred to at hearings but which was never read into the record or offered into evidence and (4) records filed under seal



that are the ultimate subject of a dispositive ruling. Id. at 897-901. The last category consisted of materials which the court relied on in making a ruling and which were discussed in Judge Becker's opinion. Id. at 901. Judge Becker held that the presumption of public access to inspect and copy attached to this material, reasoning that the courts have an obligation to explain their decisions and that this material may be critical to evaluating a judge's decision. Id. See also Cianci v. New Times Publishing Co., 88 F.R.D. 562, 565 (S.D.N.Y. 1980). (Where the court held that in light of the parties' use of sealed documents in their arguments relating to defendants' motion to dismiss and reference to sealed deposition testimony by the trial court and the appellate court, the documents had become part of the public record and the press could not be denied access to them. Id. at 564-65).

In deciding the summary judgment motions, Judge Pratt "reviewed all of the papers submitted, both in support of and in opposition including counsels' extensive memoranda and attached exhibits". See Pretrial Order No. 51 at 3. Indeed, much, if not all, of the support for the facts recited in Judge Pratt's opinion is found in the exhibits attached to the motion and reply papers. If access rights exist to promote knowledge of and attention to the performance of the courts, then it follows that the exhibits supporting the parties' summary judgment papers ought to be open for public inspection. In his written opinion, Judge Pratt

repeatedly refers to material filed under seal. Addressing government knowledge, he discusses in detail the Hoffmann Trip Report, the unclassified portion of which was produced by the government and which was itself the subject of much controversy. Pretrial Order No. 51 at 7. Also, Judge Pratt cites to deposition testimony of several government witnesses, Pretrial Order No. 51 at 8, 10, 11, and to various memoranda produced by the defendants. Pretrial Order No. 51 at 15. As Cianci makes clear, documents referred to by the court in its opinions become part of the public record and should be open to the public for inspection and copying. Cianci v. New Times Publishing Co., 88 F.R.D. at 564.

Clearly, then, documents attached to and referred to in the parties' papers on the summary judgment motions are part of the court record and are entitled to the presumption of public access. However, the inquiry cannot end there. While the public has a right of access to judicial records, that right is not absolute. Nixon v. Warner Communications, Inc., 435 U.S. 589, 598, 98 S.Ct. 1306, 1312 (1978); United States v. Mitchell, 551 F.2d 1252, 1260 (D.C.Cir. 1976). The presumption of access may be rebutted by a showing that there are countervailing interests sufficient to outweigh the public interest in access. Nixon v. Warner Communications, Inc., 435 U.S. at 602, 98 S.Ct. at 1314. In exercising its discretionary power to control and seal records, a court should "weigh the interests of the public, which are presumptively paramount, against those advanced by the parties". In re Franklin National Bank Securities Litigation,

92 F.R.D. 468, 471 (E.D.N.Y. 1981) quoting Crystal Grower's Corp. v. Dobbins, 616 F.2d 458 (10th Cir. 1980). Where unsealing of documents might reveal material governed by the work product privilege or the contents of communications between an attorney and client might be disclosed, the public interest in protecting those privileges would take precedence over its interest in inspecting and copying court records. See Crystal Grower's Corp. v. Dobbins 616 F.2d 458, 461-62 (10th Cir. 1980). Where disclosure of documents would amount to use of the court process for "gratification of private spite or public scandal", the public interest in its right of access diminishes. Nixon v. Warner Communications, Inc. 465 U.S. at 603, 98 S.Ct. at 1315, quoting In re Caswell, 18 R.I. 835, 836, 29 A.259 (1893). Neither of these reasons for maintaining confidentiality orders obtains in this case.

A third example of a private interest which might outweigh the public interest in access is a litigant's reliance on the protective order. In In re Franklin National Bank Litigation, 92 F.R.D. 468 (E.D.N.Y. 1981), a non-profit consumer organization sought to set aside a protective order which sealed all documents concerning the settlement of an action arising out of the collapse of Franklin National Bank. In balancing the interests of the public ("which are presumptively paramount", *id.* at 471) against the interests of the parties, the court found that the intervenor organization added no new weight to the scale which had tipped in favor of the public and private interests in keeping settlement terms

and documents confidential. Further, the court determined that the settlement agreement had induced substantial changes of position by many of the parties, changes which had been made at least in part in reliance on the condition of secrecy. "For the court to induce such acts and then to decline to support the parties would work an injustice on those litigants and make future settlements predicated on confidentiality less likely". Id. at 472. The court found that the public policy in favor of settling disputes and the importance of stability of judgments and settlements supported continuation of the confidentiality order. Id.

While it is true that the government and the parties to this litigation have produced documents under an order of confidentiality, the policy motivating Judge Weinstein's decision in In re Franklin National Bank does not apply here. In Judge Weinstein's case the order of confidentiality served to promote settlement. In this case by contrast, the sealing order was issued to encourage active cooperation between the parties and the government and to expedite discovery. Further undercutting the reliance argument in this case is the fact that the order itself recognized that the need for confidentiality order might evaporate as discovery progressed and fundamental disputes were resolved. In the memorandum accompanying my recommended order, I stated that the entire protective order would be reviewable upon the application of any party or the government at any time after the expiration of 120 days. See Special Master's Memorandum Opinion and Protective Order, dated October 14, 1982.

Yet another and very important private interest which may in some cases override the public's right of access is a litigant's interest in preserving his right to a fair trial. Defendants have argued that disclosure of the documents attached to the summary judgment papers will engender significant pretrial publicity which will hinder their ability to get a fair trial.

It is difficult to believe that unsealing the documents submitted to the court with the summary judgment papers will seriously affect defendants' ability to get a fair trial inasmuch as there has been considerable publicity about this case to date. In addition, as noted by Judge Pratt, much of this material has already found its way into the press. See Pretrial Order No. 51 at 40-41. There must be a substantial probability that the sealing of documents will be effective in protecting against the harm perceived to be posed by disclosure. United States v. Broklrier, 685 F.2d. 1162, 1173 (9th Cir. 1982). Here, in view of the almost daily media coverage concerning Agent Orange and dioxin, in support of the respective positions of the parties, it is difficult to see what harm will be worked by disclosure of the documents submitted in the summary judgment proceeding.

The case law demonstrates that the risk to fair trial posed by public access to the court record must be more than speculative. See United States v. Criden, 648 F.2d 814, 827 (3d Cir. 1981); See also In re Application of National Broadcasting Company, 635 F.2d 945, 953 (2d.Cir. 1980). In In re Application of National Broadcasting Company, the second circuit affirmed the

district court's order giving the broadcasting media access to copy and televised videotapes entered into evidence in a criminal trial. This issue arose before Judge Pratt in the district court during the trial of the first of the "Abscam" cases - actions against public officials charged with bribery and related offenses arising out of an FBI "sting" operation. See United States v. Myers, 635 F.2d 932 (2d Cir. 1980).

Judge Pratt granted the network's request for access to copy and broadcast the tapes while the trial against defendant Michael O. Myers and others was still pending. In re Application of National Broadcasting Company, Inc., 635 F.2d 945, 948. Appeal of the order was expedited, but, by the time it was heard, a guilty verdict had already been entered in the Myers case. Id. at 949. However, as the second circuit noted, indictments were still pending against three of the Myers defendants and others not charged in that case on charges arising out of the Abscam operation. Id. at 953. In his opinion, Judge Newman made it clear that the fact that the Myers trial had not concluded at the time Judge Pratt granted the network's request did not materially alter the public right of access to court records. (See id. at 952-53). As to those who were awaiting trial on other Abscam charges who argued against disclosure of the tapes because "the enhanced exposure and impact of the tapes that [would] occur through televising the copies [would] prejudice potential jurors against them and prevent them from receiving fair trials", id. at 953, the court disagreed that such awareness of

the tapes would pose the kind of risk to fair trials that justified curtailing the public's right to courtroom evidence. Id. Citing the events of Watergate and the attendant publicity, the court said that the publicity did not prevent selection of jurors who could serve impartially. Id.

The court further pointed out that the opportunity for voir dire examination of jurors served as a means of eliminating potentially prejudiced jurors from the panel. Id. See United States v. Criden, 648 F.2d 814, 827 (3d.Cir. 1981). Meeting the argument that release of videotapes would prejudice defendants' possible retrial, the court in Criden said that "the appropriate course to follow when the spectre of prejudicial publicity is raised is not automatically to deny access but to rely primarily on the curative device of voir dire examination at the time of any possible retrial". Id. In any event, the defendants have already made a motion for a non-jury trial, which was denied by Judge Pratt with leave to renew at a later stage in the event that a proper showing of prejudice is made. See Transcript of April 6, 1983 Hearing at 4025. If, in the unlikely event that no impartial jury can be impanelled in the Eastern District, defendants may once again move for a non-jury trial or for a change of venue.

In addition to the presumption that the public has a right of access to court records, the public interest in the release of the documents submitted with the summary judgment papers is particularly strong in this case. The public has an interest in learning more

about the nature of the issues raised by this complex litigation involving thousands of veterans and members of their families; the plaintiffs' claim of exposure to dioxin; and the chemical companies defense that the product was harmless, produced in accordance with government specifications during warfare. Indeed, apart from the Agent Orange litigation, dioxin has sparked much public interest and debate, as contamination has been discovered in the soil of towns and cities around the country.

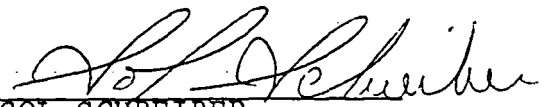
The words of the Supreme Court in Nixon v. Warner Communications, 435 U.S. 589, 98 S.Ct. 1306 (1978) are instructive. Although it did not rely on the balance test in determining whether to release the Nixon tapes, the court noted that weighing on the side of disclosure was the "incremental gain in public understanding of an immensely important historical occurrence that arguably would flow from the release of the aural copies of [the] tapes". Id. at 603 98 S.Ct. at 1314. It is this gain in public understanding which heightens the public interest in the summary judgment documents, especially in view of the fact that Judge Pratt relied on these documents in his decision to grant the summary judgment motions of four defendants and deny the motions of the other three defendants. The risk, if it exists, of impairment to the remaining defendants' right to a fair trial simply does not outweigh the public right of access to the documents submitted in the summary judgment proceedings.



On the basis of the foregoing, it is my recommendation that the provisions of the October protective order be lifted insofar as they relate to the material submitted with and referred to in the parties' summary judgment papers.

Dated: June 21, 1983

Respectfully submitted,

  
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SOL SCHREIBER  
Special Master

FILED  
IN THE  
UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK  
JAN 22 1983

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

IN RE

AGENT ORANGE

Product Liability Litigation

FILE NO. 83-1  
(Agent Orange Cases)

DOV'S MEMORANDUM ON THE SCOPE  
OF THE ISSUES TO BE TRIED  
AT A PHASE 1 TRIAL

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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

DOW'S MEMORANDUM ON THE SCOPE  
OF THE ISSUES TO BE TRIED  
AT A PHASE I TRIAL

The Dow Chemical Company ("Dow") submits this memorandum to set forth its views on the proper scope of the Phase I trial in the Agent Orange product liability litigation.

Initially, Dow reiterates its opposition to serial trials, as first set forth in Dow's Memorandum in Opposition to Plaintiffs' Motion for Serial Trials dated July 11, 1980.\* Dow stated then that plaintiffs' plan was unworkable and that any plan for separate trials must await completion of discovery. The Court denied plaintiffs' motion for serial trials but ordered that the question of whether the "defendants are protected by the 'government contract defense'" be tried separately. In Re Agent Orange Product Liability Litigation, 506 F. Supp. 762, 785 (E.D.N.Y. 1980). The Court further ordered that its previously

\* Similarly, Dow continues to maintain that common questions do not predominate over individual questions in this case for purposes of Rule 23 of the Federal Rules of Civil Procedure.

imposed stay of discovery be vacated, but only as to the government contract defense issue. 506 F. Supp. 762, 797. The parties have been conducting discovery on that issue alone, for the past year. However, in its May 12, 1983 decision ("Pretrial Order 51") granting summary judgment to four defendants, the Court unexpectedly decided to expand the issues to be tried in a Phase I trial to include liability and general causation.

For the reasons stated below, the Court should reconsider its expansion of the Phase I trial and, upon reconsideration, order the parties to proceed to trial solely on the government contract defense.

In the event that the Court determines that liability and general causation issues will be included in the Phase I trial, Dow requests that the Court define the parameters of those issues. Although Dow urges the Court to reject a Phase I trial that includes issues of liability and general causation, this memorandum, in accordance with the directions of the Special Master, sets forth Dow's views on the definition of liability and general causation issues, should they be included in a Phase I trial.

#### POINT I

#### A PHASE I TRIAL SHOULD BE LIMITED TO THE GOVERNMENT CONTRACT DEFENSE ISSUE

This Court properly concluded that a Phase I trial limited to the government contract defense would "serve the

interests of justice and judicial efficiency" since that defense raised "potentially dispositive" issues, "separate and apart from the issues of liability, causation, and damages." 506 F. Supp. 762, 796.\*

However, in Pretrial Order 51, the Court reconsidered its earlier decision. While granting summary judgment to four defendants on the government contract defense, the Court ordered a combined trial of liability, general causation, and government contract defense issues for the remaining five defendants.

Dow respectfully submits that a separate trial on government contract defense issues should be held at the earliest possible date. Four defendants have already been granted summary judgment on the government contract defense; others are likely to prevail at trial. Government contract defense discovery is nearing completion, and the parties are rapidly approaching readiness for trial on that issue. An early resolution of the Agent Orange litigation continues to be a distinct possibility if the parties are allowed to proceed to trial solely on the government contract defense.

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\* Rule 42(b) of the Federal Rules of Civil Procedure and relevant case law point to separability of issues, potential prejudice to parties and considerations of judicial economy as factors to be considered in determining whether separate trials are appropriate. See Gasoline Products Co. v. Champlin Roofing Co., 283 U.S. 494 (1931). Potentially dispositive issues are particularly appropriate for separate trial, because of the possibility that much unnecessary expense and effort can be avoided. See, e.g., United States v. American Telephone and Telegraph Co., 83 F.R.D. 323, 335 (D.D.C. 1979).

The considerations which motivated the Court to order a Phase I trial of the government contract defense--separability of issues, discovery of discrete issues, potential prejudice to parties and considerations of judicial economy--are still valid, and the Court's original decision should be reinstated.

Separability of the issues. When the Court combined general causation, liability, and government contract defense issues for trial, it expressed concern that hypothetical questions of causation had arisen in connection with the government contract defense, questions better decided on the basis of a full record at a trial on general causation. The Court also noted some similarity of issues between the government contract defense and a negligent failure to warn theory of liability. Those concerns are unfounded.

A trial on liability, including negligent failure to warn, and general causation issues must necessarily focus on whether defendants' products caused injury to plaintiffs. Defendants will introduce current scientific evidence to prove that their products, in fact, caused no harm.

The government contract defense, however, focuses on the relative knowledge of the government and the defendants in the 1960's. Scientific research performed in the 1970's and 1980's has no bearing whatsoever on relative knowledge in the 1960's. Thus, the government contract defense raises issues distinct and separate from liability and general causation issues.

Dow has previously set forth the reasons that current medical and scientific opinions as to the health effects of Agent Orange are irrelevant to the knowledge element of the government contract defense. See Dow's Reargument Memo at 18-19. Any conclusion to the contrary simply makes no sense in light of this Court's formulation of the knowledge element.

Indeed, plaintiffs argue that decisions on general causation must be "based on the best scientific evidence now available." Plaintiffs' Causation Memo at 8 (emphasis in original). Thus, there can be no question but that the issues of general causation and the government contract defense are distinct and separable. To the extent that any duplication exists, it is negligible. Furthermore, special verdicts can be devised for the government contract defense trial which will minimize any such duplication.

Thus, the issues relating to the government contract defense are so separate and distinct from both liability and general causation issues that a separate trial of the government contract defense is completely appropriate.

Potential Prejudice. Four defendants -- those receiving summary judgment -- have in effect had their separate trial on the government contract defense. The denial of a separate trial for the five remaining defendants would be fundamentally unfair and prejudicial.

Additionally, the presentation of current scientific opinion to a jury also charged with determining defendants' knowledge during the 1960's in a combined trial creates an obvious danger of confusion. Such confusion would be highly prejudicial to defendants.

The Court's concern that a separate trial would prejudice plaintiffs by "over-emphasizing" the government contract defense, see Pretrial Order 51 at 34, is misplaced. The fundamental purpose in trying the government contract defense separately was that it was a "potentially dispositive issue," 506 F.Supp. 762, 796 and, thus, entitled to such emphasis.

Furthermore, the supposed problem of over-emphasis and prejudice to the plaintiffs must apply equally to the four defendants who received summary judgment. If that problem were in fact substantial, the Court would have declined to enter summary judgment as to any of the defendants.

The most egregiously prejudicial aspect of a combined trial, however, arises from the extreme and unnecessary delay and expense for all the parties.

Judicial economy. Preparation for a trial on liability and general causation will entail enormous effort, delay and expense -- all totally wasted as to each defendant who ultimately prevails on the government contract defense. The Court has found that the government had "rather extensive knowledge" of potential



hazards of Agent Orange. Pretrial Order 51 at 12. And, when four defendants have been granted summary judgment, the probability that the remaining defendants will prevail at trial must be deemed substantial. An early termination of the lawsuit remains not only possible -- but probable.

Moreover, the gathering and preparation of current scientific evidence has barely begun, while the parties are approaching readiness for trial on the government contract defense after a year of intensive discovery and preparation on that issue alone.

Special Master Schreiber has set August 31, 1983 as a target date for completion of discovery on the government contract defense. During the past year, the parties have produced thousands of pages of documents, taken well over a hundred depositions, and spent untold hours in preparation for a government contract defense trial.

With these preparations nearing completion, the proper course is clearly for the parties to proceed to trial as planned. But, instead, the process is beginning all over again with discovery of new documents and testimony relating to liability and general causation.

Considerations of judicial economy, therefore, dictate a separate trial of the government contract defense.\*

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\* Indeed, another court has followed this Court's lead and ordered a separate trial on government contract defense issues. Tefft v. A.C. & S., Inc., Civil Action No. C80-924M (W.D. Wash., Sept. 14, 1982).

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Thus, the reasons which the Court originally cited in ordering a separate government contract defense trial continue to apply. The potential prejudice to the parties due to unnecessary delay and expense remains as great as ever.

As the Court stated in its original ruling granting a separate government contract defense trial:

[A]ny other procedure adopted might subject the parties to years of discovery and trial only to have later generations of judges, lawyers, and litigants discover that an early trial of the government contract defense might have preempted the need for almost all of the discovery undertaken and saved thousands of person-hours and millions of dollars associated with those unnecessary efforts.

506 F. Supp. 762, 796. In actuality, preparation for a trial on liability and general causation may well require much more effort and expense than even the Court envisioned.

In light of the foregoing, justice will best be served by proceeding with a Phase I trial on the government contract defense at the earliest possible date.

## POINT II

### IF A CONSOLIDATED TRIAL IS TO BE HELD, IT MUST DECIDE ALL ISSUES OF LIABILITY AND GENERAL CAUSATION

If the Phase I trial is to include liability and general causation issues, Dow respectfully requests that the Court define the parameters of those issues, as it did for the government contract defense. The parties' differences on those issues are evident.

For example, Monsanto, in its memorandum on Phase I trial issues, fails to acknowledge the necessity of considering the varying levels of dioxin in Herbicide Orange as produced by the different defendants.

Plaintiffs ask that strict liability issues be tried separately from other liability issues and describe general causation in vague and prejudicial terms. See Plaintiffs' Memorandum on the Relation of Class Certification to Liability and Damage Issues; Plaintiffs' Causation Memo.

Dow submits that, if a consolidated trial of liability and general causation issues is to be held, it must decide all such issues in order to avoid enormous problems of duplication of evidence. Moreover, the scope of these issues must be defined so as to make full use of the evidence introduced at the consolidated trial, and special verdicts must be devised which will

definitely resolve causation issues so that the same issues are not relitigated at individual trials.

Therefore, a trial on general causation must determine at what levels of exposure, if any, each defendant's Herbicide Orange caused the specific medical conditions alleged by plaintiffs. Only in this way can the Court avoid decisions on vague, hypothetical questions and make full use of the evidence which will be introduced at the consolidated trial.

The disagreement of the parties over the scope of a trial of liability and general causation issues is symptomatic of the enormous difficulties such a trial will pose. It is entirely possible, and, in fact probable, that such a trial would be so complex as to be impracticable. However, recognizing that the Court has ordered such a trial, Dow sets forth below its recommendations on the scope of such a trial and requests the Court to provide guidance on these issues to focus the parties' preparations for trial.

Liability Issues. The failure to include strict liability claims along with all other liability issues, as plaintiffs suggest, would be severely prejudicial to Dow, since it could permit plaintiffs to continue against Dow in perhaps thousands of individual trials even if Dow prevailed on every issue at the consolidated trial. Furthermore, the evidence from the consolidated trial would have to be reintroduced at each of the sub-

sequent trials--an outrageous and unnecessary duplication of effort.

While variations in state law will render a consolidated trial of strict liability quite complex, such complexity is inherent in any multi-district litigation based on diversity jurisdiction. The problem must simply be faced and dealt with, if possible, using carefully drafted special verdicts.

Liability for punitive damages. For similar reasons, if the Court adheres to its decision to proceed with a consolidated trial of liability and general causation issues, liability issues relating to punitive damages must also be addressed at that trial. If a consolidated trial is to serve any useful function, its goal should be to avoid multiple presentations of identical evidence. The discovery and evidence developed at trial with respect to general liability issues will overlap substantially with punitive damage liability issues. Thus, a consolidated liability and general causation trial should embrace liability issues related to punitive damages to avoid reintroduction of the same evidence over and over again. Putting off liability issues related to punitive damages, as suggested by Monsanto in their brief on punitive damages, will only foster unnecessary duplication of effort.

As with strict liability issues, however, the variety of state laws on punitive damages -- including, for example, differences in liability standards as well as ability to recover punitive damages more than once from a particular defendant --

will make resolution of these issues exceedingly complex. Extraordinary creativity will be required to devise appropriate special verdicts relating to punitive damages for use at any subsequent individual trials.

The demarcation between the individual and general causation trials. If a consolidated trial on liability and general causation is ordered, Dow submits that the medical, scientific, and historical evidence regarding the use and effects of Agent Orange must be gathered and introduced once, and once only, and that every issue to be decided on that evidence must be decided at that time. For if such evidence is to be reintroduced piecemeal at subsequent trials on individual causation, and if the issues to which such evidence is relevant are not to be decided until those subsequent trials, then the effort and expense required for the initial consolidated trial will have been wasted.

The Court reached that conclusion in its earlier consideration of the dividing line between general and individual causation. It envisioned the course of the Agent Orange litigation after the initial government contract defense trial in the following terms:

[I]f needed, there may be an additional trial addressing liability questions such as negligence, product liability, and general causation, where a jury will be able to hear all of the evidence relating to the development, manufacture and use of Agent Orange, and the scientific and

medical evidence relating to its potential effects, and report its findings in carefully drafted special verdicts. Those special verdicts can then serve as a framework for later disposition of the issues of individual causation (whether a particular veteran was exposed, to what degree, and with what results) and damages.

506 F. Supp. 762, 785-86 (emphasis supplied). The Court described the causation questions associated with general and individual causation as follows:

[T]here is a major dispute over whether Agent Orange can cause the injuries in question, and there are separate disputes over whether the exposure claimed in each case did cause the injuries claimed.

506 F. Supp. 762, 783. The Court's language clearly implies that all issues relating to the medical, scientific, and historical evidence concerning the use and effects of Agent Orange are to be decided at a consolidated trial on liability and general causation ("whether Agent Orange can cause the injuries"), leaving only a veteran's particular medical condition, degree of exposure, and damages to be decided at a trial of individual causation ("whether the exposure claimed in each case did cause the injuries claimed"). The Court's plan for the consolidated trial will avoid problems of duplication and prejudice to the extent possible.

However, plaintiffs contend that in a consolidated trial "generic cause ought to be limited to the issue of whether the dioxin levels in this case are or are not capable of causing

harm to human health." Plaintiffs' Causation Memo at 3. It is, of course, axiomatic that any substance, under certain conditions, is "capable of causing harm to human health." Plaintiffs' question demands a "yes" answer and is highly prejudicial to defendants.

Moreover, plaintiffs' question is so vague that its answer has no significance. The consolidated trial must necessarily result in a large number of special verdicts dealing in detail with the levels of exposure needed to cause specific medical conditions, or else its findings will be useless in subsequent trials on individual causation. The following discussion of the issues to be decided at the trials on individual and general causation makes this conclusion inescapably clear.

Specific issues of individual causation. Individual trials must be limited to the determination of each plaintiff's exposure, medical history, medical condition, and damages. The presence or absence of a causal link between exposure and particular medical conditions will have to be determined using special verdicts returned at the consolidated trial.

If a consolidated trial is to be held, there should be no need to reintroduce evidence already introduced at that trial. The special verdicts standing alone must be sufficiently detailed to decide causation questions at the individual trials, or the consolidated trial will have been an exercise in futility.

Thus, when a veteran at his individual trial proves that he was exposed at level X and suffers from medical condition Y,



there must be a special verdict available to the effect that exposure to a particular defendant's Herbicide Orange at levels above Z causes medical condition Y. Similar special verdicts must be available for any alternate causative factors to which the veteran may have been exposed. See 506 F. Supp. 762, 783.

Finally, there must be special verdicts based on pharmacokinetics and environmental degradation data. These special verdicts will be used to specify a veteran's level of exposure based on the evidence presented regarding the time, place and manner of his exposure -- for Herbicide Orange as well as for alternate causative factors.

Specific issues of general causation. Detailed formulation of the special verdicts must, of course, await the completion of discovery on causation issues. As the Court has stated, "undoubtedly patterns of exposure will emerge." Id. at 783. However, consideration of the type of evidence which will be introduced at the consolidated trial makes clear that there are a number of basic issues which the special verdicts must inevitably decide.

First and foremost, the issue is not whether each defendant's Herbicide Orange "could" cause harm, as plaintiffs suggest, nor whether it "did" cause harm as Monsanto suggests, but rather "at what levels of exposure," if any, each defendant's product caused harm. The special verdicts must deal with levels of exposure or they will be useless to a jury attempting to

decide the claims of a particular plaintiff. Without access to the medical and scientific evidence considered at the consolidated trial, a jury would have no way whatsoever to evaluate the significance of a plaintiff's particular level of exposure.

The supposed distinction between "could" and "did" is a semantic quibble. In the context of a consolidated trial, both pose indefinite, hypothetical questions. Furthermore, a "could cause injury" question would effectively transfer the burden of proof to defendants--and require them to prove a negative: that a certain event cannot possibly happen. As stated above, any substance "could cause injury." Such a question would be highly prejudicial. But a "did cause injury" question is little better since there will be no actual plaintiff with a specific injury for the jury to evaluate. By considering particular levels of exposure and the dioxin levels in each defendant's product, however, the question can be made more definite, and the answer somewhat useful.

Indeed, plaintiffs concede the relevance of exposure information to general causation but nonetheless urge the Court to ignore it on the grounds that the trial would become "so complex that it would probably defy sensible resolution." Plaintiffs' Causation Memo at 3-4. In effect, plaintiffs concede that their case is too complex to be proven.

When do the plaintiffs suggest that the issue of exposure be faced? "Later." Plaintiffs' Causation Memo at 4. Yet,

at the consolidated trial, all the evidence necessary for a decision will have already been gathered and introduced.

There is agreement in one area at least: the varying levels of dioxin in Herbicide Orange as produced by the different manufacturers must be taken into account in determining causation issues. Herbicide Orange is not a generic product. The levels of dioxin vary considerably from manufacturer to manufacturer.

Plaintiffs, for example, admit that it would be proper "to differentiate the general causation issue to a limited extent on the basis of relative levels of contamination." Plaintiffs' Causation Memo at 4. And the Court has stated that "if the product [containing 1 ppm dioxin] was clean and safe, Dow would win on the causation issue ...." Pretrial Order 51 at 18.

Dow agrees with plaintiffs and the Court that it would be impossible to discuss causation without taking the differing dioxin levels of the defendants' products into account.

The same considerations require that the special verdicts deal with specific medical conditions, not mere "harm to human health," as plaintiffs suggest. Plaintiffs' Causation Memo at 3. If the special verdicts do not address specific medical conditions, as determined by answers to interrogatories, medical and scientific evidence will have to be reintroduced at the individual trials, and the consolidated trial will have been useless.

Similarly, any alternate causative factors shown to have widespread application should be dealt with in a series of

special verdicts establishing toxic levels and effects for the types of exposure which occurred in Vietnam. See 506 F. Supp. 762, 783. Possible alternate causative factors include, among others, insecticides and other common chemicals, medicinal and non-medicinal drugs, endemic diseases, parasites and munitions.

For example, there is evidence that the Army required its soldiers to take Dapsone, an anti-malarial drug, daily while serving in Vietnam. Dapsone is a reported carcinogen with numerous severe side effects. The hazards of Dapsone and numerous other such chemicals should, like the hazards of dioxin, be dealt with in the consolidated trial.

In determining toxic levels of exposure, the consolidated trial should deal not only with matters such as the pharmacokinetics and environmental degradation of dioxin, but also with the amounts, times, and places Herbicide Orange was sprayed. In particular, the information contained in the HERBS tapes should be distilled and dealt with conclusively. In that way, those exposure issues can be settled for all plaintiffs.

The consolidated trial should also consider the foreseeability of exposure resulting from government misuse of Herbicide Orange. Applications of "overkill" concentrations and direct spraying or dumping on troops may be beyond the bounds of legally foreseeable uses of Herbicide Orange, in which case Dow would not be liable for any resultant exposure.

It is apparent that the volume of evidence relevant to general causation is staggering. If dioxin may be among the most toxic chemicals known, it surely is among the most closely scrutinized. Hundreds of experts and millions of pages of technical medical and scientific information will be needed to describe the relationship between specific medical conditions and specific levels of dioxin. An enormous volume of historical information regarding government use of Herbicide Orange in Vietnam must also be considered in determining levels of exposure. In addition, analogous evidence exists concerning other chemicals in common use in Vietnam during the 1960's, chemicals which may be the actual causes of the injuries plaintiffs allege.

The consolidated trial must deal fully with all of the issues mentioned above if it is to make intelligent use of the evidence which will be introduced and avoid the need to reintroduce such evidence in subsequent individual trials.

The development of the special verdicts and presentation of the evidence described above will be a formidable -- perhaps insurmountable -- task, one which will challenge the ingenuity of us all. Yet, however complex these issues may be, when the proper time arrives, they must be faced.

#### CONCLUSION

Notwithstanding the above recommendations regarding a consolidated trial of liability and general causation issues, Dow

remains opposed at this time to such a trial. After a year of intensive preparation, the parties are approaching readiness for a Phase I trial limited to the government contract defense. Rather than expanding the scope of discovery to include new and enormously complex issues, the Court should make efficient use of the evidence already gathered and order the parties to proceed expeditiously to trial on the government contract defense.

Dated: Garden City, New York  
June 24, 1983

Respectfully submitted,

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MDL # 381

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U. S. DISTRICT COURT E.D. N.Y.

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF NEW YORK

★ JUN - 7 1983 ★

TIME A.M. \_\_\_\_\_

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In re

"AGENT ORANGE"

PRODUCT LIABILITY LITIGATION  
\_\_\_\_\_X

MDL 381  
(All Cases)

PLAINTIFF'S MEMORANDUM ON  
GENERIC CAUSATION

June 6, 1983

YANNACONE & ASSOCIATES

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Prof. James Henderson  
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Robert A. Taylor, Jr.,

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PLAINTIFF'S MEMORANDUM ON GENERIC  
CAUSATION

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This Memorandum describes the issue of generic causation and places it in context with the other causation issues in this case. We do not address questions of proof, since to do so would be premature, nor do we address the important issues presented by each defendant's breach of its duty to warn. Our limited objective here is to help the Court to conceptualize the generic causation issue.

Each claim in these proceedings presents three basic issues of causation.

First, the "proximate causation" issue asks whether or not the responsible governmental decision makers would have used Agent Orange in the same way even if the defendants had fully informed them of the hazards accompanying such use.

The second causation issue, that of "generic causation" asks whether or not Agent Orange presented actual hazards about which the defendants should have warned the government - that is whether Agent Orange containing the dioxin levels involved in this case is capable of causing harm to humans.

The third causation issue, "particular causation", asks whether or not each claimant's injuries were, in fact, caused by exposure to Agent Orange.



The first two causation issues - proximate and generic causation - are appropriate for consideration in this multi-district litigation proceeding because they raise issues common to all claims.

The third causation issue, particular causation, raises myriad variations of factual circumstances and must wait to be resolved in each claim until such time as it is remanded to the district from whence it came.

There is, however no bright line between generic causation and particular causation. At some point, the question of "could dioxin have caused the claimant's injuries?" becomes inseparable from the question, "did dioxin cause the claimant's injuries?" The division of the issues depends on how each is framed. Thus, we could ask the question of generic causation as broadly as "could exposure to dioxin at any level of contamination for any period of time and in any way (e.g., inhalation, physical contact with skin) cause any injury to humans?" or as narrowly as "could physical contact with a substance containing XPPM for Y period of time cause ailment Z?" The question at this point of the litigation is how specifically to frame the inquiry into generic cause. Plaintiffs contend that for purposes of the multi-district litigation proceeding, generic cause ought to be limited to the issue of whether the dioxin levels involved in this case are or are not capable of causing harm to human health. If dioxin at the levels of contamination relevant in these cases is harmless to humans, then the defendants neither breached their duties to warn nor injured

anyone. Of course, if the triers of fact in this proceeding find that dioxin at the relevant contaminant level is harmful to humans, then (assuming that they also find that defendants did not share relevant data with the government) the defendants will be guilty both of breaching their duties to warn and of injuring many claimants (whose identities will be determined when the issues of particular causation are resolved after remand.)

We are moved to urge limitation on the generic cause issue by a recognition of the complexity that would otherwise obtain. We believe that the generic cause issue should be framed to include only dioxin at the levels of contamination relevant in this case for the obvious reason that it is not dispositive of the generic causation issue in the present case that dioxin levels below the lowest levels sold by the defendants are safe, or that dioxin levels above the highest levels sold by defendants can cause harm to humans. Hazards associated with the dioxin levels below and above those involved in this case are relevant, but not controlling.

It is clear upon reflection that levels of dioxin contamination in the Agent Orange sold by the defendants is not the only variable that, in theory, at least, might determine the generic causation issue. The manner and duration of exposure are probably relevant - the proof at trial may show that long exposures on bare skin, even at lower contamination levels, may be as, or more, dangerous than exposures at relatively high levels,

but for short periods with skin protected by clothing. And it may prove to be the case that these factors and others have a bearing on the types of injuries likely to be suffered by those exposed to dioxin. Emerging from considerations of this sort is the probability that a complex matrix of interdependent factors might comfortably be arranged under the heading "generic causation".

But, regardless of the validity of this observation, we urge the Court not to bring these considerations into the generic causation issue and attempt to resolve them in this phase of the litigation. The very most that should be done along these lines is to differentiate the general causation issue to a limited extent on the basis of relative levels of contamination. In no event should the Court go any further and attempt to construct a complex matrix of generic causation. Those other elements are perfectly appropriate for resolution later, if and when the cases are remanded for determination of the particular causation issues.

We have several compelling reasons for urging the Court so strongly on this important point.

First, as we trust is obvious, to venture further than a simplified PPM\* differentiation would render this phase of the trial so complex that it would probably defy sensible resolution.

Second, the "nature of exposure", "duration of exposure"

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\* Parts Per Million

and "type of injury" variables are much better suited to being handled in the context of trial upon remand. These are inquiries that are directed to the circumstances of particular plaintiffs who will not be individually considered at the multi-district stage. To engage in inquiries with respect to these circumstances will require proof that is needlessly hypothetical and that will require consideration of cases that have no necessary relationship to any real experience.

A third reason for keeping the generic causation issue relatively simple concerns potential problems of choice of law. The further one attempts to develop the details of the multi-variable matrix, the greater the risk that variations in state law would cause difficulties. At the very least, in every jurisdiction, the claimant in a negligent failure to warn case must prove that the product was capable of causing harm.

Our fourth reason for urging the Court to keep the generic causation issue as simple and straightforward as possible in this phase of the litigation is that, as the Court is well aware, the defenants have, up until now, insisted on looking at this entire controversy from the single-minded perspective that "we can't be held liable because our dioxin levels can't hurt anyone." Quite apart from anything they may now urge upon the Court regarding the issue of generic causation (perhaps for the very purpose of trying to scuttle the litigation in a nightmare of unnecessary complexity), we remind the Court

that up until now, the defendants have adamantly insisted on a fish or cut bait "does it cause harm or doesn't it?" perspective that coincides with our very perspective on generic causation.

Our final reason for urging a "keep it simple" approach is that this Court's Order dated May 20, 1983, appears to support, if not command that approach. Reacting to defendant, Dow Chemical's motion for summary judgment, Judge Pratt observed (page 18):

"Related questions of fact are the actual dioxin levels in Dow's product and the actual hazards involved in the use of the products at different levels of dioxin. Much of this may depend upon whether or not Dow's self-imposed maximum contamination of 1PPM is or was safe."

Later in the same Order (at page 37), Judge Pratt makes clear that for Dow's 1PPM dioxin standard (and, by implication, any standard) to be "safe" it would have to be such that "hazards to people would be eliminated." It follows from these statements by Judge Pratt that when he wrote the May 20th Order he must have been thinking of the generic cause issue in much the same way that we now urge him to maintain and build upon. Our statement of the issue appears to be a paraphrase of his:

"The generic causation issue comes down to whether the dioxin levels involved in this case are or are not capable of causing harm to human health."

It must be acknowledged that even within the range of contamination levels that were actually sold by defendant, it may become necessary to differentiate among different levels.

For example, if the jury were to find that one defendant sold Agent Orange that invariably contained 1PPM of dioxin, and that the lowest concentration levels of any of the other defendants' products was 5PPM, then a single jury finding that dioxin at levels of 5PPM is harmful would not necessarily condemn the one defendant's product, nor would a single jury finding that dioxin at levels of 1PPM is not harmful necessarily exonerate the products of the other four defendants.

The point is not that the generic causation issue is impossibly complex, or that the Court should at this juncture, commit itself to a definite plan regarding how, if at all to divide up the issues on a PPM basis. Instead, we are merely indicating the possibility that some differentiation may be called for if the generic causation issue is to serve its legitimate function. In any event, that decision should be made only after the Court has gotten a better feeling for the nature of the proof relating both to levels of concentration and relative toxicity. We have our own views, of course, regarding how these issues should be resolved, including how the generic causation issue should be given to the jury; but we trust such details may appropriately be left until later in these proceedings.

As a final point, it must be understood that in determining the generic causation issue, the trier of facts must rely on the latest and best, time of trial data regarding the hazards associated with dioxin. The generic causation issue - simply stated, "is dioxin at these levels harmful?" - requires

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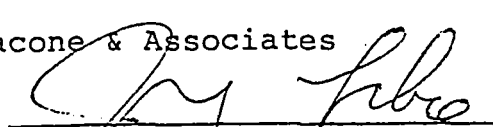
all currently available scientific knowledge to be resolved appropriately. It will be observed that the issues relating to defendants' failure to share information and proximate causation are different in this regard. Thus, in a negligence case the questions are whether the defendants shared the data then available, and whether the governmental decision makers then in positions of responsibility would have acted differently if they had been warned. But once these issues are resolved against the defendants, once the triers of fact conclude that the defendants failed to share information that would have affected government decision making, the focus under the heading "generic risk" shifts to whether, based on the best scientific knowledge now available at time of trial, the Agent Orange that the defendants sold to the government was capable of causing harm to humans. If, in addition to the other just identified elements, the jury finds that dioxin at the relevant levels of contamination is harmful to humans, all that will remain to be resolved on remand will be the issues of particular causation and damages.

Respectfully submitted,

PLAINTIFFS' MANAGEMENT COMMITTEE

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BY:

  
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Dated: June 6, 1983

TO: All Defendants  
(See Attached Service List)

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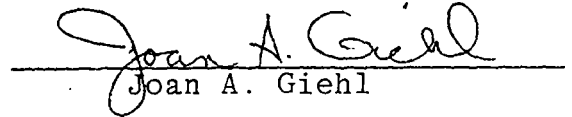
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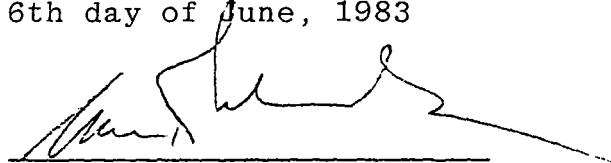
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Washington, DC 20005

  
Joan A. Giehl

Sworn to before me this  
6th day of June, 1983



WILBUR H. SCHNEIDER  
NOTARY PUBLIC, State of New York  
Residing in Suffolk County  
No. 32-3519350  
Commission Expires March 30, 1985



AFFIDAVIT OF SERVICE

STATE OF NEW YORK )  
 ) SS.:  
COUNTY OF SUFFOLK )

MDL# 381

Joan A. Giehl, being duly sworn, deposes and says, that deponent is not a party to the action, is over 18 years of age and resides at W. Sayville, New York.

That on the 6th day of June, 1983 deponent served the within PLAINTIFF'S MEMORANDUM ON GENERIC CAUSATION upon the following, at the addresses designated by said attorneys for that purpose, by depositing a true copy of same enclosed in a postpaid properly addressed wrapper in a post office under the exclusive care and custody of the U.S. post office department within the State of New York:

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U. S. DISTRICT COURT E.D. N.Y.  
★ MAY 20 1983 ★

TIME A.M. \_\_\_\_\_  
P.M. \_\_\_\_\_

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

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IN RE

MDL NO. 381  
(ALL CASES)

"AGENT ORANGE"  
PRODUCT LIABILITY LITIGATION

PRETRIAL ORDER NO. 51

----- x

PRATT, C.J.:

In this multidistrict litigation Vietnam veterans and their relatives seek to recover damages from nine chemical companies, Dow Chemical Co. (Dow), Hercules, Inc. (Hercules), The Monsanto Co. (Monsanto), Diamond Shamrock Corporation (Diamond Shamrock), Hoffman-Taff (Missouri) (Hoffman-Taff), Thompson Chemical Corporation (Thompson), T. H. Agriculture & Nutrition Co. (T.H.), Riverdale Chemical Co. (Riverdale), and Uniroyal, Inc. (Uniroyal), for injuries allegedly suffered as a result of their exposure to a herbicide called Agent Orange used by the military in Vietnam. Plaintiffs' claim is that 2,3,7,8 Tetrachlorodibenzo-p-dioxin (dioxin) is extremely toxic, that it was produced as a by-product in the manufacture of trichlorophenol (TCP) which was a precursor chemical for 2,4,5-trichlorophenoxy acetic acid (2,4,5-T), which in turn was combined with 2,4-dichlorophenoxyacetic acid (2,4-D) to make Agent Orange. Any dioxin produced in the manufacture of TCP carried forward into 2,4,5-T and therefore into the Agent Orange. Thus the claims of the plaintiffs focus upon dioxin as a contami-

nant in the Agent Orange supplied to the government pursuant to contracts with the separate chemical companies.

In pretrial order no. 26, I recognized the possibility of a government contract defense to the plaintiffs' claims but denied defendants' motions to dismiss on that ground, finding that the motions presented issues of fact which precluded summary judgment. 506 F. Supp. 762, 796 (E.D.N.Y. 1980). The contours of the defense were developed in more detail in pretrial order no. 33:

[A] defendant in this case will be entitled to judgment dismissing all claims against it based on that defendant's having supplied "Agent Orange" to the government pursuant to a contract, if the defendant proves:

1. That the government established the specifications for "Agent Orange";

2. That the "Agent Orange" manufactured by the defendant met the government's 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 "Agent Orange".

534 F. Supp. 1046, 1055 (E.D.N.Y. 1982).

Because the issues presented by the government contract defense seemed to be separate and distinct from the general theories of liability then being advanced by plaintiffs, I ordered a separate trial of the defense, 506 F. Supp. at 796, and appointed a special master to

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supervise discovery for that trial scheduled to begin on June 27, 1983, 94 F.R.D. 173 (E.D.N.Y. 1982).

In April 1983, after almost eleven months of intensive discovery, I permitted any defendant who so elected to move for summary judgment with respect to the government contract defense. The basis of such summary judgment would, of course, be that there were no triable issues of fact with respect to the defense, and that the moving defendant was therefore entitled to dismissal of all claims against it as a matter of law. All defendants except Monsanto and Diamond Shamrock moved for summary judgment. In reaching a determination on these motions, I have reviewed all of the papers submitted, both in support and in opposition, including counsel's extensive memoranda and attached exhibits. In addition, I listened closely to the oral arguments presented by all parties.

The central issue raised by the government contract defense centers on its third element: whether the government knew as much as or more than the contracting defendant about the hazards to people that accompanied the use of Agent Orange. As this action has matured, the plaintiffs have concentrated their claims on dioxin as a contaminant present in 2,4,5-T; consequently, the knowledge in question is knowledge about dioxin. To focus upon this element, it is necessary to compare what knowledge the government

had about dioxin in 2,4,5-T and about its contamination of Agent Orange, with what knowledge each of the moving defendants had about these matters.

Since discovery is not yet complete, the following discussion of facts and evidence does not constitute a finding of facts for any future purpose except for those specifically mentioned below in connection with the specifications for and performance of the government contracts.

#### RELATIVE LEVELS OF KNOWLEDGE

##### The Government

Even when all doubts are resolved in favor of the plaintiffs, as required by SEC v. Research Automation Corp., 585 F.2d 31, 33 (2d Cir. 1978), the record demonstrates that the government and the military had a considerable amount of knowledge about 2,4,5-T, about dioxin, and about the health hazards associated with both. The following general chronology, while not all-inclusive, gives some indication of both the extent of government knowledge in this area and of the fact that it was continually increasing.

During World War II, the military discovered the herbicidal properties of 2,4,5-T and conducted extensive testing of various possible herbicides. This research

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was conducted under the supervision of the Crops Division of the Army Chemical Corps at Camp Detrick, Maryland.

Several years later, in 1949, Dr. Donald Birmingham of the Public Health Service visited Nitro, West Virginia, where there had been an explosion at Monsanto's 2,4,5-T plant. The report of Dr. Birmingham's colleague, Dr. Louis Schwartz, indicated a connection between chloracne and the chemicals produced in the plant.

There is uncontradicted evidence in the record that a number of people knew in the 1950s that dioxin was toxic although they may not have connected it with 2,4,5-T. Several factors contributed to this awareness.

First, in the early 1950s, C.H. Boehringer Sohn Company of Germany had serious cases of chloracne among workers engaged in the production of TCP, a precursor chemical used inter alia to manufacture 2,4,5-T. By 1955, the Boehringer company was forced to halt production at two plants. Dr. K. H. Schulz, a skin specialist, investigated the problem and in 1957 together with Professor J. Kimmig, reported his findings in an article entitled Chlorinated Aromatic Cyclic Ethers As the Cause of Chloracne. 44 Die Naturwissenschaften 337 (1957). In this article, the authors stated that they were able to isolate dioxin, which they believed to be the contaminant in TCP that was causing

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the health problems. While it is not established that anyone in the government read the Kimmig & Schulz article at the time it was published, the article was available as part of the scientific literature and it appeared in a note to the report written by Friedrich Hoffmann concerning his trip to Europe in 1959.

The "Hoffmann Trip Report" was a second factor contributing to government knowledge during this period. Dr. Hoffmann, who was searching on behalf of the military for potential chemical warfare agents, reported that he had received "startling information" regarding the toxicity of the compound dioxin. In his report, he described the deaths of several workers in a plant that produced wood preservatives containing trace amounts of dioxin. In addition, he reported that the compound could cause severe, indeed fatal, liver damage. At least 10 copies of the Hoffmann report were sent to the Army Chemical Corps Chemical Warfare Laboratories at Edgewood Arsenal, the governmental body responsible for investigating toxicity and analyzing chemical agents. Thus, the Hoffmann report on dioxin, coupled with the Kimmig & Schulz article connecting dioxin to TCP, raises a strong possibility that personnel at Edgewood, even before 1960, were aware of the connection between dioxin and TCP as well as the use of TCP to make 2,4,5-T.

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Deposition testimony of Edgewood research personnel confirms that people at Edgewood knew about the toxicity of dioxin. Dr. Bernard Jandorf, chief of the Army Chemical Research Laboratory, testified that people at Edgewood had been familiar with this fact since the late 1950s. Dr. Richard Horton, a toxicologist, testified that he knew dioxin was toxic in 1959, as did Dr. Thomas Simmons, who worked in the Agents Research Branch. Walter Sultan, a pharmacologist in the Toxicity Screening Branch, testified that he had read the Hoffmann report.

Further evidence of governmental knowledge is found in the article written by Dr. Birmingham of the Public Health Service in 1959, stating that in the manufacture of 2,4,5-T, intermediate hydrocarbons of the chlorine group had caused chloracne in more than 200 chemical workers at a manufacturing plant. Birmingham, New Causes of Occupational Dermatoses, 20 Industrial Health 489, 490 (1959). Dr. Marcus Key of the Public Health Service testified that he had learned of the association between hydrocarbons and chloracne and other diseases at the Harvard School of Public Health in 1953.

In the early 1960s, Dr. Bernard McNamara, Chief of the Toxicology Division at Edgewood, performed a study at Edgewood Arsenal of the toxicity of Agent Purple, another



defoliant containing 2,4,5-T that was used by the military. This testing was conducted at the request of General F. J. Delmore, Commanding General, U.S. Army Chemical Corps, Research & Development Committee. While the testing indicated that there was some toxicity, the results were not conclusive. At a meeting held at Edgewood Arsenal in 1963 to discuss and evaluate the toxicity of 2,4,5-T, the overall thrust of those reporting was that both 2,4,5-T and 2,4-D were safe for humans.

Other events occurring in 1963 give additional indications of governmental knowledge. The Institute for Defense Analysis wrote a report for the Advanced Research Project Agency, an agency within the Department of Defense. This report stated that herbicides were safe when used commercially, but that there could be increased hazards in military use because greater concentrations might be applied by less experienced personnel under the pressures inherent in battlefield use. The report noted the connection between chloracne and skin and respiratory irritations and their association with herbicides.

Dr. Key of the Public Health Service testified at his deposition that in 1963 he placed a sample of 2,4,5-T herbicide on his forearm to see if it would induce chloracne. He did this three times a week for three weeks and developed chloracne on his forearm. He also testified that he had

read Kimmig & Schulz and learned of dioxin from that article. When questioned concerning a June 1964 article by Dr. Jacob Bleiberg, Industrially Acquired Porphyria, 89 Archives of Dermatology 793 (1964), which discussed chloracne and porphyria in workers engaged in 2,4,5-T production, Key stated that he had reviewed the article at the time it was written and that it was only a more complete version of what they already knew.

The level of government knowledge appears to have increased much more rapidly during the mid-to-late 1960s. Defendants point to numerous instances of governmental knowledge which are not disputed by plaintiffs. Dr. Herbert Stokinger, the chief toxicologist of the Division of Occupational Health, testified that he knew dioxin was an impurity in 2,4,5-T sometime around 1965. Colonel Robert A. Shade, who was chief of the Chemical Operation Branch of Military Assistance Command-Vietnam and later on the staff of the chemical branch of the Assistant Chief of Staff Force Development, testified that he learned of the connection between dioxin and 2,4,5-T sometime between mid-1966 and summer 1968.

In July 1966, the director of the National Academy of Sciences wrote to the chief of the Bureau of Medicine and Surgery for the Navy advising him of the connection between 2,4,5-T and porphyria and chloracne. In August

1966, the National Academy of Sciences, in response to a request for information, wrote to the Army Surgeon General telling him that 2,4,5-T was toxic and that chloracne was associated with it.

Recent deposition testimony indicates that people closely associated with the White House were aware of hazards involved in the use of defoliants. Dr. Gordon MacDonald, a member of President Johnson's Science Advisory Committee (PSAC), testified that the issues of herbicides and dioxin in herbicides were informally discussed by a subgroup of PSAC sometime between April and June 1965. Dioxin as an impurity in 2,4,5-T was also discussed. He said there was discussion of the potential toxicity of dioxin, and while it was considered that the evidence was fragmentary and inconclusive, the subject of dioxin contamination deserved continuing attention. Dr. MacDonald testified that human health effects were discussed, and that he attended a meeting where the effectiveness of herbicides and the presence of dioxin in 2,4,5-T were discussed. According to MacDonald, Secretary of Defense Robert MacNamara attended this meeting.

Dr. Donald Hornig, Special Assistant to President Johnson for Science and Technology and Chairman of PSAC, testified at his deposition that by 1966 PSAC was discussing impurities in 2,4,5-T. He stated that this discussion

occurred sometime between 1964 and 1966. He said that when he learned of the impurity, he felt that "one ought to be concerned" about what the magnitudes of the toxicological effects and of the exposures might be. He testified that he understood dioxin was a health hazard to human beings. However, he also testified that he did not relay the information to President Johnson.

An additional element of knowledge is found in a 1967 Rand report commissioned by the Advanced Research Project Agency of the Department of Defense. This report described "actual experience" of health hazards associated with the use of defoliants in Vietnam.

Finally, there is the study commissioned by the National Cancer Institute, Evaluation of Carcinogenic, Teratogenic, and Mutagenic Activities of Selected Pesticides and Industrial Chemicals (Bionetics Report). This study evaluated the carcinogenic, teratogenic, and mutagenic effects of various chemicals. The study was commissioned in 1963, and the report is dated August 1968. The study did result in a finding of some teratogenic effects connected with the use of 2,4,5-T. While it is not clear that defendants are correct in their assertion that portions of the study were available to the government earlier than August 1968, it is clear that by 1968 and 1969, the results of the study were available to the government.

This picture of knowledge shown to be in government hands is based almost entirely on uncontradicted and uncontested evidence. It reveals that the government and the military possessed rather extensive knowledge tending to show that its use of Agent Orange in Vietnam created significant, though undetermined, risks of harm to our military personnel. Against this picture we must examine what was known by the different defendants, keeping in mind that, by and large, much of the government's knowledge was classified and not shared with the defendants.

Dow Chemical Company

Dow supplied Agent Orange to the military pursuant to seven contracts. Deliveries were made from September 1965 to December 1968. The government established the specifications for the delivered product, and Dow performed to those specifications.

Dow began manufacturing 2,4,5-T in 1948. Dow admits that it knew prior to this that chloracne was an industrial health hazard present in the production of certain chlorinated hydrocarbons. It developed the "rabbit ear" test, which was non-specific, but was able to determine if a chloracnegen was present. Dow used this test until 1964.

Plaintiffs argue persuasively that Dow must have known about the 1949 explosion at the Monsanto plant in Nitro, West Virginia, in 1949, and the resulting cases of chloracne. Dow does not deny such knowledge.

In the 1950s, C.H. Boehringer Sohn Company had the chloracne problems in its plant discussed supra, and it wrote to Dow for help. In 1955, Dow replied by sending a data sheet describing the hazards due to toxicity and the precautions Dow was taking to prevent them. In 1957, C.H. Boehringer reciprocated by informing Dow of the methods it had developed to prepare TCP so as to avoid "chloracne excitors".

The Kimmig & Schulz article was produced by Dow from its files during discovery. There is no indication in the record of when Dow obtained the article, other than the fact that it was referenced in a memo written by a Dow official in 1964.

Plaintiffs also argue that Dow knew about the outbreak of chloracne among workers at the Diamond Alkali (now Diamond Shamrock) plant in 1956. Dow does not deny this.

In February 1964 at Dow's plant in Midland, Michigan, more than 40 workers developed chloracne. These workers

had been engaged in the manufacture of TCP. After shutting down the plant, Dow investigated the incident and found that there was a high concentration of chloracnegen in the waste stream from the plant. It determined that this chloracnegen was dioxin. Dow reported the incident to the Michigan Department of Health.

Around this time, Dow developed a method of using gas chromatography to detect dioxin in TCP and in 2,4,5-T at concentration levels as low as 1 part per million (ppm). Dow researchers were satisfied that there was no chloracnegenic response if the dioxin level was at or below 1 ppm. Dow thereupon instituted procedures to ensure that no TCP or 2,4,5-T left its plant with a dioxin level above 1 ppm. This is supported to a certain extent by Dow's exhibits 42 through 45 which indicate that Dow's dioxin levels in its 2,4,5-T were less than 1 ppm, although these exhibits do not appear to cover all of the 2,4,5-T and Agent Orange that Dow produced. However, nowhere in their papers do plaintiffs challenge Dow's contention that its 2,4,5-T was contaminated by 1 ppm of dioxin or less. Since Agent Orange was a 50-50 mixture of 2,4,5-T with 2,4-D, and since plaintiffs have abandoned their earlier claims against 2,4-D, this in effect establishes for purposes of this motion a contamination level for Dow's Agent Orange at .5 ppm or less.

In March 1965, Dow called a meeting attended by Hercules, Diamond Alkali, and Hooker Chemical Corporation to discuss health hazards involved in the production of TCP and 2,4,5-T. No one from the government was invited to the meeting, but Dow had not yet contracted to produce Agent Orange. It is not disputed that Dow knew that the dioxin problem arose during the manufacturing process and that any dioxin produced at that stage could carry forward into the delivered product. At the meeting, Dow explained that precautions were necessary to prevent health hazards, and stated that it had examined herbicides sold by some other companies and found some to contain "surprising high levels" of dioxin. In a memo to the file after the March 1965 meeting, Dr. Edward Chandler of Diamond Alkali indicated that Dow thought that repeated exposure to 1 ppm could be dangerous.

In June 1965, V.K. Rowe of the Dow Biochemical Research Laboratory wrote to Ross Mulholland of Dow Chemical of Canada. He described the chloracne problems Dow had experienced and stated that Dow did not want any of its customers to develop acne. The letter also indicates a fear of government intervention into and control of the entire herbicide industry, and further that Dow wanted to get the problem under control without governmental regula-



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tion. Mulholland was cautioned not to transmit this information to anyone else.

Dow claims, however, that on four occasions in 1967 it did transmit to the government information concerning health hazards related to the manufacture of Agent Orange and 2,4,5-T.

1. On February 29, 1967 A. P. Beutel, vice president of Dow, wrote a letter to Brigadier General J. A. Hebbeler concerning the government's plan for producing Agent Orange in a government plant. Beutel mentioned "certain health problems" inherent in the manufacturing process.
2. On April 20, 1967 Beutel wrote to H.G. Fredricks, Deputy Director of Procurement and Production, concerning the same subject -- government production of Agent Orange. In the letter, Beutel mentioned a "serious potential health hazard" to workers, and stated that even with detection methods care is necessary in the handling of the product.
3. In August 1967 Beutel and two other Dow representatives told two officials from the office of the Secretary of Defense that caution should be exercised in producing 2,4,5-T.
4. On September 26, 1967 Beutel wrote to Andrew Anderson of Edgewood indicating that Dow would not bid on the government project to

manufacture Agent Orange because of, among other reasons, the chloracne problem.

By 1970 there appears to have been widespread concern in various parts of the government concerning the hazards of the defoliation program. In March 1970, Dow briefed representatives of the military on the presence of dioxin as an impurity in TCP and 2,4,5-T.

In June 1970, after temporary suspension of Agent Orange use, Dow wrote to Secretary of Defense Melvin Laird recommending "strongly" that the government set appropriate specifications and controls to ensure that no 2,4,5-T be used if it contained more than 1 ppm dioxin. Dow specifically urged that standard for any 2,4,5-T used as a component of Agent Orange if it was to be used as a defoliant in Vietnam.

On a motion for summary judgment, the moving party must show that "no genuine issue as to any material fact" exists. Fed. R. Civ. P. 56(c); see, e.g., Landmark Land Co. v. Sprague, 701 F.2d 1065 (2d Cir. 1983). Here, several questions of fact preclude summary judgment in favor of Dow.

If there is a real difference in the level of knowledge between Dow and the government it focuses upon Dow's discovery in 1964 that dioxin was the chloracnegen

in TCP, its development of a test to determine dioxin levels, and its development of techniques (partially through purchase from C.H. Boehringer Sohn Company) to reduce dioxin levels during the manufacturing process. One question of fact is whether this knowledge, if disclosed to the government, might have made a difference in the government's decisionmaking process.

Related questions of fact are the actual dioxin levels in Dow's product and the actual hazards involved in the use of the products at different levels of dioxin. Much of this may depend upon whether or not Dow's self-imposed maximum contamination of 1 ppm is or was safe, and this, too, presents a question of fact. Arguably, if Dow was selling a clean "safe" product to the government, then it told the government everything it needed to know. Of course, if the product was clean and safe, Dow would win on the causation issue as well, because a clean and safe herbicide, by definition, would not cause the injuries plaintiffs claim to have suffered from Agent Orange.

T. H. Agriculture & Nutrition Co.

T.H. supplied the government with Agent Orange pursuant to contracts dated June 28, 1967, March 1, 1968, and May 20, 1968. As with Dow, the government established the specifications for the delivered product, and T.H.

performed to those specifications. T.H. had manufactured 2,4,5-T for commercial sale as a herbicide prior to 1967. It did not make TCP but rather purchased it from other chemical companies.

According to its brief, T.H.'s first knowledge of any problems associated with 2,4,5-T occurred in 1964. In December of that year, Dr. David Groth of the Public Health Service wrote to T.H. requesting samples of 2,4,5-T. The letter stated that 2,4,5-T was associated with chloracne and that it was suspected that dioxin was the culprit. Groth stated that he was attempting to develop a method to isolate the contaminant.

In December 1964, Lindley S. DeAtley, a Vice President of Research and Development for T.H., wrote to Dr. R. C. Dosser, Laboratory Director at Dow, telling him of Groth's letter. Dosser replied in a telephone call that there might be some methods of production which led to a toxic compound. By January 1965, DeAtley had concluded that T.H. should conduct some tests of its own. At this time T.H. was not yet a government supplier of Agent Orange.

On February 19, 1965, DeAtley and D. W. Fuhlhage, T.H.'s Supervisor for Process Development, visited Dow's Midland plant. The minutes of the meeting indicate that DeAtley and Fuhlhage learned that cases of chloracne had

recently been more severe, and that Dow had its workers changing clothing and showering at mid-shift.

T.H. admits that it had cases of chloracne among its workers, but claims that it did not know the cause until December 1964 at the earliest. T.H.'s argument is that by June 1967 when it first became a government contractor, the government certainly knew as much as it did. In June 1967, when T.H. negotiated its first contract, it did tell the government that there was a chloracne problem in the manufacturing process and that this was factored into the price.

As in the case of Dow, questions of fact remain with respect to T.H.'s assertion of the government contract defense. The level of dioxin in T.H.'s Agent Orange is not clear. According to plaintiffs, T.H. has not produced its records on dioxin levels, except for the years 1970 and 1971. Samples tested at Gulfport, Mississippi, indicate a level that went as high as 4.1 ppm. This raises a question of fact as to the potential for harm of T.H.'s product.

Plaintiffs emphasize the fact that T.H. knew that gas chromatography could determine dioxin level, but never told the military about it even after it began to supply Agent Orange to the government. Nor did it tell the government that its chloracne manufacturing problem

was probably caused by dioxin, or that the contaminant very likely carried over into the delivered Agent Orange. Whether this information might have made a difference in the government's decisionmaking process is an issue of fact.

Uniroyal, Inc.

Uniroyal sold Agent Orange to the government pursuant to three contracts between October 6, 1966 and March 1, 1968. Uniroyal's delivered product, like that of the other moving defendants, complied with specifications established by the government. It appears to be undisputed that the product sold was not manufactured by Uniroyal, but rather, was supplied to Uniroyal by a Canadian subsidiary, now named Uniroyal, Ltd. (Ltd.). Uniroyal denies having had any knowledge of the toxicity of 2,4,5-T or that there were any health hazards connected with Agent Orange. Uniroyal has not presented evidence of the actual level of dioxin contamination of its product.

The only evidence of Uniroyal's knowledge of chloracne problems is found in a memo from Ltd. to Uniroyal dated June 11, 1962, which states that five employees at the Clover Bar plant in Canada had symptoms of chloracne. A reply affidavit of Arthur Gorman, technical liaison to the Ltd. plant at the time, states that the Clover Bar

facility did not produce either TCP or 2,4,5-T in 1962. The inference is that this memo has nothing to do with this case.

There are at least two issues of fact with respect to Uniroyal which preclude summary judgment in its favor. The first concerns the memo of T. H. Evans of Ltd. dated August 10, 1965. This memo was found in the files of Walter Harris of Uniroyal who stated that he did not receive it until 1968. Evans stated in his affidavit that he did not send it to Uniroyal, and Arthur Gorman of Ltd. stated that copies of the Evans memo were not sent to Uniroyal until 1968. The actual date that Uniroyal received it, however, presents a triable issue of fact.

The memo is important because it contains Evans' description of his visit to Dow's Midland plant in 1965 and the discussions he had with Dow scientists concerning chloracne problems and dioxin. If a jury were to find that Uniroyal received the memo in 1965, then Uniroyal knew much more about the possible hazards of Agent Orange use than it now claims it knew when it entered into its first contract with the government in 1966.

The second issue of fact is whether Uniroyal is chargeable with the knowledge of its subsidiary, Ltd., because of their corporate relationship. While I do not

fault Uniroyal for its irritation at plaintiffs' eleventh hour argument here, I do believe that plaintiffs and Uniroyal's cross-claiming co-defendants should be permitted to introduce evidence, if they can, that the two corporations were really the same entity, assuming without deciding the validity of Uniroyal's argument that there is a presumption of separateness, see Lockett v. Bethlehem Steel Corp., 618 F.2d 1373, 1379 (10th Cir. 1980); Bendix Home Systems, Inc. v. Hurston Enterprises, 566 F.2d 1039, 1042 (5th Cir. 1978); Williams v. McAllister Brothers, Inc., 534 F.2d 19, 22 (2d Cir. 1976). If the parties intend to pursue that line, I expect that they will do so in good faith and not just waste the court's time or attempt to confuse the issues. Counsel are reminded that 28 U.S.C. § 1927 (Supp. V) provides that an attorney "who so multiplies the proceedings in any case unreasonably and vexatiously may be required by the court to satisfy personally the excess costs, expenses, and attorneys' fees reasonably incurred because of such conduct." See Kline v. Wolf, 702 F.2d 400, 405 (2d Cir. 1983).

Riverdale Chemical Company

Riverdale states that it manufactured Agent Orange pursuant to a contract, that the government set the specifi-



cations, that it performed to specifications, and that it knew of no health hazard connected with Agent Orange.

Riverdale's motion for summary judgment is unopposed, except by its co-defendants who argue merely that it is too early to grant summary judgment for Riverdale. However, as Riverdale points out in its reply memorandum, opposition to a summary judgment motion "must set forth specific facts showing that there is a genuine issue for trial." Fed. R. Civ. P. 56(e).

The party opposing summary judgment must offer "some competent evidence that could be presented at trial showing that there is a genuine issue as to a material fact." Wright & Miller, Federal Practice and Procedure: Civil § 2727. No such evidence has been presented, and there are no other circumstances as to why summary judgment cannot be fairly granted now to Riverdale.

Hoffman-Taff (Missouri)

Hoffman-Taff is in the same situation as Riverdale, and for the same reasons is entitled to summary judgment in its favor.

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Thompson Chemical Corporation

Originally, Thompson declined to bid for Agent Orange contracts. Acting under appropriate statutory authority, The Defense Production Act of 1950, Sept. 8, 1950, ch. 932, 64 Stat. 798, amended, June 30, 1966, 80 Stat. 235 (current version at 50 U.S.C. App. §§ 2061 et seq.) however, the government required Thompson to supply Agent Orange pursuant to two contracts dated April 19, 1967 and May 24, 1968. It supplied 333,685 gallons between September 1967 and January 1969. As reflected in test results, the dioxin content of its product ranged from .1 to .3 ppm.

There is no evidence that Thompson knew of any toxicity problems associated with the use of any of its products up to the time that the government required it to produce Agent Orange. The company had no testing facilities on its premises. William T. Thompson, president of the corporation, testified that he had never heard of dioxin until recently.

Soon after it began to manufacture Agent Orange, Thompson experienced an incident that caused a few of its employees to develop what was believed to be chloracne. The principal evidence of Thompson's knowledge of this health hazard is found in two internal memos of Dow Chemical Company dated February 1967. The first states that

M. S. Buckley, now deceased, Technical Director of Thompson, requested information from Dow to assist him in dealing with a "severe chloracne problem" among some of Thompson's employees. The second memo, written by V. K. Rowe, indicates that he did not give Buckley a very detailed description of what caused the problem because, in his words, "it was quickly apparent that Mr. Buckley had little understanding of the toxicological aspects of his problem. Had he asked for methods, etc., I would have agreed to send them to him."

There is no claim that Thompson disclosed this production accident to the government; however, the government already knew of similar and more serious problems that had occurred at Monsanto and Diamond Alkali, and, possibly, the government knew of Dow's 1964 chloracne problem.

At most, this incident establishes Thompson's knowledge of possible health hazards related to the manufacture of Agent Orange, something the government already knew. It establishes no knowledge in Thompson of hazards to users. Plaintiffs would have me infer such knowledge, perhaps even infer that the problem was discussed in the telephone conversation between Buckley and Rowe. The evidence presented, however, does not support the inference but instead invites mere speculation, particularly when

we consider that the deceased Mr. Buckley would be unavailable to testify.

On the other side of the knowledge comparison, it is clear that by 1967, when Thompson first contracted to manufacture Agent Orange, the government had a significant amount of knowledge about dioxin, its contamination of 2,4,5-T, and its association with chloracne and some other health problems. Without question, the government's level of knowledge greatly exceeded that of Thompson in 1967.

Plaintiffs also argue that Thompson had knowledge of and the discretion to use alternative methods of manufacturing Agent Orange. Thompson points out, accurately, that there is no evidence to support that assertion. Even assuming it to be true, however, there is no evidence that Thompson knew of any risk to users that would call for the use of an alternative manufacturing method, and Thompson itself denies knowledge of any such risk. A party opposing summary judgment cannot rely on mere innuendo to defeat the motion. See Vantage Point, Inc. v. Parker Brothers, Inc., 529 F. Supp. 1204, 1213-14 (E.D.N.Y. 1981), aff'd, 697 F.2d 301 (2d Cir. 1982).

Under these circumstances, I conclude that Thompson has established that there is no issue of material fact

remaining for trial on the government contract defense, and that Thompson is therefore entitled to summary judgment.

Hercules, Inc.

Hercules supplied to the government compounds containing 2,4,5-T pursuant to contracts dating from May 8, 1964 through May 20, 1968. There is no evidence in the record that Hercules knew anything concerning chloracne or other health problems related to the production of 2,4,5-T during the 1940s or 1950s. Dr. John P. Frawley, Hercules' general manager of Health, Environment and Safety, who has been with Hercules since 1956, testified at his deposition that he did not learn of Monsanto's 1949 chloracne problems until February 1965. With respect to Diamond Alkali's explosion in 1960, Frawley testified that he knew of the explosion but not of any toxicity associated with it.

Hercules began producing phenoxy herbicides in 1961. On July 3, 1963 Frawley wrote to V. K. Rowe of Dow concerning a request by Dr. John Leary of the United States Department of Agriculture that the chemical companies do some testing of phenoxy herbicides. Plaintiff contends that this letter is evidence of Hercules' knowledge of the problems associated with 2,4,5-T. However, as Frawley points out in his answering affidavit, the few problems

of alleged health hazards mentioned in the letter relate to 2,4-D, not to 2,4,5-T. The only reference to 2,4,5-T concerned a lawsuit in which the plaintiffs were unsuccessful. Further, with the exception of two inconclusive incidents involving two children who ate sprayed fruit and some workers who worked in a sprayed area, plaintiffs present no concrete evidence of Hercules' knowledge of any problems prior to March 1965.

Frawley states that the first knowledge he had of industrial health problems associated with the production of 2,4,5-T occurred in February 1965, when he was told by Dow of its chloracne problem. In March 1965, Frawley attended the Dow meeting, where he received Dow's analyses of Hercules' product. They showed a very low level of dioxin. Later in 1965, Hercules improved its process of production so as to eliminate even the low dioxin level, and Hercules began to test its own product for dioxin contamination.

Dr. Frawley states in his affidavit that to his knowledge Hercules never had a case of chloracne among its workers from 1961 until 1970 when it ceased production. Further, he states that Hercules learned of possible teratogenicity only in 1969 when the government released the Bionetics Report. Plaintiffs have presented no evidence to contradict this.

From January 1966 through May 1970 Hercules' product contained no measurable dioxin except on one test in September 1966 when it measured .1 ppm. The results of U.S.D.A. tests in 1970 also showed no measurable dioxin. Hercules states in its reply brief that the only Hercules 2,4,5-T containing more than a trace amount of dioxin was tested in 1965 and was not sold to the government. Plaintiffs do not seriously contend that Hercules' product was contaminated by any significant amount of dioxin.

The lack of dioxin in Hercules' product leads to the conclusion that no issue of fact exists with respect to the relative knowledge of Hercules and the government. As will be discussed infra, since its product was dioxin-free, Hercules had no knowledge of harm from dioxin contamination caused by its product and thus did not know more than the government about hazards associated with the use of its product. Consequently, its motion for summary judgment is granted.

#### DISCUSSION

As indicated at the outset of this opinion, in pretrial order no. 33, I stated that the government contract defense would entitle a defendant to judgment dismissing all claims if the defendant proved:

1. That the government established the specifications for "Agent Orange";

2. That the "Agent Orange" manufactured by the defendant met the government's 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 "Agent Orange".

534 F. Supp. at 1055. Elaborating on the knowledge element, I stated that a defendant could not avail itself of the defense if it "was aware of hazards that might reasonably have affected the government's decision about the use of 'Agent Orange'", id. at 1057, and failed to disclose them to the government, id. at 1058.

Each defendant has established the first two elements of the defense -- that the government established the specifications for Agent Orange, and that the Agent Orange manufactured by the defendant met those specifications in all material respects. Accordingly, pursuant to Federal Rules of Civil Procedure 56(d), I have determined that there is no substantial controversy with respect to any moving defendant over those two facts, and they are deemed established for purposes of the trial of this action. These are the only two facts I am determining for future purposes. All other discussion of facts and evidence in this decision relates only to these summary judgment motions.



Plaintiffs argue with considerable force that because defendants did not share with the government all their knowledge about Agent Orange, the resulting ignorance on the government's part affected not only what was put into or omitted from the specifications but also the standards applied to determine whether a particular defendant's product conformed to the specifications. I view this more as a means of talking about the central problem of knowledge than as a proper description of the elements of the government contract defense. For purposes of my discussion of that defense and its analysis, the various problems arising out of differing levels of knowledge between the government and the defendants are encompassed in the third element.

With respect to that third element -- whether the government knew as much as or more than the defendant about the hazards to people that accompanied use of Agent Orange -- four of the defendants, Riverdale, Hoffman-Taff, Thompson, and Hercules, have established that there is no triable issue and each of them is entitled to judgment dismissing all complaints and all cross-claims against it on the ground that the government contract defense shields it from liability.

As to all four of these defendants there is no triable issue over knowledge. As to each, on the record

before the court the government clearly knew as much as or more than the defendant about any hazards to people that accompanied use of that defendant's product. Riverdale and Hoffman-Taff both deny any knowledge of hazards, and no other party has controverted their denials. Thompson was essentially an unwilling producer of Agent Orange who knew virtually nothing about its hazards. Clearly, in 1967 when it first began to supply the herbicide, the government's knowledge of the hazards of Agent Orange exceeded that of Thompson. Equally clearly, the government's knowledge at that time was increasing more rapidly than was Thompson's.

Hercules' dismissal rests on the same ground, but follows for different reasons. Unlike Riverdale, Hoffman-Taff and Thompson, Hercules was aware of possible dioxin contamination of 2,4,5-T. But since the Agent Orange produced by Hercules was free of the contamination, there were no dioxin-related hazards accompanying the use of its product about which Hercules could have had knowledge.

Summary judgment is denied with respect to Dow, T.H., and Uniroyal on the ground that on the papers before the court triable issues of fact are presented on the question of relative knowledge. Following our earlier schedule, this would have meant that the trial of the government

contract defense would proceed for these defendants together with Monsanto and Diamond Shamrock on June 27, 1983.

However, for a combination of reasons I have concluded that a separate trial of the open issues on the government contract defense with respect to the remaining defendants is no longer appropriate. A separate trial might prejudice the plaintiffs by over-emphasizing the importance of this narrowly drawn defense as it has evolved in its present context; it might prejudice the defendants by requiring presentation of the defense based on hypothetical questions of causation that ultimately would have to be developed on a full record; and it would prejudice both sides due to the additional time, effort, and expense that would be required.

As this case has developed we all have raised our level of knowledge concerning this somewhat unique litigation. In 1980 when I entered an order anticipating phased trials, the idea of a separate trial of the fact issues raised by the government contract defense seemed appealing. It had the advantages of focusing on what appeared to be a discrete segment of the evidence with a possible early termination of the lawsuit and a saving to all parties of considerable unnecessary expense. The chief disadvantage of the separate trial appeared to be a relatively insignificant one of having to assume hypotheti-

cally certain facts about liability. On balance, the goals of obtaining a just, speedy, and inexpensive determination seemed to be well served by working toward a separate trial of the government contract defense. The premise underlying that conclusion was that the elements of the defense would be uniquely suited to consideration and adjudication separately and apart from the issues of liability, causation, and damages. In addition, it seemed to me at the time that as a practical matter discovery on those discrete issues would be rather narrow compared to the discovery that some of the other fact issues presented by this action might require.

What has actually happened, however, is that, as we all have learned more about the development and use of Agent Orange in Vietnam, the issues in the action have become clearer. Plaintiffs undoubtedly will strongly emphasize a negligent failure to warn as a basis for liability. But when the "knowledge" factor of the government contract defense is placed alongside a liability theory of a negligent failure to warn, the issues, unfortunately, no longer remain discrete or separate. On the contrary, they tend to merge to such an extent that the legal test for liability under a failure-to-warn negligence theory would fully encompass all the knowledge issues of the government contract defense except for the final test of whether the knowledge "would

have" as opposed to "might have" affected the military's handling of Agent Orange purchases and use.

Separate application of the government contract defense has been possible as to the four defendants in whose favor I will be granting summary judgment. As to the remaining defendants, however, the central point of the dispute seems to have shifted. Whether or not the presence of a dioxin contaminant in Agent Orange gives rise to liability is complicated by a variety of circumstances, including the relative ignorance of virtually everyone about dioxin when our involvement in Vietnam commenced, the increasing level of everyone's knowledge about dioxin at varying rates until Agent Orange was no longer used in Vietnam, the changing level of technology which enabled the scientist to detect and measure smaller and smaller concentrations of dioxin over the relevant time period, and the dynamic, constantly changing attitudes of the military and political authorities about the use in Vietnam of herbicides.

The problem is illuminated by comparing the situation of Hercules with that of Dow. Hercules attended the 1965 meeting called by Dow to consider the problem of dioxin contamination in 2,4,5-T. Beginning in January 1966 the 2,4,5-T produced by Hercules was, with one exception, free of any detectable dioxin. This meant that if dioxin was

present, it was there in concentrations of less than one tenth of one part per million. In one month out of the ensuing 39 months of production, Hercules' 2,4,5-T did show dioxin contamination, but at the minimum measurable level: .1 ppm. That one month when a trace was found becomes de minimis both as to the quantity affected and the degree of contamination when compared with the dioxin contained in the other companies' products. Since Hercules had no knowledge of its product creating hazards to people, its knowledge could not have exceeded that of the government, and Hercules has established the third element of the government contract defense, thereby entitling it to summary judgment in its favor.

Dow took an approach to its production that differed from that of Hercules. Instead of producing a dioxin-free product, it adopted a self-imposed contamination standard of 1 ppm for its 2,4,5-T. At the March 1965 meeting, Dow urged the others in attendance to adopt that single standard and to use it as the industry standard for 2,4,5-T. From the evidence in the present record it appears that Dow believed that standard to be within a reasonable margin of safety so that hazards to people would be eliminated.

The test results in the record show that neither Diamond Shamrock nor Monsanto followed Dow's recommendation.

Dow itself lived up to its self-imposed standard, however, with the result that the Agent Orange it produced contained .5 ppm. It may eventually appear that the 1 ppm standard was safe. If so, then Dow could succeed in its government contract defense, just as Hercules has now done, by showing the safety of its product. In that event it could also succeed against any liability claim based on an allegedly defective product. The fact remains, however, that we do not know whether Dow's self-imposed 1 ppm standard was a safe level for dioxin contamination of the 2,4,5-T. Indeed, we do not know whether contamination even at the level of 140 ppm, the highest level for any product at any time reported in the papers now before the court, would produce Agent Orange that was hazardous to people. Thus, Dow's adoption of the 1 ppm standard raises an issue of fact that precludes summary judgment.

It may also eventually appear that if Dow had revealed its concerns about dioxin to the government in 1965 the military would have adopted the Dow 1 ppm standard regardless of what our present knowledge tells us about the safety of that standard. In that event, Dow would succeed against a claim of negligent failure to warn, but not necessarily on its government contract defense because the defense would fail merely if the information "might have affected" the military's decisionmaking. Rather,

Dow would succeed on the causation issue, because its failure to disclose its concerns about dioxin would not have affected the military's judgment in using the product.

If we were to proceed at this time with a separate trial of the government contract defense as to those defendants who remain in the case, we would on that trial have to determine whether dioxin contamination of Agent Orange was harmful, and if so, in what concentration did it become harmful, and, if the defendant's product was unsafe and if the defendant had told the military in 1965 of Dow's fears about the effect of dioxin contamination, whether the military might have stopped using Agent Orange, or changed its specifications to provide a maximum level of contamination, or changed its method of using Agent Orange in the field, or imposed safety precautions in connection with its use in the field.

A trial to answer these questions would necessarily involve most of the evidence needed for trial of the issues relating to liability and general causation. Under these circumstances I conclude that justice would be served by combining what remains of the government contract defense issues with a trial on liability and general causation which will be scheduled after completion of the remaining discovery necessary for those issues.



### Case Management

I will continue the action under the supervision of the special master, Sol Schreiber, who has thus far provided extraordinary, dedicated and effective assistance in bringing the case this far. His authority will continue as before, 94 F.R.D. at 174-76, with the objective being a trial at the earliest reasonable date covering the issues of liability, general causation, and the government contract defense. I will request the special master to recommend an appropriate timetable for the remaining discovery, any further motions, preparation of a pretrial order, and trial. I will also request from him as quickly as possible a formal recommendation with respect to the nature and form of class certification. And, despite the determined resistance to class certification by some of the dismissed defendants, I will nevertheless in the interest of justice defer entry of summary judgment on the present motions until after the class has been certified.

### Confidentiality of Motion Papers

I will also ask the special master to reconsider with counsel whether the need for secrecy remains, or whether some of the restrictions on public disclosure of the affidavits, documents, and depositions cannot be lifted. From what I see on television and read in the newspapers, it

appears that some counsel and some parties in this case do not take seriously either their ethical obligations or the orders of this court with respect to non-disclosure of information. I also understand that due to careless designations on the filing of some papers, some information which was intended to be under seal ended up in the hands of a newspaper reporter. Other documents as to which there have been no slip-ups in filing or designation for sealing, have also been quoted directly in newspaper articles, thereby confirming my own view in the circumstances of this case of the futility of attempting to keep information confidential.

Although keeping discovery materials subject to the protective order previously entered in this case, pretrial order no. 43, 96 F.R.D. 582 (E.D.N.Y. 1983), has already served several worthwhile purposes, I am not certain that those purposes are furthered by continuing the sealing with respect to the motion papers on these summary judgment motions. I request the special master to review the matter again with counsel and make an appropriate recommendation to me.

CONCLUSION

In summary, the motions of defendants Hercules, Thompson, Riverdale, and Hoffman-Taff for summary judgment on the ground of the government contract defense are granted, and all claims and cross-claims against those defendants based on their having supplied Agent Orange to the government pursuant to contract are dismissed. The motions of Dow, T.H., and Uniroyal are denied due to the existence of genuine issues of material fact precluding summary judgment. The trial of the government contract defense with respect to the five remaining defendants, Dow, T.H., Monsanto, Diamond Shamrock, and Uniroyal, will be combined with the trial on liability and general causation.

SO ORDERED.

Dated: Uniondale, New York  
May 20, 1983.

  
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GEORGE C. PRATT  
U. S. CIRCUIT JUDGE\*

\* Of the U. S. Court of Appeals, Second Circuit, sitting by designation.

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

In Re

MDL No. 381  
(All Cases)

"AGENT ORANGE"

Product Liability Litigation

PLAINTIFFS' SECOND SUPPLEMENTAL  
MEMORANDUM ON CLASS DEFINITION  
AND SUPPLEMENTAL MEMORANDUM  
ON GENERIC CAUSATION

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

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*Irving Like*  
Irving Like,  
Chairman, Law Committee

*Thomas W. Henderson*  
Thomas W. Henderson,  
Chairman, Generic Causation Committee

*Albert J. Fiorella*  
Albert J. Fiorella,  
Chairman, Management Committee

Dated: September 12, 1983

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(1513)

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

In Re

MDL No. 381  
(All Cases)

"AGENT ORANGE"

Product Liability Litigation

PLAINTIFFS' SECOND SUPPLEMENTAL  
MEMORANDUM ON CLASS DEFINITION  
AND SUPPLEMENTAL MEMORANDUM  
ON GENERIC CAUSATION

Introduction

At the prehearing conference of September 1, 1983, Special Master Schreiber directed plaintiffs' counsel to define the members of plaintiffs' class for purposes of class notice, having earlier requested a further elucidation of Generic Causation following the submission of Plaintiffs' Memorandum dated June 6, 1983. Plaintiffs have addressed the question of class definition in their prior submissions, e.g. "Plaintiffs' Memorandum Setting Forth Class of Identification of Agent Orange Victim Class Members" dated August 31, 1983; "Plaintiffs' Supplemental Memorandum Supporting Class Certification" dated December 30, 1982; "Plaintiffs' Supplemental Memorandum on Class Definition and Deferred Class Notice" dated March 14, 1983; Plaintiffs' Memorandum on the Relation of Class Certification to Liability and Damages Issues" dated June 15, 1983, and "Plaintiffs' Supplemental Memorandum Concerning Class Action Status."

### Definition of Plaintiffs' Class

This part of the Memorandum is intended to define the plaintiffs' class in a very broad manner so that the outcome of this litigation will be dispositive as to all present and potential claimants. At this time, plaintiffs submit that the class include those whose injuries fall within particular Agent Orange profiles, which are believed to be associated with their exposure to dioxin contaminated phenoxy herbicides (including Agent Orange), supplied by the defendants to the military while serving in South East Asia during the Vietnam War. (As to the word "associated", please see Generic Causation portion of this Memorandum.) Those profiles will include the entire spectrum of adverse health effects, a partial list of which is set forth in the Interrogatories propounded to defendants on September 9, 1983, specifically #48, and is attached hereto as Exhibit "A".

In defining the class broadly, flexibility is retained by the Court to redefine the class, based at least in part on those adverse health effects that may be established in the generic causation trial, that is, those associated with exposure to dioxin contaminated phenoxy herbicides.

In its Pretrial Order No. 26 dated December 29, 1980, the Court broadly defined the members of the class:

"Here, the plaintiff class can be readily identified; they are persons who claim injury from exposure to Agent Orange and their spouses, children and parents who claim direct or derivative injury therefrom. The Court has intentionally defined the class in broad terms consistent with the demands of this litigation. If we begin with the broadest possible class, the issues common to all members of that class can be resolved. It may later prove advantageous to create subclasses for various purposes, e.g., for resolving statute of limitations claims,

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for determining liability in 'negligence' as opposed to 'product liability' states, and finally, perhaps, for preserving the class action format prior to remand to the transferor judges so as to provide them with the greatest possible flexibility in ultimately determining the issues remaining after multi-district treatment has ended."  
(P. 5)

Plaintiffs propose that this definition should be expanded to also include Australian and New Zealander servicemen and civilians such as employees of government contractor and non-military relief organizations such as the American Red Cross, who were also injured as the result of exposure to defendants' contaminated herbicides in South East Asia.

In the language just quoted, the Court has listed several obvious benefits deriving from the flexibility of a broad class definition. For at least three reasons, plaintiffs agree that flexibility is a proper goal and believe that, with the definition now submitted, such flexibility is retained.

Other advantages are present. For example, the obvious one is that a broad definition avoids under-inclusion of injured claimants. Specifically, such definition permits the proper inclusion in the class of those whose injuries and diseases, i.e. adverse effects, are found to be associated with dioxin exposure in the trial on generic causation. In a pragmatic sense, it will be infinitely easier to redefine the class from the broad to the narrow, rather than the converse. Finally, notice to a broadly defined class is preferable if the Court should later determine that (b)(1)(B) treatment is appropriate based upon whether the defendants' "limited asset fund" can be established.

In rejecting 23(b)(1)(B) class treatment as premature in its Order of December 29, 1980, the Court stated:

"However large the potential damages may appear here, plaintiffs offer no evidence of the likely insolvency of defendants and apparently do not, in defendant Dow's words, 'have the temerity to argue that the aggregate claims of the purported class exceed the total assets of the five named defendants.'"

When the broad definition of the class was established by the Court in its Pretrial Order No. 26 dated December 29, 1980, this litigation was in its infancy. The case, with all its attendant publicity, has now resulted in more than 15,000 claims filed or transferred to this Court which include American, Australian and New Zealander servicemen and civilians who served or were otherwise present and were exposed to dioxin contaminated phenoxy herbicides in South East Asia during the Vietnam War. These claimants comprise a partial, although not insignificant portion of the class. Indeed, a common pattern of injuries and diseases, i.e., the so-called "Agent Orange profiles" has emerged from the more than 15,000 claims.

In this context, notice to a broadly defined class is essential in determining the maximum aggregate financial exposure of the defendants because such notice will enable the Court to determine the maximum number and distribution of any injury and disease claims.

The Agent Orange injury and disease profiles will aid materially in this regard as well. The number and distribution of such claims when determined and multiplied by their probable verdict or settlement values will yield the aggregate financial exposures of defendants. Assuming liability is established, the Court can determine if plaintiffs qualify for such a "limited asset fund" (b)(1)(B) class.



Therefore, such a broadly defined class is preferable not only within the context of (b)(3) class treatment, but to facilitate the use of a (b)(1) class in combination with or as an alternative to a (b)(3) class.

Plaintiffs therefore believe that the Court's definition of the class as set forth in its Pretrial Order of December 29, 1980 is proper and urge that the plan of class identification and notice combining direct Eisen type notice and constructive notice utilizing the media offers the most reasonable and practical means of implementing class notification.

#### Generic Causation

The issue of generic causation in the form of dioxin-associated injury and disease and how it is to be handled in the context of the trial is obviously a crucial one. In this light, the following is submitted.

As noted in Plaintiffs' Memorandum dated June 6, 1983, in order to preserve and foster further the aspect of commonality, generic causation perforce must be defined broadly. The question which should be presented to the jury is simply:

Could dioxin have caused the plaintiffs' injuries?

or

Is dioxin capable of causing plaintiffs' injuries?

The question, in either form however, has two components.

The first such component is exposure of the veterans to dioxin - whether by inhalation, ingestion, or external absorption. It is essential to note at this point that any level of dioxin contamination of any phenoxy herbicide manufactured and sold by any defendants can cause one or more of the injuries or diseases from which the veterans suffer. Contrary to any

assertion which has been made or might be made by any defendant in this regard, the basic scientific fact is there is no safe level of dioxin. Indeed, no safe level has or can be established at this time for any substance which can cause carcinogenic and/or genetic effects and/or other chronic manifestations. The scientific evidence in respect of all this to be presented on behalf of the plaintiffs will be quite clear.

The second such component is the effect of the provable exposure to dioxin by the veterans. More precisely, the entire spectrum of harmful effects (Exhibit "A") will require substantial medical evidence.

The evidence establishing exposure and adverse effects, coupled with such positive associations resulting from toxicological and/or epidemiological studies, demonstrates therefore the quintessential character of "Generic Causation" association in the specific area of dioxin-related injury.

After much study of dioxin and its multitude of adverse health effects, it has been clearly established that dioxin-related injury is a cumulative process, i.e. the higher the level and/or the longer a veteran was exposed, the earlier and/or greater the chances of the manifestation of adverse health effects. However, as noted above, any level of dioxin is potentially harmful; higher levels result in a higher probability of harm. That is to say, since dioxin contamination to which a veteran was exposed may be harmful to human health, all of the phenoxy herbicides manufactured and sold by any of the defendants are responsible in some undefined part. This, therefore, triggers the concept of joint and several liability of all of the defendants who manufactured and sold phenoxy herbicides, including Agent Orange, to the United States for use in Vietnam during the period 1962-1971.

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48. State whether you knew health hazards, physical disorders, injuries, irritations or diseases were associated with exposure to, or use of, phenoxy herbicides, including but limited to the industrial synthesis (during and after) of 2, 4, 5-T. If your answer is affirmative, state or identify:

- (a) the date you acquired such knowledge;
- (b) the manner in which you gained such knowledge;
- (c) the type of health hazards, physical disorders,

injuries, irritations or diseases, including but not limited to:

chloracne; porphyria cutanea tarda; hyperpigmentation; hyperkeratosis; hirsutism; asthenia; weakness in lower 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; neurasthenia; 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; fibrosarcomatous 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; and

(d) all documents and communications which refer, reflect, relate to, or embody the information sought by this interrogatory.

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

-----x

In re  
AGENT ORANGE  
Product Liability Litigation

M.D.L. 381  
(All Cases)

-----x

PLAINTIFFS SUPPLEMENTAL MEMORANDUM  
CONCERNING CLASS ACTION STATUS

Edward F. Hayes III

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Huntington, New York

Irving Sike

Irving Sike  
Chairman, Law Committee  
Babylon, New York

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Albert J. Fiorella  
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Mineola, New York

On the Brief:

Aaron Twerski

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

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In re

AGENT ORANGE

Product Liability Litigation

MDL 381

(GCP)

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PLAINTIFFS SUPPLEMENTAL  
MEMORANDUM CONCERNING  
CLASS ACTION STATUS

Plaintiff veterans and their families respectfully submit this Memorandum in further amplification of their Memorandum of June 15, 1983 concerning the class action status of this litigation.

I. The Present Status

By its pretrial Order dated December 29, 1980 (In re Agent Orange Product Liability Litigation, 506 F. Supp. 762 (E.D.N.Y. 1980)), the Court found that the present was a proper case for class action treatment under F.R.C.P. Rule 23(b)(3). At the same time it stated that consideration under 23(b)(1)(A), 23(b)(1)(B) and 23(b)(2) was not warranted. Plaintiffs have previously urged the propriety of 23(b)(3) certification, and continue to do so here. However, since the December, 1980, decision there have been developments which suggest a reconsideration of

the Court's determination on 23(b)(1) certification as a further option.

#### RULE 23(b)(1) in Tort Litigation, Generally

Although Rule 23(b)(1) certification has been allowed in some large tort cases (Coburn v. 4-R Corp., 77 F.R.D. 43 (E.D. Ky. 1977) (night club fire); Hernandez v. Motor Vessel Skyward, 61 F.R.D. 558 (S.D. Fla. 1973) (cruise ship food poisoning); and In re Gabel, 350 F. Supp. 624 (C.D. Cal. 1972 (air crash), the more traditional thinking is that such certification is not available in such cases (McDonnell Douglas Corp. v. United States Dist. Court, 523 F.2d 1083 (9th Cir. 1975), cert. denied, 425 U.S. 911 (1976); Payton v. Abbott Labs., 83 F.R.D. 382 (D. Mass. 1979); Abed v. A.H. Robins Co., 693 F.2d 847 (9th Cir. 1982), cert. denied, 103 S. Ct. 817 (1983). Indeed, in Payton the Court flatly opined that 23(b)(1) "...is not meant to apply to personal injury suits for damages." 83 F.R.D. at 389.

In large part, the rationale for denying 23(b)(1) status of some variety appears to have more to do with the individual predilections of the court than with either the wording of the Rule or its history. The citation to the Advisory Committee Notes at 39 F.R.D. 69, 100 (1966) by the Payton court in support of the above statement is little short of mysterious. In the meantime, a valuable tool in the management of massive tort litigation lies essentially unused. This has caused no small amount of criticism from the learned journals. See Comment, Mass Acci-

dent Class Actions, 60 Calif. L. Rev. 1615 (1972); Comment, The Use of Class Actions for Mass Accident Litigation, 23 Lyola L. Rev. 383 (1977); Comment, Class Certification in Mass Accident Cases Under Rule 23(b)(1), 96 Harv. L. Rev. 1121 (1983); Williams, Mass Tort Actions: Going, Gone, Gone?, 22 Judges Journal, 102, P.8 (Spring 1983). This criticism generally makes the following points:

- (1) Joint litigation of mass tort claims is desirable because it enables all parties to afford better counsel, better experts, and more effective discovery.
- (2) Joint litigation makes the adjudication of some small but real claims possible at all.
- (3) Joint litigation prevents harassment of independent witnesses.
- (4) Joint litigation tends to rationalize legal fees and avoid "windfall" contingent fees.
- (5) Joint litigation tends to equalize power at the bargaining table.
- (6) Joint litigation minimizes the possibility of inconsistent and inequitable results.
- (7) Joint litigation minimizes inequities and similar problems in punitive damage claims.
- (8) Joint litigation, of course, husbands judicial resources.
- (9) Collateral estoppel is an unsatisfactory means of effecting joint litigation because its benefits may not reach the small claimant (large cases settle first), it may take repetitive litigation to achieve, and, by the time it becomes effective, resources will have been expended on pretrial discovery anyway.
- (10) Voluntary cooperation for joint litigation is rare.

(11) Multidistrict pretrial discovery does not (involuntarily) govern state litigations, does not consolidate for trial purposes, leaves the stronger cases free to settle independently at the expense of the weak, and leaves legal fees a matter of private contract between individual litigants and their counsel to the detriment of the litigants.

(12) Rule 23(b)(3) consolidation is less than completely satisfactory because cases may "opt out", and because there is an emphasis on the individual origins of the separate case in its administration. Also, its notice requirements are onerous.

By reason of the foregoing:

"The best existing procedural device to further the various interests discussed in part I is the rule 23(b)(1) class action. Rule 23(b)(1) is designed specifically to avoid inconsistent adjudications and the impairment of class members' interests by separate actions. Moreover, unlike rule 23(b)(3), rule 23(b)(1) includes no provision for plaintiffs to opt out of the class. As a result, the court is able -- and required -- to ensure that class members are adequately represented and that all plaintiffs are treated fairly in settlement negotiations."

Rule 23(b)(1), 96 Harv. L. Rev. at 1152.

The conclusion of the law review writers and of the plaintiffs before this Court is that the decisions against (23)(b)(1) certification in tort cases are not well-founded and that in retaining a highly restrictive view of the applicability of Rule 23(b)(1), the federal courts have imposed an unconscionable burden on themselves and on the litigants before them in the handling of mass tort litigations.

## II. Management Factors in this Case

These cases appear before this Court largely due to a



transfer to this forum pursuant to 28 U.S.C. § 1407. While there has been some prosecution of individual claims in the state courts, neither plaintiffs nor defendants in those proceedings have been heard to claim harassment. Because of its Multidistrict powers, this Court has been able to control all of the federal actions concerning Agent Orange, which constitute the vast bulk of the Agent Orange litigation.

That control is about to end.

At the time it originally considered plaintiffs' Rule 23(b)(1) applications, this Court had already determined, not unreasonably, that all of the potential plaintiffs in this litigation could have access to the federal courts under so-called "federal question" jurisdiction. 28 U.S.C. 1331. In re Agent Orange Product Liability Litigation, 506 F. Supp. 737 (E.D.N.Y. 1979). In fact, most of them were already in the federal court. While they have been here, significant discovery has taken place and significant rulings concerning the legal parameters of the litigation have been made. The Court of Appeals, however, later reversed this Court on the jurisdictional issue and the Supreme Court declined to intervene. In re Agent Orange Product Liability Litigation, 635 F.2d 987 (2d Cir. 1980), cert. denied sub nom., Chapman v. Dow, 454 U.S. 1128 (1981). That means that, absent some intervening actions, the centralized control that this court has heretofore been able to exercise in bringing this case to a prompt and just conclusion will be lost. A large number of cases will be relegated to state jurisdictions.

That result, if and when it occurs, will be little short of an ethical and moral disaster. At best it will see valid claims dismissed while others proceed because of limitations variances; it will see these defendants responding to a cacaphony of legal propositions - some of them conceivably conflicting - to fit the doctrines of the locality where the suit is proceeding, but all concerning the same course of conduct. In the end, there is no guarantee that the race won't belong to the quick, with the vast number of claimants holding worthless claims. See, In re Johns-Manville Corp., 82 B. 11,656, to 82 B. 11,676 (Bankr. S.D.N.Y. 8/26/82).

From a management point of view, the redissemination of these cases to local jurisdictions, even where dismissal does not automatically follow, will place the defendants in position to bury individual plaintiffs with their vast litigation resources. That strategy has not gone unnoticed, even in the consolidated proceeding; it will be many times more effective against the individual plaintiff on his own. No wonder, then, that the defendants have so diligently urged the early consummation of this act.

The Rule 23(b)(3) certification allowed by this Court, for all of the virtues that have led plaintiffs to continue to urge its applicability to this lawsuit, does not completely rectify the problem. Such certification will permit plaintiffs to enjoy the benefits of federal jurisdiction derived from their representatives, notwithstanding that diversity jurisdiction may

be lacking in their particular case (Fitzgerald v. Dillon, 92 F. Supp. 681 (E.D.N.Y. 1950)) and such certification will permit individual members to enjoy the date of first filing in the class suit for limitations purposes (American Pipe & Const. Co. v. Utah, 414 U.S. 538 (1974)), but there is at least some danger that some plaintiffs may still be barred because, even with the early filing date, their claims would have been barred under local law. Cf. Garrett v. City of Hamtramck, 503 F.2d 1236 (6th Cir. 1974). In other words, designation of the class might not eliminate completely the inequities sought to be controlled.

At the same time, the 23(b)(3) class certification requires formal 23(c)(2) notification of class members. While the form of notice to be employed in this case has yet to be worked out within the parameters of Eisen IV (Eisen v. Carlisle & Jacquelin, 417 U.S. 156 (1974)), it cannot be gainsaid that unless there is some redefinition of the class the cost of such notice could conceivably be in the six-figure range. It betrays little to disclose that such a requirement could well approach or exceed the entire rest of the cost of the prosecution of this lawsuit. If defendants wished to bury plaintiffs with litigation costs, they could devise nothing better than their interpretation of this Rule.

It is not unlikely that some plaintiffs may ultimately elect to opt out of the class action. Individual plaintiff's counsel have appeared at various hearings in this matter to express separate views. Their election is of no moment to those

plaintiffs who would go forward with the class, and is probably a matter of glee to the divide-and-conquer-minded defendants. But it must be wondered how this case could be informally resolved if there is the possibility of further opt-outs. Additionally, the possibility of opt-outs would be a matter of concern to court administrators called upon to provide support for additional independent litigation.

Rule 23(b)(3) certification, then, is a step in the right direction, but it has its shortcomings. Those shortcomings could be rectified by certification under 23(b)(1) and, it is respectfully submitted, such certification is now available.

### III. Rule 23(b)(1)(B)

Plaintiffs' June 15, 1983 Memorandum recognized the likelihood of a 23(b)(1)(B) "limited fund" class, but did not urge an immediate consideration of that point. A number of developments have occurred, however, and are likely to occur in the near future which have caused plaintiffs to modify their position:

First, serious injury claims have been and continue to be intervened or recorded in the government's Agent Orange Registry in numbers whose aggregate verdict or settlement value promises to exceed the assets of the defendants, individually, if not collectively.

Second, evidence continues to accumulate, as more internal documents of defendants are released, that conduct jus-

tifying punitive damage awards against certain defendants may well be proven.

Third, some of defendants' assets will be further drained by the increasing number of claims of employees exposed to dioxin in the work place, and the claims of local residents arising out of dioxin-contaminated dump sites. The increasing evidence that dioxin is toxic to health at levels as low as one part per billion makes it reasonably likely that the plaintiffs and many other non-veterans will prove causation and establish their right to damages against defendants.

Fourth, class notification is shortly to occur for the 23(b)(3) class, as modified. This seems, therefore, a particularly opportune moment to consider what alternative certifications and notices are available.

Fifth, these developments suggest that it would be prudent for plaintiffs and the Court to accelerate consideration of the 23(b)(1) class, as a second option. In doing so plaintiffs do not abandon their view that the 23(b)(3) class is valuable and viable.

Simply put, the reality of what is rapidly taking place in and outside of this Court makes it necessary to place before the Court, now rather than later, the 23(b)(1) option.

Rule 23(b)(1)(B) authorizes a class action when separate actions would create a risk of "adjudications with respect to individual members of the class which would as a practical matter be dispositive of the interest of the other members not

parties to the adjudications or substantially impair or impede their ability to protect their interest."

The Advisory Committee to the 1966 amendments particularly considered in conjunction with this subsection a case where there were reasonably more claims than the defendant could respond to:

"In various situations an adjudication as to one or more members of the class will necessarily or probably have an adverse practical effect on the interest of other members who should therefore be represented in the lawsuit. This is plainly the case when claims are made by numerous persons against a fund insufficient to satisfy all claims. A class action by or against representative members to settle the validity of separate proof of the amount of each valid claim and proportionate distribution of the fund, meets the problem." 39 F.R.D. 69, 101 (1966)

Perhaps significantly, the Advisory Committee cited as an example of this approach the Second Circuit case of Dickinson v. Burnham, 197 F.2d 973 (2d Cir. 1952), cert. denied, 344 U.S. 875 (1952).

The "limited fund" approach was employed in the nightclub fire case of Coburn v. 4-R Corp., 77 F.R.D. 43 (E.D. Ky. 1977), where 164 actions for wrongful death were asserted against assets of approximately \$3,000,000. The court opined that verdicts in excess of \$100,000 for wrongful death were "not unusual" and that verdicts in excess of \$500,000 were "not unknown." The court did not even attempt to evaluate injury claims short of wrongful death.

Considering all of the facts of the case, the court stated:

"There is good reason to believe from the foregoing that total judgments might substantially exceed the ability of defendants to respond. The Court makes no determination of liability of any or all defendants. It cannot be stated with assurance that judgments, if obtained, would be unpaid. But, it likewise cannot be said with assurance that judgments for wrongful death and injuries reasonably foreseeable could be satisfied in toto. In no event, however, should this litigation become an unseemly race to the courtroom door with monetary prizes for a few winners and worthless judgments for the rest."

Continuing with its analysis, the court cited dictum from the ninth circuit decision of Green v. Occidental Petroleum Co., 541 F.2d 1335 (9th Cir. 1976):

"It is conceivable, of course, that the claims of named plaintiffs would be so large that if the action were to proceed as an individual action, the decision would as a practical matter be dispositive of the interests of the other members not parties to the adjudication, or substantially impair or impede their ability to protect their interests. Federal Rules of Civil Procedure 23(b)(1)(B). This would be the case where the claims of all plaintiffs exceeded the assets of the defendant and hence to allow any group of individuals to be fully compensated would impair the rights of those not in court."

Therefore, the Coburn court concluded "there is a risk of adjudication awarding damages to individual members of the class that might impose inconsistent standards of conduct upon defendants or might so reduce the fund of money available as to

substantially impair or impede the ability of other members of the class to protect their interests. This litigation may therefore, proceed as a class action."

In In re Northern District of California "Dalkon Shield" IUD Products Liability Litigation, 521 F. Supp. 1188 (N.D. Cal. 1981), modif., 526 F. Supp. 887, rev'd, 693 F.2d 847 (9th Cir. 1982), cert. denied, 103 S. Ct. 817 (1983), the District Court certified a national class against the manufacturer of a defective interuterine device with respect to punitive damages issues under 23(b)(1)(B). The trial court viewed the facts as follows:

"This court specifically finds that separate actions inescapably will alter the substance of the rights of others having similar claims. In the Dalkon Shield actions presently on file against A.H. Robins, the punitive damages specifically claimed total some \$2,350,597,000.00. Moreover, to date, jury verdicts for punitive damages against the defendant company have been entered for \$75,000.00 and \$6,200,000.00 respectively. It goes without saying that a figure representing some element of punitive damages has entered into the numerous actions that have been settled.

"It is clear that the amount of punitive damages sought far exceeds the available net worth of the company. This fact poses two very real threats if actions on this issue continue on an individual basis: 1) The company will be unable to respond to claims for punitive damages due to actual or constructive bankruptcy; or 2) At some point in the future, courts could rule that the aggregate sum already assessed against the defendant company in punitive damages was such that as a matter of law the company had been sufficiently



punished and therefore punitive damage claims would be dismissed as a matter of law.

"In either event, the limited fund available to satisfy all claims for punitive damages merits certification of a nationwide class under Rule 23(b)(1)(B) in order to equitably distribute any such recovery from a general fund recoverable by any claimant who successfully pursues her claim on an appropriate theory before a jury or in settlement."

In a related portion of the decision, the court also found a 23(b)(3) class with respect to claims by California residents only for personal injury damages.

The Ninth Circuit reversed this holding, not because the District Court was incorrect in its analysis of Rule 23(b)(1)(B) or its applicability to the facts as it saw them, but because there had been no hearing to establish those facts as a matter of evidence. No evidence had been received of defendant's net worth, earnings or available insurance coverage, and no opportunity was given to challenge affidavits as to the total claims against the defendant and defendant's fund of assets. Without a preliminary fact finding inquiry or other evidence of defendant's actual ability to respond in damages, its settlement experience or continuing exposure, the Court of Appeals felt the District Court's finding was unsupported.

The Federal Skywalk Cases, 680 F.2d 1175 (8th Cir. 1982), cert. denied, 103 S. Ct. 342 (1982), are also worthy of note. There, after a hearing, District Judge Scott Wright certified Rule 23(b)(1)(A) and 23(b)(1)(B) classes on all issues of

liability and punitive damages. He was reversed on appeal, not because the Eighth Circuit disagreed with his basic findings relative to the appropriateness of Rule 23(b)(1) on its own terms to the case -- indeed, the opinion specifically commends him for his "creative efforts in attempting to achieve a fair, efficient and economical trial for the victims of the Hyatt Regency disaster" -- but because the appellate court found that the effect of a "non-opt" class in the circumstances of that litigation constituted a federal injunction against state court proceedings as forbidden by the Anti-Injunction Act, 28 U.S.C. § 2283. The decision is replete with citations to secondary authorities favoring class action treatment of mass tort litigation.

The Court in the present case ruled against such a procedure on the grounds that the predicate limited fund was not evident:

"However large the potential damages may appear here, plaintiffs offer no evidence of the likely insolvency of the defendants and apparently do not, in defendant Dow's words, 'have the temerity to argue that the aggregate claims of the purported class exceed the total assets of the five named defendants'... For good measure, Dow adds 'such an argument would be ludicrous on its face'... As one court has noted, 'without more, numerous plaintiffs and a large ad damnum class should [not] guarantee b(1)(B) certification'. Payton, et al v. Abbott Labs, et al, 83 F.R.D. 383, 389 (D.Mass 1979). Thus, certification under rule 23(b)(1)(B) is not appropriate." 506 F. Supp at 790.

A footnote added, "Since that statement was made the number of named defendants has increased,...thus rendering class certification under rule 23(b)(1)(B) even more inappropriate." It would seem that the issue of defendants' solvency should not be so easily disposed of. In the first instance, the trend towards aggregation of defendants has since been reversed by this Court in its rulings on the motions for summary judgment relating to the government contract defense, which exonerated several defendants from further participation in the case. While the "walkers" may seem insignificant from the point of view of assets, when compared to the defendants who remain, their loss in the face of such massive claims cannot be said to be without significance.

Secondly, mere assets is not the proper test. As the court noted (596 F. Supp. at 790, n. 35) the plaintiffs have expressed the belief that a full judgment to them will be a serious impairment on the ability of the defendants to function and have accordingly asked that special funds be established to pay judgments. A serious impairment of working capital would be disastrous. The claim in the Johns Manville petitions, op cit. supra, is that products liability claimants were threatening the solvency of the company. If that threat could bring Johns Manville to the doors of bankruptcy, there is no reason to believe, smugly, it could not happen here.

One of the largest of the defendants, Dow, certainly regarded the threat as serious in 1965. Having discovered the

dioxin problem, it immediately sought to cover it up and hide it from the government and, ultimately, the public. Large numbers were at stake. It avails Dow nothing now to denigrate the risk it so clearly saw then.

As is clear from a reading of Judge Rubin's decision in Coburn, and from the Harvard Law Review article cited above, the determination that there is a threat to the assets to which all are looking need not be final or conclusive. If it is unsatisfactory to accept the plaintiffs' claims at face value, it is equally unnecessary to require unshakable proof that the fund is threatened:

"Rule 23(b)(1)(B) itself requires only that there be a 'risk' of impairment, not that impairment be conclusively determined." 96 Harv. L. Rev. at 1143.

Here, the court is faced with claims of wrongful death, neoplasms, liver damage, teratogenic, carcinogenic and mutagenic injury as well as severe acneogenic disfigurement. The aggregate of these claims is, even without detailed analysis, a matter of significant potential liability. Whether that liability would be serious enough to the working capital of any of the defendants to bring them to the point of shut-down is, it is submitted, a closer question than the court's earlier analysis suggests. Because it is, realistically, a close question, plaintiffs would urge that 23(b)(1)(B) certification is warranted.

#### IV. Rule 23(b)(1)(A)

Plaintiffs' June 15, 1983 Memorandum expressed considerable caution about the possibility of Rule 23 (b)(1)(A) certification:

"We have considerable concern that by pushing the frontiers of the 23(b)(1)(A) class we would be inviting interlocutory appellate review and possible substantial delay into a case that has already been in litigation over three years." Id. at 6.

That statement immediately preceeded plaintiffs' equally cautious consideration of Rule 23(b)(1)(B) certification, suggesting deferral of that issue as well.

Because plaintiffs have reconsidered and are now urging immediate consideration of 23(b)(1)(B) certification, it would seem appropriate that some thought also be given to Rule 23(b)(1)(A). "Pushing the frontiers" of 23(b)(1)(A) essentially involves a critical reading of the Ninth Circuit's decision in McDonnell, discussed below.

Rule 23(b)(1)(A) authorizes a class action when the prosecution of separate actions would create a risk of "inconsistent or varying adjudications with respect to individual members of the class which would establish incompatible standards of conduct for the party opposing the class." That section is designed to prevent situations where different courts establish incompatible standards of conduct for the party opposing class certification.

In its analysis of December, 1980, this Court argued that incompatible standards of conduct were really not at stake:

"Rule 23(b)(1)(A) is not meant to apply, however, where the risk of inconsistent results in individual actions is merely the possibility that the defendants will prevail in some cases and not in others, thereby paying damages to some claimants and not others. McDonnell Douglas Corporation v. United States District Court, Central District of California, 523 F.2d 1083, 1086 (CA9 1975), cert. denied sub nom., Flanagan v. McDonnell Douglas Corporation, 425 U.S. 911, 96 S. Ct. 1506, 47 L. Ed.2d 761 (1976). 'The risk of paying money [damages] to some and not others is not what the rule-makers intended by the words "incompatible standards of conduct"'. A. Miller, An Overview of Federal Class Actions: Past, Present and Future at 43 [1977]." 506 F. Supp. at 789.

The McDonnell Douglas decision, relied on by the court, is not without its critics. See, Becker, The Class Action Conflict, 75 F.R.D. 167, 188 (1976). Indeed, the court in Coburn v. 4-R Corp., 77 F.R.D. 43 (E.D.N.Y. Ky. 1977), after noting a prejudice in McDonnell Douglas against 23(b)(1) certification in tort cases, generally, stepped around the decision by referring to later decisions by the ninth circuit which, it was satisfied, backed off the McDonnell holding in 23(b)(1)(B) cases.

The problem with the McDonnell holding, as highlighted by the Harvard article, is that it overlooks entirely the fact that whether a plaintiff obtains a recovery or not depends primarily on what standard of conduct has been imposed on the defen-

dant. 96 Harv. L. Rev. at 1143, n. 45-48, and accompanying text.

Cases prior to McDonnell had little difficulty in seeing the possibility of different standards of conduct arising out of separate tort cases. In Petition of Gabel, 350 F. Supp. 624 (C.D. Cal. 1972) the court, considering a mid-air disaster, stated:

"Having found that the prerequisites of F.R.Civ. P. 23(a) are satisfied, the Court now finds in addition thereto that the prosecution of separate actions by the individual plaintiffs would create a risk of (1) inconsistent or varying adjudications on the question of liability, in which event there would be established incompatible standards of conduct for the defendants; (2) moreover, it is possible that adjudications with respect to individual suits by individual members of the class would, in case judgment went against that plaintiff, as a practical matter, be dispositive of other members of the class not party to the individual adjudication, so as to substantially impair or impede the ability of other members to protect their interests, by the application of the doctrine of res judicata.

"Adjudications exonerating any one of the defendants would as a practical matter certainly impair or impede the ability of the other plaintiffs to recover against the defendant who might be exonerated."

While the Court's musings on the law of res judicata may be somewhat dated, its reflections on the practicalities of prior adjudications on subsequent litigation are quite pertinent.

Similarly, in Hernandez v. Motor Vessel Skyward, 61 F.R.D. 558 (S.D. Fla. 1974), involving a class action by passen-

gers of a ship who complained about the fitness of the food and water provided them, it was said:

"The Court finds that the prosecution of separate actions by individual members of the class would create a risk of inconsistent or varying adjudications with respect to individual members of the class which would establish incompatible standards of conduct for the parties opposing the class. It is conceivable that the defendants would be taken to task by one passenger after another until a judgment against the defendants was obtained. At that point, future plaintiffs could call the doctrine of collateral estoppel into play to bind the defendants on the issue of negligence in the preparation of food and water."

From this, the court was satisfied that certification under Rule 23(b)(1)(A) satisfied the spirit of that rule in that the class action would "provide a ready and fair means of achieving unitary adjudication." 61 F.R.D. at 561, n. 8, citing Advisory Committee Comments 39 F.R.D. 95, 100.

That the potential for conflicting standards of liability exist in this case - to the benefit of some and the detriment of others - is beyond question. Indeed, it was just such a conflict that initially led, in part, to this Court's determination that federal interests would be impeded by such conflicts:

"Application of varying state laws would burden federal interests by creating uncertainty as to the rights of both veterans and war contractors. It would also be unfair that essentially similar claims, involving veterans and war contractors identically situated in all relevant respects, would be treated differently under different laws." 506 F. Supp. at 748.



This conflict goes well beyond the mere question of whether some plaintiffs recover while others do not; it involves the very question of how war contractors are to conduct themselves in their dealings with government, and what rights injured veterans have when that code of conduct - whatever it is - is violated. The standard cannot be diffuse or contradictory: it must be firm, predictable and demanding of adherence. As the Harvard writers state, "if various fact finders reach inconsistent conclusions about the same set of facts, the defendant (and others in similar circumstances) is left without any guidance concerning the legality of its conduct." 96 Harv. L. Rev. at 1154.

The rationale underlying the McDonnell case, barring (b)(1)(A) class certification in a mass disaster case, is particularly inapplicable to this litigation.

McDonnell was not a negligent failure to warn claim with a Government contract defense - which claim and defense are common issues as to all parties. The causation issue in McDonnell was the unitary individual issue as to each plaintiff - i.e., whether the crash did, in fact, cause the injuries complained of. In Agent Orange, the causation issue is bifurcated into generic and individual causation issues.

The generic causation issue is whether exposure to defendants' dioxin-contaminated product was capable of causing the injuries alleged - an issue common to all plaintiffs. The individual causation issue as to each plaintiff is whether such exposure did in fact cause his injuries.

The generic causation issue is to be litigated in the class action.

The individual causation issues are to be adjudicated in individual damages trials after defendants' liability is determined and the plaintiffs' claims remanded to their home jurisdictions.

This splitting of causation into generic and individual issues means that defendants will be found liable, if negligent failure to warn is established, and the Government contract defense is not sustained, and if generic causation is proven. In these circumstances, defendants will be liable to pay a damage judgment to any individual plaintiff who goes on to prove individual damages caused by such exposure.

Applying the McDonnell formulation, only a 23(b)(1)(A) class can protect against the creation of "incompatible standards of conduct" for carrying out a judgment. As a result of the bifurcation of the causation issue, if only a (b)(3) class was certified, the "opt-outs" who subsequently litigated their claims in individual actions could create "incompatible standards of conduct". This would occur if in the (b)(3) class action generic cause were proven, and if in the opt-out plaintiffs later action generic cause were not proven. In such event, the (b)(3) class member would secure a judgment in his later individual case if he proved individual damages. However, the opt-out plaintiff would not in his individual case obtain an individual judgment for damages if he did not prove generic causation. Conversely, if the

(b)(3) class action failed to prove generic causation, the individual (b)(3) class members would not be able to sue for damages in individual actions. However, the opt-out plaintiff could recover an individual damage judgment if he proved generic causation and individual damages. The rationale of McDonnell is that a defendant cannot act inconsistently in a mass disaster action because it acts consistently if it pays a judgment to a plaintiff to whom it is liable and it doesn't pay to one to whom it is not liable.

Under the McDonnell formulation, the reason the defendant acts consistently by either paying or not paying is that payment is only required if liability is established. However, as shown, the fact that defendant pays or does not have to pay in Agent Orange may depend on whether the plaintiff is a member of the class or an opt-out plaintiff and not whether defendants' liability is proven. In conclusion, the rationale of McDonnell and its progeny, even if still good law, should not be applied to bar a (b)(1)(A) certification option in Agent Orange given its unique case management plan.

Certification under F.R.C.P. Rule 23(b)(1)(A) is clearly warranted under the facts and issues of this case.

#### V. A Proposed Plan

Given the significant advantages of the (b)(1) class to this litigation, plaintiffs respectfully request an immediate opportunity to pursue limited evidentiary hearings designed to

establish that defendants' assets are insufficient to satisfy plaintiffs' claims. Plaintiffs urge that such hearings begin immediately and they be permitted to examine appropriate financial officers of defendants to determine whether defendants' net worth, earnings and available insurance coverage are sufficient to satisfy plaintiffs' claims.

Plaintiffs propose at the same time to submit affidavits establishing the number of plaintiffs' claims and the severity of plaintiffs' injuries, and the aggregate verdict or settlement values represented by such claims.

Plaintiffs are also prepared to submit a reasonable sampling of claimants' medical records or to submit such claimants to non-invasive physical examinations by defendants' doctors to verify the nature and extent of their injuries. Affidavits or testimony by experts would be offered to establish the verdict or settlement values of such claims, if that is required.

The number of plaintiffs' present and potential claims can be provided by affidavit or pre-class certification discovery of the government's Agent Orange Registry.

We also urge that government counsel cooperate in providing the Court with information as to the number of Agent Orange claimants whose injuries fall within the Agent Orange injury profile. This information, together with the intervened claims will give the Court a reasonable approximation of the total number of Agent Orange claims presently known from plaintiffs' files and from the Registry.

The number and distribution of injury claims thus determined and multiplied by their probable verdict or settlement values, will yield the aggregate financial exposure of defendants, if liability is established, and will enable the Court to determine if plaintiffs qualify for a "limited fund" (b)(1)(B) class.

The Court may, of course, also entertain the possibility of a reasonable number of punitive damage awards in reaching its determination.

It is not proposed that this discovery/disclosure should in any way impede or hinder existing discovery on the merits of the case, which should continue as the class action matter is prepared for judicial consideration.

#### VI. Interlocutory Appeals

Lastly, and still without hinderance or interruption of existing trial preparations, plaintiffs are prepared to stipulate that any certification either under 23(b)(1) or 23(b)(3) would be subject to immediate appeal pursuant to 28 U.S.C. § 1292 (b). As was stated in the "Dalkon Shield" opinion:

"It is obvious that the certification opinion that the court will issue involves a controlling question of law and upon which there is some ground for difference of opinion."

The Ninth Circuit considered the case pursuant to that interlocutory appeal. Plaintiffs are confident that this is an appropriate case for 23(b)(1) or 23(b)(3) certification, but they are

prepared to defend an immediate contest to that position in the appellate court(s).

CONCLUSION

For all of the streamlining that this Court has been able to effect through its Multidistrict powers, this case has been and remains a war of attrition between plaintiffs and defendants. Class action certification will facilitate a just, speedy, and equitable litigation and trial, and certification procedures are about to begin. Before that process is initiated, plaintiffs would ask the court to reexamine the posture of this case in relation to Rule 23(b)(1) certification.

Respectfully submitted,

Edward T. Hayes III  
EDWARD F. HAYES, III

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IRVING LIKE

~~Albert J. Fiorella~~  
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UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

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In re  
"AGENT ORANGE"

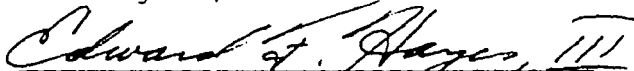
MDL 381  
(All Cases)

Product Liability Litigation

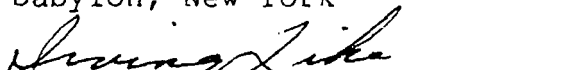
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PLAINTIFFS' MEMORANDUM IN SUPPORT OF  
INCLUSION OF STRICT PRODUCTS LIABILITY  
AND PUNITIVE DAMAGES IN THE GENERIC TRIAL

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UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

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In re  
"AGENT ORANGE"

MDL 381  
(All Cases)

Product Liability Litigation

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PLAINTIFFS' MEMORANDUM IN SUPPORT OF  
INCLUSION OF STRICT PRODUCTS LIABILITY  
AND PUNITIVE DAMAGES IN THE GENERIC TRIAL

In its Order of May 12, 1983, the Court directed the parties and the Special Master to begin preparing the case for trial on the issues of liability, general causation and the government contract defense. It has now been queried whether it would be appropriate for further issues such as Strict Products Liability and Punitive Damages to be tried at the same time. For the reasons set forth hereinbelow, plaintiffs submit that combining these issues with the other issues to be tried will maximize litigation economies and preserve fairness to all concerned.

POINT I

THE TRIAL OF THE STRICT LIABILITY CASE  
IN THE GENERIC CAUSE PHASE WILL MAXIMIZE  
ECONOMIES OF LITIGATION RESOURCES

In their original submission on Phased Trials, plaintiffs proposed a series of three or more trials to bring this case to a manageable conclusion. Phase I was limited to the issue, is



dioxin-contaminated Agent Orange harmful to health? This was a gateway issue in the case because it was one hotly contested by the defendants and one which was potentially dispositive of the plaintiffs' cases.

In its order of December 29, 1980, this Court appeared to reject that approach:

"After [trial of the Government Contract Defense], if needed, there may be an additional trial addressing liability questions such as negligence, product liability, and general causation, where a jury will be able to hear all of the evidence relating to the development, manufacture and use of Agent Orange, and the scientific and medical evidence relating to its potential effects, and report its findings in carefully drafted special verdicts." 506 F. Supp. 762, 785-86 (E.D.N.Y. 1980)

Subsequently, motions for summary judgment were brought in connection with the Government Contract Defense. At the end of its ruling on those motions, the Court abandoned the idea of a separate trial on the government contract defense and rolled that trial into a larger trial:

"If we were to proceed at this time with a separate trial of the government contract defense as to those defendants who remain in the case, we would on that trial have to determine whether dioxin contamination of Agent Orange was harmful, and finally, if the defendant's product was unsafe and if the defendant had told the military in 1965 of Dow's fears about the effect of dioxin contamination, might the military have stopped using Agent Orange, changed its specifications to provide a maximum level of contamination, changed its method of using Agent Orange in the field or imposed safety precautions in connection with its use in the field.

"A trial to answer these questions would necessarily involve most of the evidence needed for

trial of the issues relating to liability and general causation. Under these circumstances I conclude that justice would be served by combining what remains of the government contract defense issues with a trial on liability and general causation which will be scheduled after completion of the remaining discovery necessary for those issues." Id. at 5135-36.

The decision left some room to question, however, what the parameters of that larger trial would be. It is noted, particularly, that the Court was able to distinguish (in a manner the defendants do not) between matters of "liability" and "general cause." For this reason, plaintiffs submitted a Memorandum on June 6, 1983 requesting a limitation of the upcoming trial to the threshold question, "Whether the dioxin levels involved in this case are or are not capable of causing harm to human health." Id. at 6. There was nothing naive or simplistic about the request: plaintiffs recognize that other factors will have to be considered before defendants are found liable in a single case - but the trial of this single, discreet issue had much to do with the future course of the case and the manageability of the litigation as a whole. See, Note, The Right to a Jury Trial in Complex Civil Litigation, 92 Harv. L. Rev. 898 (1979).

Defendants, for motives that are far from clear, have objected to such a threshold trial. While they were eager enough to litigate the "discreet issue" of government contract defense (Dow still urges a separate trial on that point), this particular discreet issue does not appeal to them. Hence they argue that resolution of the issue in plaintiffs' favor would not result in

liability to a single individual, which plaintiffs concede it would not. That does not mean, however, that the issue is not an important one. A decision adverse to plaintiffs would certainly have a dampening effect on their cause. Secondly, while a determination favorable to plaintiffs would lead to proximate cause questions. it would establish the fact of product "defect" which is central to any further discussion of liability.

The defendants also express fear that such a finding, "hanging in the air," would be unduly prejudicial to them. Such a fear is utterly premature. It cannot be said that subsequent juries (or the first Agent Orange jury regathered) would not be properly instructed in the use (and misuse) of this finding. As far as prejudice arising out of the publicity surrounding an adverse finding is concerned, the rules to be applied are no different or less respectful of the rights of the defendant than they would be in any other noteworthy trial: real prejudice will be eliminated, but open-minded, albeit informed, jurors will be seated. For all the adverse publicity surrounding smoking and cigarettes, much of it government-supported, it cannot be said that the cigarette companies do not have their day in court.

Dow (particularly) complains that plaintiffs' formulation is not dose-related. This misconstrues, plaintiffs's position. See June 6, 1983 Memorandum at p. 6. Plaintiffs have consistently contended that there is no such thing as a "safe" dioxin level, but if there is one, this is the part of the trial where that should be determined.

Plaintiffs never anticipated that the trial of generic causation would end the case. If plaintiff veterans and their families failed to prove that dioxin-contaminated phenoxy herbicides cause physiological injury at the cellular and tissue level, with subsequent damage to human physiological systems, they would then know that they had lost "on the merits" and not as the result of some (to them) Byzantine legal technicality. If, on the other hand, plaintiffs were to prevail at this point in the trial, it would next be necessary to establish that this veteran's illness was caused by his exposure to dioxin-contaminated herbicides.

For these reasons, plaintiffs, urge the Court to reject defendants' suggestions that all possible factors be resolved at the generic causation trial. It cannot be denied, as a practical matter, that inquiry into the matters suggested by the defendants will delay and complicate immensely the trial of the central issue and go a long way toward rendering the case incomprehensible to even a special jury.

A. The Government Contract Defense, as  
Formulated by the Court, Requires  
Refinement and, Perhaps, Reconsideration

Before considering the interrelationship between the evidence to be presented at the trial of the government contract defense and the other liability issues in the case, it is important to state at the outset that the formulation of the government contract defense posited by the defendants and apparently accepted by this Court is, in plaintiffs' opinion, wrong.

When the Court first outlined the parameters of the defense in February 28, 1982, it was writing on a nearly clean blackboard, without benefit of discovery. Since that time, however, substantial evidence has been uncovered supporting the following facts.

1. The herbicide specifications (the design) of defendants' products required under the contracts between the defendants and the government, did not call for, nor did the government in any way contemplate, the production of the toxic contaminant known as dioxin.
2. Defendants had discretion as to the method of manufacture to be used to produce the Agent Orange prescribed by the specifications.
3. Dioxin was neither inevitable nor unavoidable, and at least the defendants Dow and Hercules were fully aware of the extraordinarily toxic levels of dioxin contamination of their competitors' products, particularly these produced by Monsanto and Diamond Shamrock.
4. The defendants sold Agent Orange herbicide products to the government which contained the chemical compounds prescribed by the specifications but also containing varying levels of dioxin contamination.
5. By the mid-1950's the defendants, and while they were selling dioxin-contaminated Agent Orange to the government, had or could acquire the capability of analyzing, detecting, testing for and avoiding, removing or reducing the dioxin in the Agent Orange product they were selling to the government.
6. By the mid-1960's, the defendants had knowledge of the dioxin contamination of the Agent Orange product they were selling to the government and the means of its removal or reduction.
7. By the mid-1960's, the defendants knew of the potential hazards to human health which would accompany the use of the dioxin-contaminated herbicides they were selling to the government and the defendants knew the methods of reducing the health risks associated with the herbicide products they were selling the government.

8. By the mid-1960's, the defendant Dow established an internal standard of less than 1 PPM dioxin, allegedly believing that dioxin levels below 1 PPM were safe, and believing that Agent Orange containing dioxin levels in excess thereof was hazardous to human health; and Dow communicated such facts to the other defendants.
9. Notwithstanding the knowledge of the defendants, as described above, all continued to sell to the government during the 1960's Agent Orange containing varying levels of dioxin contamination, and only Dow and Hercules made an effort to reduce the dioxin content of their herbicides to what they allege they believed as a safe level.
10. All of the defendants, including Dow, at some period, but possibly except Hercules, sold Agent Orange to the government with dioxin levels exceeding 1 PPM.
11. A few government officials, none of whom had any legal means of public distribution of the information, knew of the hazards associated with dioxin, and of the chloracne health problems incident to occupational exposure to TCP manufacturing processes. Discovery has produced no evidence that those government officials knew what the defendants knew, as described above, and the significance and materiality of their knowledge is yet undetermined because the Court has not defined who is or are the responsible government decision-makers whose knowledge must be compared with that of the defendants under the government contract defense.

Despite these facts, the government contract defense formulated in this Court's Order of February 28, 1982 appears to bar any claims for strict product liability, breach of warranty, or negligence, even the kind of egregious negligence that warrents assessment of punitive damages. Smith v. Wayde, 51 U.S.L.W. 4407 (1983). Such a broad scope of foreclosure does not accord with the case law or with sound reasoning.

The formulation, for example, appears to apply even if the defendats negligently producted and supplied an unreasonably defective and dangerous Agent Orange. It is conceivable that the

government might know as much or more about the dangers of dioxin without knowing that the defendants had, in disregard of their knowledge, produced an unnecessarily dangerous product. Plaintiffs know of no case where mere parity of knowledge concerning product hazards permits a defendant to invoke the government contract defense to escape the consequences of this own misconduct. Merritt, Chapman & Scott Corp. v Guy F. Atkinson Co., 295 F.2d 14 (9th Cir. 1961), on the contrary, holds that where the method of manufacture used by a contractor in order to satisfy the government's specifications is left entirely to the contractor's discretion, and the product turns out to be faulty or defective, the government contract defense does not act to relieve the contractor of liability.

In McKay v. Rockwell International Corp., 704 F.2d 444 (9th Cir. 1983), the court reiterated the rule that the government contract defense does not bar claims based on the contractor's negligence or a production defect in manufacturing the product:

"We also note that the rule enunciated here does not relieve suppliers of military equipment of liability for defects in the manufacture of that equipment. To hold otherwise would remove the incentive from manufacturers to use all cost-justified means to conform to government specifications in the the manufacture of military equipment."

Something like that was said by this Court when it noted, "If it should appear that the contract set merely a performance specification, as opposed to a specified product, then the government contract defense would be more restricted than as described here." 534 F. Supp. 1045, 1056 (E.D.N.Y. 1982). That appears to

recognize, obliquely, that if a defendant was free to choose its own method of manufacture to meet the government's expressed requirements, and it then produced a defective product because of its choice of manufacturing method, it would not be relieved of liability by virtue of the government contract defense. A fortiori, claims based on a government contractor's negligence in the manufacture process which results in a defective product should not be barred by the defense.

While this Court's decision appears to recognize this important aspect of the defense at one point, it goes on, elsewhere, to state:

"If established, [the Government Contract Defense] would be a bar to the claims asserted in this lawsuit with respect to all matters that fall within the scope of the defense. In broadest terms, plaintiffs' claims against defendants are that for having manufactured and sold to the government 'Agent Orange' for use in Southeast Asia, defendants should be held liable under principles of negligence, strict products liability, and warranty. To the extent it is successful on this government contract defense, a defendant would be entitled to dismissal of all such claims." 534 F.2d 1045, 1054 (E.D.N.Y. 1982).

There is a need for clarification on this point. If, as the Court seems to indicate, there is room for liability in negligence where the contractor has discretion as to how to manufacture the product it supplies, then the defense should not be a complete bar to such claims. To prove such negligence, plaintiffs would have to prove that the defendant acted unreasonably in the light of the dangers to be perceived. The very formulation tells that the reasons the government contract defense was



formulated will be satisfied at such a trial and that none of those reasons will be frustrated by a finding of liability.

Similarly, plaintiffs have urged the Court to note the overwhelming weight of authority that the government contract defense does not apply to strict liability claims. Challoner v. Day & Zimmerman, Inc., 512 F.2d 77 (5th Cir.), vacated on other grounds, 423 U.S. 3 (1975); Foster v. Day & Zimmerman, Inc., 502 F.2d 867 (8th Cir. 1974); Montgomery v. Goodyear Aircraft Corp., 392 F.2d 777 (2d Cir.), cert. denied, 383 U.S. 841 (1968).

Attention is again drawn to the recent case of McKay v. Rockwell International Corp., 704 F.2d 444 (9th Cir. 1983), a suit involving the defective design of an aircraft ejection seat. The ninth circuit, relying on this Court's formulation of the government contract defense, nonetheless found that it did not apply where the contractor had discretion in fulfilling the requirements of the contract:

"When only minimal or very general requirements are set for the contractor by the United States the rule [i.e., the government contract defense] is inapplicable."

That is true whether the claim is in negligence or in strict tort liability:

"To summarize, we hold that under the Feres-Stencel doctrine and the government contractor rule, a supplier of military equipment is not subject to [Restatement 2d Torts] section 402A liability for a design defect where: (1) the United States is immune from liability under Feres and Stencel, (2) the supplier proves that the United States established, or approved, reasonably precise specifications for the allegedly defective military equipment, (3) the equipment conformed to

those specifications, and (4) the supplier warned the United States about patent errors in the government's specifications or about dangers involved in the use of the equipment that were known to the supplier but not the United States." 704 F.2d at 451.

Otherwise, of course, the rule does not preclude liability for product design under strict products liability, and the decision does not speak to liability for product defect all all.

Judge Alarcon's lengthy and well-reasoned dissent argues that even this formulation too easily allows contractors to shift responsibility for the safety of their designs to the government.

Quite apart from questions of whether, in theory, the government contract defense should bar certain claims, s the manner in which the defense is to be applied. The May 12, 1983 ruling, for example, makes no differentiation concerning the persons in government who might have known about dioxin and, more importantly, its relation to herbicides then being used by the government. Plaintiffs have previously briefed to this Court the question of "Levels of Responsibility."

In both its decisions deliniating the government contract defense (534 F. Supp. 1046 (E.D.N.Y. 1983)), and applying it to summary judgment, this Court has declined to go behind the government order form to see who was responsible for the formulations adopted. The evidence to date indicates that the government bought defendants' chemicals off-the-shelf, adopting as a statement of its requirements that which they had to offer. Indeed, some of the defendants have vigorously pressed the point

as a matter of defense. Plaintiffs have contended since the beginning that the manner in which the specifications came to be drawn the way they were is as important a fact as the ministerial truth that somebody in government (a technical writer with no personal knowledge of the subject matter, as it turns out) signed off on the specification form.

There is now some evidence of a conspiracy to conceal information in the case. In its rulings on summary judgment, the Court, at that juncture of the case, appeared desirous of eliding over the point and staying with the overall balancing of knowledge. Does the final formulation of the defense regard as irrelevant a willful attempt to mislead the government about the safety of the product?

Again, this Court has dismissed Hercules from the case, not on the ground that it was ignorant of the dioxin problem, because it wasn't, but because the Court believed that there was no evidence that its product contained any dioxin. In fact, the evidence submitted (and that was not complete) showed that Hercules' product at times approached the level of 1 PPM, Dow's self-imposed standard, adopted because that was practically attainable, but by no means adopted because that was shown to be "safe." In fact, there has been no evidence presented so far in this case showing that any level of dioxin is safe, and plaintiffs contend there is no such safe level.

Lastly, plaintiffs note that while the motions for summary judgment elicited the finding that the defendants had delivered a

product in conformity with the specifications, continuing discovery on the subject indicates that might not be true, and plaintiffs assume the Court's finding in that regard was tentative for the purposes of the motion.

Plaintiff's stress this analysis of the Government Contract Defense at this time because it believes that clarification of the parameters of that defense are in order and further, that even if the defense is to remain in much its present form that plaintiffs' contentions should be tried to the jury for findings:

"Because the jury returned what amounted to general verdicts for the plaintiff on each of these charges, we are bound in the following discussion to construe the evidence and the possible inferences in the light most favorable to Berkey. See, e.g., Continental Ore Co. v. Union Carbide and Carbon Corp., 370 U.S. 690, 696 & n. 6, 82 S. Ct. 1404, 8 L. Ed.2d 777 (1962). We note en passant, however, that in large and complex cases such as this involving many novel legal issues, the better practice would have been to require special verdicts or the submission of interrogatories to the jury pursuant to Fed. R. Civ. P. 49. In that way the right to a jury trial of all factual issues is preserved while the probability of a laborious and expensive retrial is reduced. See, SCM Corp. v. Xerox Corp., 463 F. Supp. 983, 988-90 & nn. 13, 15 (D. Conn. 1978), remanded on other grounds, 599 F.2d 32 (2d Cir. 1979). Certainly the already difficult task of reviewing a case of this magnitude would have been eased somewhat for this court if we knew precisely what the jury's findings were on several specific factual issues." Berkey Photo, Inc. v. Kodak Co., 603 F.2d 263, 278 (2d Cir. 1979), cert. denied, 444 U.S. 1093 (1980).

The trial of the government contract defense will be a detailed matter, encompassing a rich variety of operative facts, and looking toward detailed findings from the jury.

B. The Joinder of the Strict Liability Claim with the Other Claims Will Make Litigation Sense and Result in a Maximization of Litigation Economies

There are a variety of reasons, conceptually, why strict liability, along with plaintiff's other claims, should be tried together with the government contract defense at this juncture:

1. If plaintiffs prevail in the trial of that defense, then there is no further reason in logic why they should be prevented from going forward with their entire case. Stripped of their pretended immunity, defendants would be nothing more than classic sellers to a purchaser (the government) with the plaintiffs being classic injured third parties.
2. If plaintiffs prevail in the trial of the defense, they may, ipso facto, be entitled to judgment for negligent failure to warn, but may find themselves confined unnecessarily in defending a judgment on appeal. All bases of liability should be tried and determined.
3. It is theoretically possible, perhaps, that plaintiffs could win on the government contract defense, but somehow lose on the affirmative failure to warn issue. If that occurs, plaintiffs would require a further trial on their other causes of action, anyway.
4. Even if plaintiffs lost on the government contract defense, they would press for a trial of those issues (negligence, strict tort) which they contend are not affected by the defense. If the court continues in its present view of the defense, plaintiffs might have to appeal and, should they secure a reversal, a retrial of alternative grounds of liability would be wasteful in the extreme.

These conceptual "pluses" for a full trial are backed by practical considerations.

What will trial of the government contract defense and generic causation entail? Under the Court's view of the trial is-

sues (see page 3, supra), the trial of the government contract defense will involve consideration of at least the following issues:

- (a) Is Agent Orange harmful, at least under certain circumstances?
- (b) Did the defendant know it was harmful?
- (c) Did the defendant know of any testing, or manufacturing or use restrictions that might reduce the risk of harm?
- (d) Did the defendant communicate its knowlegdge of the harmfulness of the herbicide and of risk reduction methods to the government?
- (e) What did the government know about the harmfulness of the product and risk reduction methods?

The court will appreciate at once that this formulation is virtually identical with the proof required to prove "Negligent Failure to Warn" Restatement 2d Torts, sec. 388 (1965); Kidwell, The Duty to Warn: A Description of the Model of Decision, 53 Tex. L. Rev. 1375 (1975); Noel, Products Defective Because of Inadequate Directions or Warnings, 23 Sw. L.J. 256 (1969). It would make almost no sense, therefore, for the Court to have the jury make findings on the government contract defense and, assuming such findings were favorable to plaintiffs, to fail to have the jury make the affirmative finding of a liability for negligent failure to warn or, indeed, defect based upon inadequate warning.

Plaintiffs question whether, even if they were to win on that basis, that would be an adequate method of proceeding through this trial. In the view of the Berkey Photo court, the

Record would be incomplete. The entire judgment would be vulnerable to upset because the Court misformulated or misapplied the government contract defense, or because it misread some party's views on "failure to warn." There is no reason why plaintiffs should be locked into a single cause of action when they have pleaded many, at least where there is a chance of reversal on appeal.

The overlap between the government contract defense and negligence is obvious. Added to the basic formulation for "failure to warn" set out above would be issues like whether it was foreseeable that the product, if designed or made a certain way, might cause harm to injured parties in the position of plaintiffs. Subsidiary to that issue is whether the defendant followed accepted procedures of testing and its own internal procedures, generally. Considered with this, if not elsewhere, would be "state of the art." Though a step beyond what is asked for in "failure to warn", these negligence issues would not be so far removed from the issue of "did the defendant know", that they should be segregated. Many of the same witnesses would be called on both issues, by all sides.

Trying the government contract defense in a general causation trial therefore leads naturally to a consideration of the negligence issues in the case. With the government contract defense and the negligence cases going to the jury together with generic causation, however, it almost follows that there be a trial on strict products liability.

The emphasis in a strict products liability case is, of course, on the defect in the product, not on the fault of the producer or seller, where "defect" is defined as some aspect of the product that is not inherent to its operation and which makes it unreasonably dangerous. Plaintiffs have contended throughout this litigation that the presence of dioxin in defendants' Agent Orange rendered it unreasonably dangerous.

A mere statement of the issue is sufficient to show that the evidence required to establish such a cause of action is virtually identical to the evidence that will be produced in connection with failure to warn, the government contract defense and generic causation, generally, whether the defect is one of design or, as has developed in discovery so far, also one of manufacture.

The economies in terms of litigation time, effort and expense are obvious. Plaintiffs believe that there is also much to be gained in the advancement of this litigation by including the strict products liability claim in this stage of the trial. First of all, it could, as a possibility, happen that plaintiffs would prevail on the government contract defense and then fail, for some reason, to win on the negligence issues. At that point there can be no question that plaintiffs would be demanding a further trial on strict tort liability. The desirability of having all matters resolved at one time cannot, in this context, be questioned.

Notwithstanding some disputation to the contrary, the case in strict products liability is clearly manageable. While the



doctrine of strict product liability is somewhat more recent and therefore more fluid than more traditional doctrines sounding in, for example, negligence, the fact remains that the view of strict products liability through the country is far more uniform than is often pretended. The American Law Institute has captured the essence of strict product liability in section 402A of its Restatement 2d Torts:

"(1) One who sells any product in a defective condition unreasonably dangerous to the user of consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user or consumer, or to his property, if

"(a) the seller is engaged in the business of selling such a product, and

"(b) it is expected to and does reach the user or consumer without substantial change in the condition in which it was sold.

"(2) The rule stated in Subsection (1) applies although

"(a) the seller has exercised all possible care in the preparation and sale of his product, and

"(b) the user or consumer has not bought the product from or entered into any contractual relation with the seller.

See, also, Restatement 2d Torts, section 402(b).

The Restatement provision has been adopted as the law of several states by statute or by case law. See, CCH Products Liability Repr., para. 4016, and authorities cited. The Restatement represents the broadest consensus of the law of strict products liability and, because it is so well known and interpreted, it is

the formulation the plaintiffs would urge upon this Court for this case.

In urging the Restatement on the Court, plaintiffs do not minimize that there are minor variations among the laws of the different states with respect to specific issues that may or may not come to play in this case. For example, in the matter of "state of the art". some cases virtually exclude the defense (See, e.g., Beshada v. Johns-Manville Products Corp., 90 N.J. 191, 477 A.2d 539 (1982)), while other jurisdictions appear to give excessive deference to the doctrine (See, e.g., Boatland of Houston, Inc. v. Bailey, 609 S.W.2d 743 (Tex. 1980)). Such variations can, if necessary, be handled by way of subclasses and special interrogatories to the jury, but there is no reason why they should be permitted to obliterate and outweigh the essential uniformity of products liability law as it truly exists.

Indeed, it could well be that there is no need to consider such minor variations of law at all. Under New York choice of law doctrines, there is a balancing of interests that should be considered:

"Justice, fairness and 'the best practical results' (Swift & Co. v. Bankers Trust Co., 280 N.Y. 135, 141, 19 N.E.2d 992, 995, supra) may best be achieved by giving controlling effect to the law of the jurisdiction which, because of its relationship or contact with the occurrence or the parties has the greatest concern with the specific issue raised in the litigation. The merit of such a rule is that 'it gives to the place "having the most interest in the problem" paramount control over the legal issue arising out of a particular factual context' and thereby allows the forum to apply 'the policy of the jurisdiction most intimately con-

cerned with the outcome of the particular litigation." (Auten v. Auten, 308 N.Y. 155, 161, 124 N.E.2d 99, 102, supra.)" Babcock v. Jackson, 12 N.Y.2d 482, 240 N.Y.S.2d 743, 191 N.E.2d 279 (1963).

Surely, the "best practical result" requires that the forum, in a complex case such as this, should have the right to balance the competing interests at stake and to come up with a single choice of law which is fair to all sides and which permits the action to proceed in a sensible manner.

To illustrate the point, in their Brief in Support of the Federal Common Law, plaintiffs alluded to instances where young men and women set out to war from a home to which they never returned. Indeed, there are cases where the plaintiffs may have moved several times since returning from Southeast Asia. Which of the several states in which he or she has lived has a paramount interest in the claim? Is it the state where they happened to reside at the onset of this litigation? It may be that none of these jurisdictions can lay claim to a "paramount" interest in the lawsuit. In any event, it is clear that whatever interests of such nature as exist can and should be weighed against the competing interests of other jurisdictions as well as the interest of the forum in rendering this case manageable.

The Strict Products liability claim is desirable, to minimize judicial and litigation time and resources, to avoid duplicative trials, and such a trial would present no insuperable impediment to the orderly conduct of the trial that is already tak-

ing place. Plaintiffs therefore recommend that strict products liability be included in the generic causality trial.

## POINT II

### A TRIAL OF PUNITIVE DAMAGES TOGETHER WITH THE OTHER ISSUES IN THE TRIAL WILL OBVIATE NEEDLESS DUPLICATION OF EVIDENCE AND SERVE THE INTERESTS OF JUSTICE

Concerning punitive damages, plaintiffs adhere to their earlier position that it would be desirable to try the issue of punitive damages together with other "fault" issues in a single trial. Whether this means that only the "fact" of punitive conduct is tried, with damages remanded to local districts, or whether this means that punitive damages would be assessed at the principal trial, as Dow suggests, plaintiffs are prepared to try the case either way.

A trial of punitive damages, including an assessment of actual damages may avoid what some commentators perceive as the constitutional difficulties of successive punishments for the same conduct. See, Wheeler, The Constitutional Case for Reforming Punitive Damage Procedures, 69 U. Va. L. Rev. 269 (1983).

A single trial of punitive damages also avoids the spectre of inconsistent results on the same evidence. Compare Roginsky v. Richardson-Merrell, Inc., 378 F.2d 832 (2d Cir. 1967), with Toole v. Richardson-Merrell, Inc., 251 Cal. App. 2d 689, 60 Cal. Rptr. 398 (1967), wherein the California court respectfully but consciously differed from the Second Circuit and held that the

same evidence did, in fact, support an award of punitive damages. See, generally, Note, Punitive Damages in Mass-Marketed Product Litigation, 14 Loyola of L.A. L. Rev. 405(1981).

The machinery for a unified trial of punitive damages exists. A highly authoritative work, after reviewing the laws of the several states with respect to punitive damages, concluded:

"Although with some exceptions, there is no precise uniformity among the terms used by all jurisdictions to describe the character of the conduct on the part of a defendant which will justify a punitive or exemplary damage award, an analysis of the authorities clearly indicates a conceptual uniformity among all jurisdictions. The conduct which the varying terms are used to describe is generally of two distinct types. The first type is that in which the defendant desires to cause the harm sustained by the plaintiff, or believes that the harm is substantially certain to follow his conduct. With the second type of conduct the defendant knows, or should have reason to know, not only that his conduct creates an unreasonable risk of harm, but also that there is a strong probability, although not a substantial certainty, that the harm will result but nevertheless, he proceeds with his conduct in reckless or conscious disregard of the consequences." Ghiardi, & Kircher, Punitive Damages Law & Practice, para. 5.01 (1981)

The Restatement 2d of Torts, sec. 908(2)(1979) holds that "Punitive damages may be awarded for conduct that is outrageous, because of defendant's evil motive or his reckless indifference to the rights of others." Cf. Smith v. Wayde, 51 U.S.L.W. 4407 (1983).

Even if a single, homogenized charge on the question of punitive damages be rejected, there is still authority in the Babcock language quoted above for this Court to choose a single law of a jurisdiction having a paramount interest.

Such an approach does no violence to the interests of individual states. The issue in a punitive damages trial is, after a finding of conduct justifying punishment, "What is the appropriate sanction to deter the same kind of conduct in the future?" That is not a matter of concern to any individual state. Their interest is satisfied when an injured claimant is awarded compensatory damages:

"Nor do the domiciliary states have an interest in imposing punitive damages on the defendants. The legitimate interests of these states, after all, are limited to assuring that the plaintiffs are adequately compensated for their injuries and that the proceeds of any award are distributed to the appropriate beneficiaries. . . . Those interests are fully served by applying the law of the plaintiffs' domiciles as to issues involving the measure of compensatory damages (insofar as that law would enhance the plaintiffs' recovery) and the distribution of any award. Once the plaintiffs are made whole by recovery of the full measure of compensatory damages to which they are entitled under the law of their domiciles, the interests of those states are satisfied." In re Air Crash Disaster Near Chicago, ILL., 644 F.2d 594 (7th Cir.), cert. denied Sub nom Lin v. American Airlines Inc., 454 U.S. 878 (1981).

In re Northern District of California "Daklon Shield IUD Products Liability Litigation, 521 F. Supp. 1188 (N.D. Cal. 1981), modif., 526 F. Supp. 887, rev'd 693 F.2d 847 (9th Cir. 1982), cert. denied sub nom Abed v. A.H. Robbins., 103 S. Ct. 817 (1983), is a nearly perfect example of what is at issue in this case. There, class action certification was sought (and given) with respect to the claim of a nationwide class of punitive damages claimants. The court certified the class, but did not attempt class treatment of individual compensatory claims on a

nationwide basis. While the court of appeals reversed, it did not overrule the district court's holding that class action treatment of punitive damages might be appropriate in a proper case, but rather held that the district court had failed to hold a evidentiary hearing concerning the ability of the defendant to meet the actual claims against it. The single mass trial of punitive damages was, in effect, approved.

There are, of course, variations among the individual states concerning punitive damages: some do not permit punitive damages at all, while others require that they be tied into some limiting factor. See Owen, Problems in Assessing Punitive Damages Against Manufacturers of Defective Products, 49 U. Chi. L. Rev. 1 (1982). Plaintiffs agree with defendant Dow that these variations should not be permitted to predominate over other interests in this case, or over the Court's interest in trying the issues in the case in an expeditious and intelligent manner.

It is also true that the trial of punitive damages could lead the Court into new areas of evidence, most particularly the extent of each defendant's ability to respond in damages. See, generally, Ghiardi & Kircher, supra, at para. 5.36. It is hardly to be supposed that this additional evidence will maim the conduct the trial, or that it constitutes an impediment to the inclusion of this part of the suit in the generic causation trial. Plaintiffs therefore respectfully submit that punitive damages should be tried before the same jury that is going to hear virtually all of the other evidence in the case concerning defendants'

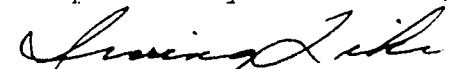
conduct and, if justified, that jury should be permitted to pass upon the punitive culpability of that conduct.

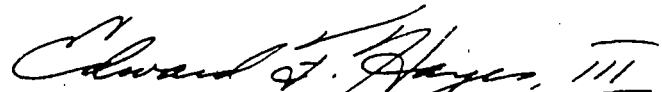
#### CONCLUSION

The generic causation trial initially considered by plaintiffs has blossomed considerably beyond a mere scientific debate concerning the properties of dioxin as an impurity in Agent Orange. With the inclusion of the government contract defense, the case naturally broadened into matters of failure to warn and negligence, both in design and in manufacture. The addition of the product liability claim adds almost nothing to the burden of the Court and the trier of the facts and should be pursued at this time. Similarly, the same triers that hear the case of the defendants' faults in negligence should also pass upon the degree of that fault in the trial on punitive damages. The plaintiffs therefore support the inclusion of both claims in the Phase I trial. At the same time, none of the exculpatory issues raised by the defendants (the government contract defense excepted) appears at all intertwined with the main issues and should be excluded.

Dated: August 30, 1983

Respectfully submitted,

  
IRVING LIKE

  
EDWARD F. HAYES, III

On the Brief:

Aaron Twerski



UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

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In Re

"AGENT ORANGE"

MDL No. 381

Product Liability Litigation

-----X

PLAINTIFFS' MEMORANDUM SETTING FORTH PLAN  
FOR IDENTIFICATION OF AGENT ORANGE VICTIM  
CLASS MEMBERS

INTRODUCTION

This memorandum will set forth the plaintiffs' proposed plan for addressing the several issues which fall under the general umbrella of class notice.

We begin with the straightforward assertion that plaintiffs are prepared to undertake all reasonable efforts which will facilitate the identification of Agent Orange victims. This is the mandate of Eisen & Carlisle v. Jaquelin, 417 U.S. 156, 175 (1974), and must be complied with in letter and spirit. Clearly, before members can be provided with individual notice they must be identified. We do not propose, at this time, that anything other than individual notice to parties appropriately

identified as Agent Orange victims be undertaken. The issue for this day and in this submission is to formulate the plan most likely to identify Agent Orange victims who are members of the class so that they may receive individual notice.

In formulating our proposals we have begun with the most obvious sources - those calculated to be the most productive in revealing potential Agent Orange Victims. As we move down the list of potential sources, and as we exhaust those sources we shall learn much about the wisdom and necessity to move to sources which appear more remote and thus, less likely to reveal additional class members. We shall thus be in a better position to speak to the question of whether class members were "identifiable through a reasonable effort". It is thus our intent to impose a sensible structure on a task which all must admit is a formidable one.

Rule 23(c)(2) of the Federal Rules of Civil Procedure requires that in a Rule 23(b)(3) class action, "...the court shall direct to the members of the class, the best notice practicable under the circumstances, including individual notice to all members who can be identified through reasonable effort." This does not mean nor has it been interpreted by the courts as requiring that notice be sent directly to all

class members, known or unknown, whoever and wherever they might be. The rule does mean that, "If identification of any number of members of the class can readily be made, individual notice to these members must be given..." Eisen v. Carlisle & Jacquelin, 479 F.2d 1005, 1015 (2CA, N.Y., 1973); Mullane v. Central Hanover Tr. Co., 339 U.S. 306, 318 (1950).

On January 22 and 26, 1981, and again on April 14, 1982, plaintiffs filed memoranda of law setting forth the details and justification for a method of class notification which, under the circumstances of this litigation, is the best notice practicable under the circumstances and is designed to satisfy the requirements of Rule 23(c)(2) and Eisen.

#### POINT I

IT IS NECESSARY TO IDENTIFY THE CLASS  
MEMBERS WHO ARE AGENT ORANGE VICTIMS  
BEFORE THE CLASS NOTICE MAY BE ADDRESSED.

Plaintiffs propose that the following sources be utilized for the identification of class members who are Agent Orange victims:

1. The first and most obvious source of names are those who have either retained counsel and filed complaints in this

lawsuit and those who have not yet filed a complaint but have made known to counsel that they suffer from illness or injuries associated with exposure to contaminated Agent Orange herbicides. It should be noted that this lawsuit has attracted attention in the media. It has been the subject of many T.V. and radio programs and has been featured in national and international publications such as Newsweek and Time magazines. The names from the following sources thus comprise a significant portion of the potential class of victims:

- a. All those who have filed a complaint, either in the District Court, Eastern District of New York, or elsewhere, and whose suit has been transferred to the Eastern District of New York under MDL #381, pursuant to the rules of the Judicial Panel on Multidistrict Litigation. This group shall include all plaintiffs who have retained Yannacone & Associates directly; all plaintiffs who have retained other counsel who have chosen to associate with Yannacone & Associates; and all plaintiffs who have retained counsel who have chosen not to associate with Yannacone & Associates, but whose names appear on the transfer orders of the Judicial Panel on Multidistrict Litigation.

b. All those who have not filed a complaint in any court, but who have retained Yannacone & Associates directly or who have retained other counsel who have associated with Yannacone & Associates. This group shall include all those who have retained independent counsel, not associated with Lead Counsel, but whose names and addresses or the names and addresses of the independent counsel are known or are made known to Yannacone & Associates.

2. We are informed that there is in existence within the Veteran's Administration an "Agent Orange Registry". It is estimated that at least 85,000 veterans are included in this registry, which records the names and addresses of veterans who have been examined or who have complained to the Veteran's Administration regarding illnesses or injuries which may be linked to exposure to Agent Orange.

This list is such an obvious source of potential class members that its production by the VA is an essential means of identifying Agent Orange Victims. On July 12, 1982, plaintiffs served a subpoena on the U.S. Government requesting disclosure of the names and addresses of the veterans listed in the Agent Orange Registry.

If it is deemed necessary to make further efforts to identify Agent Orange class members who are victims, then plaintiffs suggest a plan of identification which would utilize mass media, veterans service organizations and state agencies responsible for veteran's assistance programs.

## POINT II

### PLAINTIFFS MAY USE MASS MEDIA TO FACILITATE THE IDENTIFICATION OF CLASS MEMBERS. \*

#### A. Rule 23(c)(2) authorizes Use of Mass Media as a "Reasonable Effort" to Identify Individual Class Members.

As we noted at the outset, Rule 23(c)(2) leaves "no doubt t individual notice must be provided to those class members who are identifiable through reasonable effort", Eisen & Carlisle v. Jacquelin, 417 U.S. 156, 175 (1974), a requirement which, the court went on to emphasize, is "not a discretionary consideration to be waived in a particular case." Id. at 176. As the Court of Appeal has put it,

Notice to class members is crucial to the entire scheme of Rule 23(b)(3). It sets forth an impartial recital of the subject matter of the suit, informs members that their rights are in litigation, and alerts them to take appropriate steps to make certain their individual interests are protected... It also preserves the right of class members to "opt out" if they believe their interests are antagonistic to the other class members, or if they wish to proceed by separate suit.

\* The manner of using the media is set forth in plaintiffs' memor of January 22 and 26, 1981, and April 14, 1982.

Erhard v. Prudential Group, Inc., 629 F2d 843, 846 (2d Cir. 1980). Rule 23(c)(2) reflects well established principles of due process. Members who would be bound by the judgment are entitled to "notice reasonably calculated, under all the circumstances, to apprise interested parties of the pendency of the action..." Mullane v. Hanover Trust Co., 330 U.S. 306, 314 (1950), reaffirmed in Greene v. Lindsay, 102 S.Ct. 1874, 1878 (1982); see also Johnson v. General Motors Corp., 598 F2d 432, 436-37 (5th Cir. 1979).

Plaintiffs must make an effort to identify the class members entitled to receive notice. Identification is "simply another task that must be performed in order to send notice..." Oppenheimer Funds, Inc. v. Sanders, 437 U.S. 340, 355 (1978). Identification of members of the class is, therefore, central to both Rule 23 and to due process, and Rule 23(d) authorizes the court to enter orders to facilitate such identification, as the Court squarely held in Oppenheimer Funds, supra, at 350-56. Under the circumstances of this case it is clear that plaintiffs may use mass media, specifically radio, television and newspapers, to advise potential class members of the existence of this litigation and to invite those individuals to identify themselves in order to receive subsequent individual notice. Rule 23(c)(2). Oppenheimer Funds, supra.

Payton v. Abbott Laboratories, 83 FRD 382 (D.Mass 1979); 86 FRD 351 (D.Mass 1980), the rationale of which is seriously misunderstood by defendants,\* adopted such an identification procedure. The court there included within the plaintiff's "reasonable efforts" to identify potential class members the use of newspaper advertisements and television and radio prepared announcements. To allay any danger of overstatement, the court required that all material be submitted for its prior approval. See 86 FRD at 352. See also Dolgow v. Anderson, 43 FRD 472, 500 (E.D. N.Y. 1968) (notice by publication may be most practicable way "of identifying members of the class"). See also the decisions recognizing the propriety of class notice through the media where direct mail notice is not feasible, e.g., In re Scientific Control Corp., 80 FRD 237 (S.D.N.Y. 1978); In re U.S. Financial Securities Litigation, 69 FRD 24, 47 (S.D. Cal. 1975)

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\* In their Suggested Modification memorandum of January 23, 1981, defendants cite Payton for the proposition that where "the stakes... are high" and a judgment would bind all class members who did not opt out, notice by first class mail, return receipt requested may be required to provide the court with proof that notice has actually been received. The issue of the precise form of notice to be sent to members who have been identified is not now before the court. We are concerned only with identification of members of the class, not with the forms of the subsequent notice about the litigation. But we would add that the Payton court recognized that the drug at issue was one taken by pregnant women that allegedly had adverse effects on female offspring that did not manifest itself until several years after birth. The court was justifiably concerned that a judgment might bind individuals prior to the time they discovered that they had even been exposed to the drug. In this unique situation, the court deemed it appropriate to limit the scope of the class to include only those women who knew of their exposure to the drug. The court recognized that individual notice was an appropriate safeguard for potential members of the class who - even if they were aware of the existence of the litigation - would not necessarily be aware of its application to them.



We submit that, given the possible incompleteness and unreliability of the records, documents and lists from which plaintiffs may otherwise obtain information concerning prospective class members, this is a paradigmatic example of a case authorizing use of the media to identify additional class members. The class is numerous and geographically dispersed, cutting across chronological and socio-economic lines; a similarly widespread, public identification effort will produce acceptable results in complying with the notice requirement of Rule 23.

Defendants' objections to media oriented identification efforts are baseless. They point to no rule that forbids such a process; nor do they address the duties imposed upon class representatives by virtue of Rule 23 and the Due Process Clause to identify class members. Rather, they raise a spectre: media notice, whatever its form or content, would "cause widespread confusion," frustrate "review and meaningful comprehension of the information" and generally be "misunderstood". These objections are wholly chimerical. In a long line of cases the Supreme Court has rejected the notion that advertising of lawful activity can be suppressed on the bare assertion that it is "inherently" misleading. See, for example, Matter of R. M.J., 102 S.Ct. 929 (1982). Here media use is solely to invite potential class members to receive additional and full information concerning the instant action.

The form of media <sup>message</sup> notice would be submitted for approval by this court at which time defendants' specific objections could be addressed. Potential class members would read or hear a general description of the action and of the class whose members are eligible for inclusion. An invitation to receive additional information would be extended. Plaintiffs would respond to any subsequent inquiry by an eligible class member with written individual notice, once again approved by this court, setting forth an explanation of the litigation and the rights of class members.

In sum, far from constituting a source of intractable confusion, media use will simply provide data necessary to supply class members with the more specific information to which they are entitled under Rule 23 and Due Process. Given defendants' unremitting insistence that plaintiffs are required to undertake reasonable efforts to identify individual class members their sudden solicitude for the comprehension of those class members is, to say the least, somewhat quixotic.

Wholly apart from plaintiffs' possible obligation to notify individual class members under Rule 23, plaintiffs are entitled to use media identification to communicate with prospective members of the class, as Gulf Oil Co. v. Bernard, 452 US 89 (1981), makes plain. In Gulf Oil, the district court had entered an order

prohibiting communications concerning the case from parties or their counsel to both potential and actual class members. On appeal to the Fifth Circuit, thirteen judges of that court held that the restriction violated the first amendment. 619 F2d 459 (1980). The Supreme Court did not reach the constitutional issue. In essence it accepted the view of the eight concurring judges in the court of appeals that the prohibition of communication was not an "appropriate" order for the conduct of class litigation as required by Rule 23(d). Observing that the order "interfered with...efforts to inform potential class members of the existence of the lawsuit," 452 U.S. at 101 \*, the Court held without dissent, that any such restraint must be predicated on "a clear record and specific findings that reflect a weighing of the need for a limitation and the potential interference with the rights of the parties." Ibid.

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\* Well before these most recent pronouncements from the Supreme Court, district courts administering class actions fully recognized the need for communication with potential class members. Thus, in Hormel v. United States, 17 FRD 303 (S.D.N.Y. 1955), the court permitted class action plaintiffs to "circularize others similarly situated and ask them to intervene in the suit" if plaintiffs could do so at their own expense. Similarly, in a lengthy and well-reasoned opinion the court in Zarate v. Younglove 86 FRD 80 (C.D. Cal, 1980) denied defendants' request for an order regulating communication, including publication of newspaper advertisements, with potential class members. The court, after review of the relevant cases, found that an order without a demonstration that plaintiff's conduct posed a serious and imminent threat to the fair administration of justice and would violate constitutional prohibitions on prior restraint. Similar results have been reached in Norris v. Colonial Commercial 77 FRD 672 (S.D. Ohio 1977) (post-class certification fund solicitation from class members permitted subject to court supervision) and Coles v. Marsh, 560 F2d 186 (3d Cir. 1977).

Defendants argue that media identification "would become an unbounded device for generating publicity and soliciting claims."\* The argument amounts to no more than an assertion of "stereotyped and conclusory statements" that the Court in Gulf Oil held insufficient for barring communication in class actions. Id. at 102.n.16. Here the class has already been certified and the form of the media advertising would be under the supervision of this court. Defendants' argument is, in fact, a contention that media advertising can never be other than impermissible solicitation - an assertion that is inherently implausible and one in the very teeth of the commercial speech and bar advertising decisions of the Supreme Court. Compare Conflicts in Class Actions and Protection of Absent Class Members, 91 Yale L.J. 590, 608-614 (1982) demonstrating the insubstantial character of the solicitation arguments even with respect to communications prior to class certification.

B. The First Amendment Does Not Authorize  
Suppression.

We would emphasize that not only does Rule 23 not authorize a blanket prohibition on media use to contact class members, the first amendment would bar Rule 23 from imposing such a restriction. The matter is thoroughly discussed by the en banc Fifth Circuit in Gulf Oil, supra, and we need do no more than refer to that court's

\* Defendants' Memorandum, dated April 29, 1982 at 2.

opinion. We simply note the Supreme Court has recently reaffirmed its concern that widespread communication between counsel and potential clients not be unnecessarily inhibited. In In the Matter of R.M.J., 102 S.Ct. 929 (1982), the Court once again pointed out that "(t)ruthful advertising related to lawful activities is entitled to the protections of the first amendment." Id. at 937. The Court then invalidated restrictions on attorney advertising, including restrictions on the mailing of announcement cards to members of the general public. Id. at 938-939. These restrictions, the Court emphasized, could only be justified by a finding that such advertising was misleading or otherwise violated some substantial state interest, not capable of being achieved by a less restrictive alternative. Here, any concerns for misleading information can be appropriately controlled by this court's review of plaintiff's proposed form of media identification. We submit, therefore, that in light of Gulf Oil and R.M.J., any greater constraint would exceed this court's power under FRCP 23(d) and the first amendment.\*

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\* We note also that plaintiffs' proposal is fully consistent with the Manual for Complex Litigation as revised after the Supreme Court's decision in Gulf Oil Co. v. Bernard. The Manual recognizes the need for liberal construction of that case and for the free flow of communication between class members or their counsel and potential class members. Only specific findings of abuse are considered by the authors of the Manual to justify interference with that communicative right. Manual for Complex Litigation, S. 1.41 (1981).

POINT III

IF NECESSARY, PLAINTIFFS ARE PREPARED  
TO USE OTHER MEANS OF IDENTIFICATION  
OF AGENT ORANGE VICTIMS WHO ARE  
CLASS MEMBERS.

Should further efforts be deemed necessary, plaintiffs suggest several other sources who may, through their communications network help identify Agent Orange victims:

a. All those whose names and addresses can be identified and furnished by the known ex-servicemen's organizations. This group shall include organizations such as the American Legion, Veterans of Foreign Wars, Disabled American Veterans, Agent Orange Victims International, Vietnam Veterans of America.

b. All those whose names and addresses appear on a compilation of such data by those states which have contacted Vietnam veterans directly during the decade of the 1970's for purposes of distributing state-wide legislated bonuses or letters of gratitude if said states will voluntarily furnish such data. In this group there are approximately sixteen states.

POINT IV

IF NECESSARY, PLAINTIFFS ARE PREPARED  
TO USE DISCOVERY AND THE FREEDOM OF  
INFORMATION ACT TO ASCERTAIN THE  
GOVERNMENT'S LISTS OF AGENT ORANGE  
VICTIMS.

---

Finally, we have been informed by various government agencies that their list of veterans are dated, incorrect and incomplete.\* They do not appear to be a promising source of good data. Nonetheless, if the efforts at identification previously proposed are not productive, plaintiffs will confront the need for using discovery processes and the Freedom of Information Act as further means of identification of the Agent Orange victims.

---

\* See Keith Kavenagh Affidavit, dated August 31, 1982, accompanying this memorandum.

CONCLUSION

We do not suggest that all the methods outlined above are necessary to constitute a "reasonable effort" at identification. Rather, it is our intent to set forth a common sense structured plan for identification. The plan set forth above carries within itself a feedback mechanism which will guide the court and the parties in addressing the crucial question as to whether the efforts have been reasonable, productive and cost effective.

The answer to this question will enable the Court to address the issue of what is the best practical notice under the circumstances.

Dated:  
August 31, 1982

Respectfully Submitted,

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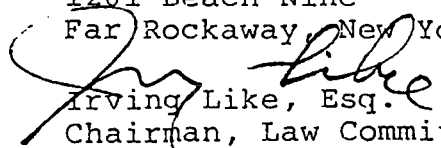
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UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

-----X

In re.

"AGENT ORANGE"

PRODUCT LIABILITY LITIGATION

AFFIDAVIT

MDL #381  
(All Cases)

-----X

W. KEITH KAVENAGH, being duly sworn, deposes and says that I am a member of the law firm of Yannacone & Yannacone, a member of Yannacone & Associates, and duly licensed to practice in the State of New York and admitted to practice before the Federal District Court, Eastern District of New York.

1. On May 28, 1982, in company with David J. Dean, a member of the law firm of Dean, Falanga & Rose, a member firm in Yannacone & Associates, I attended a conference convened and directed by Joan Bernott, Esq., U.S. Department of Justice, at the office of the Civil Division, Torts Section, Safeway Building, Room 1102, Washington, D.C.

2. Present at the conference were fifteen representatives of the armed services of the United States and government agencies, three attorneys representing certain defendants. (Exhibit A). The conference convened at 10:53 and ended at 14:30.

3. The purpose of the conference was to determine, if possible, the extent to which the armed services and other government agencies maintained contact with Viet Nam veterans, over what period of time and by what method; the availability of names and addresses of those who served in the armed forces from 1962 through 1972, the currency and reliability of such data, and bulk mailing capabilities.

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4. As for assistance from the Social Security Administration, that agency would require both surname, first initial; and social security number to access a given address through a computer search. The address thus gleaned from the records would be that given by the person on the date he applied for a social security number. A person who applied for a number in 1962 would list his then current address, which is the only address the Administration could produce twenty years later. By matching names with W-2 forms, the Administration can locate a last known employer through 1980, forward mail and request it be sent on to an employee. Thereafter, it is solely within the discretion of the employer to forward it or discard it.

5. Verification by that agency of name-number for a large request takes one-two months and a computer tape with the known name/social security number is a prerequisite. Up to 200,000 letters, standard size paper, duplexed with single sheet-preferred, can be accomplished with two months lead time. The representative could not commit the Administration to any cooperation in mailing class notices.

6. Using this agency's addresses is futile and would be akin to relying upon Genesis for the current addresses of the progeny of Noah. Considering the vintage of the addresses of those who served in Viet Nam from 1962 to 1972, and taking into account the well known mobility of the American people, no reasonable businessman would rely on or make use of such a listing in a mass mailing for marketing purposes. One must conclude that the Social Security Administration is not a feasible route to take to obtain addresses.

7. The General Services Administration maintains a mailing list only for those currently in the armed services; nothing for ex-servicemen. By definition, discharged Viet Nam veterans are not included in any required mailings from the G.S.A. The few still on active service cannot be identified as such. This agency is not a source of names/addresses for purposes of mailing class notices.

8. The National Archive is a depository for computer tapes of 10,000,000 names and addresses of ex-servicemen, known as the 201 File. The list does not indicate place of service. Most tapes are housed in St. Louis, Missouri; a few made in 1971 and considered 80% accurate as to addresses at that date, are in Monterey, California. Portions of the tapes date back to 1965, but accuracy is considered to be 25%. Prior to that date manual records were kept. The inability to determine the place of service of an individual from these tapes renders them useless for class notice purposes.

9. In the opinion of the U.S. Navy representative, that branch of the service has no list of men assigned to fleet or shore duty in Viet Nam. It is his belief that all served off-shore and would not have been exposed. His remarks did not take into account activities of construction battalions, if any (aka "Sea Bee's"), river patrols, dockside duty in loading-unloading operations. Nevertheless, it is estimated that between 145,000 and 150,000 Navy personnel served in the Southeast Asia theatre. From the information available, it would be impossible to identify them individually.

10. The Air Force representative reported that his branch of the service began automated data of active service personnel in 1971. The data includes only those currently on active

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duty. Prior to 1969, personnel were assigned service numbers; thereafter social security numbers have been used. In either case one must refer to the DD214 ( discharge papers ) to ascertain individual numbers for search purposes. The Air Force maintains an archive in Denver, Colorado of active and reserve records. Retention is for ten-year periods. Of the estimated 325,000 Air Force personnel who served in Viet Nam, only about 50,000 might be identifiable from this source, but it would take many months to do.

11. Use of the Air Force data would provide meager results at best. It is unknown how many remained in that service after 1972. Even given a manual search of all prior records, the addresses would be minimally twelve or more years old. Use of the automated data post-1971 might produce a few names, a fraction of those unknown Air Force veterans who should be notified. Both types of searches would be spread over many months with the end-product unreliable and questionable at best.

12. The Military Area Command - Viet Nam (MAC-V) documents were discussed briefly. Comprising 40,000 square feet of paper, they are in the custody of the U.S. Army. MAC-V consists of all documents not destroyed or lost dealing with daily activities of the military ranging from uniform-of-the-day orders to other somewhat more serious military matters. All service branches are included. Buried somewhere in that Mt. Everest of documents are the names of the 170,000 personnel who died in Viet Nam. It is unlikely that when personnel were reassigned and recorded, either individually or by unit, the home addresses were also noted. For class notice purposes, this collection of documents would, for all intents and purposes, be useless.

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13. The Veterans Administration personnel presented a combined picture of overkill and an historian's nightmare of destruction of records.

a. The VA center in Austin, Texas has tapes of discharged veterans' names and addresses from January 1, 1973 onward, derived from the DD214's. Many tapes deemed outdated have been destroyed.

b. Commencing in 1967, using DD214 data, the VA mailed general benefits notices to all honorably discharged personnel. Many of the original mailing records have been destroyed as outdated. Prior to 1967, VA contacts with veterans were confined to those who sought benefits or were being treated for in-service injuries. There is no address correction capability, so that the one given on the DD214, many ten or more years old, is the one relied upon if available in current files.

c. The VA Beneficiary Identification and Records Location System (BIRLS) file extends back to the Indian Wars (which one was not mentioned) and includes those receiving compensation or pensions. On January 1, 1973, BIRLS had no names of Viet Nam veterans and began collecting them based on who received the Viet Nam Service Medal issued by Viet Nam or the Viet Nam Campaign Medal of the United States. "Other than honorable" discharged personnel are not included in VA files.

d. In the Compensation and Pension files there are 5,000,000 names from any war and is restricted to those ten percent or more disabled. They can be segregated by dates of duty, but prior to 1972 only name and VA number were recorded; no addresses.

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e. BIRLS establishes contact with veterans only if contacted by them for benefits and the request is either denied or payments are made. It is likely that outdated files have been destroyed. Before 1973 veterans were assigned a VA number; thereafter social security numbers were used. Thus, patient treatment files, including inactive names, can be searched only by the assigned VA number or social security number. Given only one of the two essential factors, a name, nothing could be found. A number is the sine qua non for discovery of names and addresses, the age of the entry determining the reliability of any address.

f. The possibility of using GI insurance policy data as a source proved less than gratifying. Unlike their World War II counterparts, all of whom automatically received insurance, Viet Nam servicemen only received it if they applied individually. Many did not. Unless notified later of any change, addresses would reflect the date of application. An insurance policy exists for any serviceman who has a disability, its unusual feature being the lack of a physical examination requirement. It can be presumed that any names and addresses accessed from this source would be duplicated in other VA files as note elsewhere in this affidavit.

g. The VA does have a compilation of 7,000,000 names of those who have received or are now receiving educational benefits. It includes all those from World War II onward and is current for those now taking advantage of such benefits. An inactive file is on tape housed in Chicago. It was estimated by Ms. Elinor

Hunter, VA Educational Services, that, since more Viet Nam era veterans applied for educational benefits than those from previous wars, the list of names might be about sixty percent accurate. Again, a name and a social security number are prerequisites to search for addresses. Many addresses would prove to be outdated and useless, particularly if a veteran exhausted his benefits or dropped out years ago..

h. Generally, the VA is precluded from divulging the names and addresses of veterans by the Privacy Act, 5 U.S.C. 552a. However, pursuant to the Release of Names Act, 38 U.S.C. 3301, it can provide Congressmen with selective lists of names and addresses, subdivided based on zip codes, for mailing public interest announcements relative to VA benefits.

i. When asked a hypothetical question that, given a completely new benefit that all veterans must be made aware of, how would the VA go about notification? The consensus of those present was that reliance would be placed on any available mailing list in-house, with all its shortcomings as noted herein. Thereafter, the VA would request assistance from the various ex-servicemen's organizations such as the American Legion, Disabled American Veterans, Veterans of Foreign Wars, and similar groups. They have sought and obtained such assistance sporadically since 1967. About five of these organizations have been given tapes of names and addresses between 1967 and 1974. Whether they still have them is, of course, problematical and the dates strongly suggest the tapes, if available and not discarded, would be outdated.

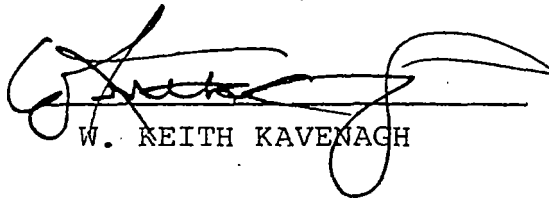
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j. The Agent Orange Registry, consisting of 85,000 Viet Nam veterans who have applied to the Va for care or benefits, is reasonably current, but reliance on addresses is questionable, duplication with other VA lists is a virtual certainty, and an ongoing attempt to update and verify addresses and names speaks to its unreliability.

14. If nothing else came of this conference, it can be concluded that the federal government's data, vis-a-vis useable names and addresses for class notification, is the long sought black hole in space into which all has been drawn and little or nothing of value able to escape.

15. One suggestion was agreed upon by most present. The many veterans' organizations very probably have reasonably current lists of names and addresses of members. So too do those states such as Wisconsin, Pennsylvania, Oregon, North Dakota, South Dakota, Minnesota, Massachusetts, and six more who are known to have compiled Viet Nam veteran names and addresses for purposes of distributing to them small benefits or communications of gratitude. It was the consensus that such lists would be more reliable, albeit not complete, than anything the federal government agencies could produce.

DATED: Patchogue, New York  
August 31, 1982

  
W. KEITH KAVENAGH

Sworn to before me this 31st  
day of August, 1982.

  
NOTARY PUBLIC

MARJORIE S. BOGART  
NOTARY PUBLIC, State of New York  
4747440 Suffolk County  
Term Expires March 30, 1983

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EXHIBIT A

Persons Present at Washington, D.C. Conference,  
May 28, 1982

|                               |                                                                              |
|-------------------------------|------------------------------------------------------------------------------|
| 1. Joan Bernott, Esq.         | Department of Justice,<br>Civil Division, Torts.                             |
| 2. Major John White           | U.S. Air Force.                                                              |
| 3. Commander Hugh M. Highland | U.S. Navy.                                                                   |
| 4. Douglas L. Clark           | U.S. Army Agent Orange<br>Task Force(AAOTF).                                 |
| 5. Richard S. Christian       | AAOTF.                                                                       |
| 6. Francis K. LeClercq        | U.S. Air Force Military<br>Personnel Command.                                |
| 7. David M. Bullock           | U.S. Army, Litigation.                                                       |
| 8. Paul M. Swanenburg         | Social Security Administration.                                              |
| 9. M. Reardon                 | U.S. Navy                                                                    |
| 10. Glenn Parr                | U.S. Air Force, J.A.C.C.                                                     |
| 11. Elinor Hunter             | Veterans Administration(V.A.)<br>Education Services.                         |
| 12. Clarence A. Johnson       | V.A. Administrative Services.                                                |
| 13. Jerome Berger             | V.A. Compensation & Pension.                                                 |
| 14. Mike McIntyre             | V.A. Administrative Services.                                                |
| 15. Gina Abate                | V.A. Administrative Services.                                                |
| 16. Fred Conway               | V.A., General Counsel.                                                       |
| 17. Edwin Matthews            | Budd, Larner, Kent, Gross,<br>Picillo & Rosenbaum (Thompson<br>Chemical Co.) |
| 18. Robin Bierstadt           | Townley & Updike (Monsanto).                                                 |
| 19. Jeffrey Silberfeld        | Rivkin, Leff, Sherman & Radler<br>(Dow Chemical Co.)                         |
| 20. David J. Dean             | Yannacone & Associates.                                                      |
| 21. W. Keith Kavenagh         | Yannacone & Associates.                                                      |

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

In Re

"Agent Orange"

Product Liability Litigation

MDL No. 381  
(All Cases)

PLAINTIFF'S SUPPLEMENTAL MEMORANDUM  
SUPPORTING CLASS CERTIFICATION

December 30, 1982

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POINT I

PLAINTIFFS HAVE SET FORTH A STRUCTURED PLAN TO MEET  
THE "REASONABLE NOTICE" REQUIREMENTS FOR THE CLASS  
CERTIFIED BY THIS COURT.

Throughout this litigation, plaintiffs have demonstrated a willingness to fulfill their obligations to identify and notify absent members of the class. It must be recalled, however, what the extent of those obligations are. Defendants suggest that identification and individual notification must be made to all class members at all costs. Thus, defendants claim that plaintiff's burden is to identify and individually notify all class members." Defendants Supplemental Memorandum at 4. This position, however, seriously misstates both the Federal Rules and the case law. FRCP 23(c)(2) and Eisen embody a rule of reason that requires "the best notice practicable under the circumstances, including individual notice to all members who can be identified through reasonable effort." The test of reasonableness is whether the cost and burden of an identification effort is justified in light of the expected results it will produce. See, In re Nissan Motor Corp. Anti-trust Litigation, 552 F2d. 1088, 1098-99 (5th Cir. 1977).

Defendants' Supplemental Memorandum in opposition to class certification rests on the explicit, but as we will demonstrate, flawed major premise that plaintiffs have not made an adequate

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PRELIMINARY STATEMENT

Defendants have, in a submission entitled "Supplemental Memorandum In Opposition to Class Certification" sought to convince the Court that the Agent Orange litigation is not suitable for class certification. This is now the third time that defendants have rehashed their objections to class treatment of this case. They cite no new governing law except a Ninth Circuit case which supports the appropriateness of class certification in this case. In the main the arguments retread those made several times over and which have been rejected by this Court. All this takes place in the context of a lengthy submission by the plaintiffs in this case which sets forth a carefully structured plan for full identification of members of the class and for the mailing of individual Rule 23(c)(2) notice to each member so identified.

In the absence of any new evidence or superior binding authority, it is clear that Judge Pratt's earlier rulings constitute the law of the case. We thus believe that our response in this case is surplusage that burdens the parties and the Court needlessly. Nonetheless, the misstatements of fact and law in defendants' brief are so significant that we feel constrained to reply.

effort or proposed an adequate means, to identify all Agent Orange class members. Defendants argue that an independent effort by plaintiff would identify the class members but that plaintiffs instead have embarked upon an illusory and fruitless effort to solicit the assistance of the United States to identify class members for the plaintiffs. Defendants' argument, to say the least, is astonishing because it presupposes that what the sovereign U.S. Government declares is an unreasonable effort for it to undertake is reasonable for the plaintiffs and should be performed by them.

A. History of Plaintiffs' Efforts to Identify  
Members of the Class.

The following historical facts demonstrate the absurdity of defendants' views.

1. The Government counsel, by letter of January 27, 1981, advised the Court and the parties that the Government did not have the capacity to issue class notification to all class members because the information necessary for such a task is not feasibly machine retrievable. Defendants' Supplemental Memorandum p.5.

2. After the government's letter of June 14, 1982, advising that it would not volunteer federal assistance with class notice, plaintiff's counsel, by April 12, 1982 letter, requested the Government to pursue several means to enable

it through its various departments and agencies to identify the veterans. (p.6 and footnote).

3. Plaintiff served notice dated July 12, 1982, upon the Veteran's Administration and Defense Department requesting production of records indicating the names and last known addresses of all Vietnam veterans. (pp. 6, 7).

B. The Government's Incapability of Identifying the members of the Class through Government Records.

4. The Government responded to plaintiff's notice declaring that obtaining the names and addresses of most of the Vietnam veterans would necessitate searching the personnel records of each of the millions of persons who served in the Armed Forces of the U.S. during 1961 to 1972, and that to secure such names and addresses "would require a great deal of time and expense and that the manual search of individual records...would take several years to complete at a cost of several million dollars". (p.8).

5. Details as to the obsolete, incorrect and incomplete status of the various government's agencies' lists of veterans are contained in the affidavit of Keith Kavenagh, dated August 31, 1982, accompanying Plaintiff's August 31, 1982 "Memorandum Setting Forth Plan for Identification of Agent Orange Victim Class Members." Mr. Kavenagh's affidavit reported on a May 23, 1982 conference at the Department of Justice in Washington, D.C. attended by 15 representatives of the armed services and government agencies. Several inescapable conclusions were drawn from such conference. First, that the Social Security Administration was not a feasible route to obtain addresses because its lists of addresses were obsolete (Kavenagh, p.2). Second, that the General Services administration did not maintain mailing lists of discharged Vietnam veterans and, hence, was not a source of names/addresses for purposes of mailing class notices (Kavenagh, p.3). Third, that the National Archive lists of ex-servicemen do not indicate place of service, and, hence, are useless for class notice purposes (Kavenagh, p.3). Fourth, that the U.S. Navy has no list of men assigned to fleet or shore duty in Vietnam, thus making it impossible to identify those who were exposed (Kavenagh, p.3). Fifth, that the Air Force data includes only those currently on active duty, and that it would take many months searching through its archives to identify those who served in Vietnam, and that of the 325,000 Air Force personnel who served in Vietnam, only about 50,000 might be identifiable from this source. Furthermore, the Air Force data would produce an



unreliable and questionable end product because the addresses would be 12 or more years old (Kavenagh, p.4). Sixth, the MAC-V documents, comprising 40,000 square feet of paper would yield the names of the 170,000 personnel who died in Vietnam, and it is unlikely that the home addresses of personnel were noted, when they were reassigned so that the MAC-V collection of documents would be useless for class notice purposes. (Kavenagh p.4). Seventh, that the V.A. records were incomplete or unreliable because of: (Kavenagh, pp.5-7);

- a) distribution of documents;
- b) lack of names, addresses or address correction capability;
- c) absence of names of Vietnam veterans not receiving compensation or pensions;
- d) absence of assigned V.A. or Social Security members;
- e) limited utility of G.I. Insurance policy data;
- f) limited value and inaccuracies in V.A. compilation of 7,000,000 names of servicemen from World War I onward who have received or are now receiving educational benefits (Kavenagh, p.6).

Eighth, that the Agent Orange Registry 85,000 addresses are questionable (Kavenagh, p.8).

The questionable reliability of the Agent Orange Registry as a class notice source is confirmed by the Comptroller General's Report to the Congress, "V.A.'s Agent Orange Examination Program: Actions Needed to More Effectively Address Veterans'

Health Concerns" (GAO/HRD-83-6, October 25, 1982) (hereinafter, the GAO report). The GAO report found that complete addresses are lacking for many veterans, the registry contains inaccurate and unreliable data (See, pp. 23-29 annexed hereto as Exhibit A). Ninth, that as late as October 29, 1982, the Government's Counsel advised the Special Master and the parties that the V.A.'s discharge system lists only veterans separated from military service after 1973, has no program for updating the addresses and does not reflect individuals discharged from military service prior to 1973 (See October 29, 1982 letter from Arvin Maskin, Esq., annexed hereto as Exhibit B).

In the face of this massive evidence of the Government's incapability, because of the inadequacy of its records, of identifying the members of the Agent Orange class of veterans, defendants continue to rely on the January 28, 1981 affidavit of an attorney employed with the law firm representing defendant Thompson Chemicals Corp. The findings and conclusions of the government officials and GAO, previously described, thoroughly negate whatever limited informational value may be ascribed to Mr. Matthew's affidavit.

Even if one were to fully credit Mr. Matthew's affidavit, for the plaintiffs to be required to undertake the effort of identification in the manner he suggests is on its face unreasonable, and not contemplated by FRCP 23(c)(2) or Eisen v. Carlisle and Jacquelin, 417 U.S. 156, 173 (1974).

C. Plaintiffs' Reasonable Effort to Identify All  
Members of the Class.

In sharp contrast to the "wild goose chase" which defendants propose, plaintiffs have set forth a plan for the identification of class members. Plaintiff's August 31, 1982 memorandum is premised on the common sense notion that at this late date the great likelihood is that those who have suffered Agent Orange related injuries have either filed suit, retained counsel to file suit, or made themselves known to the government by reporting their injuries to the V.A. hospitals (and would thus be listed in the Agent Orange Registry). In order to spread the net even more broadly, plaintiff's have suggested that the media be used in the identification process. This would entail utilization of an Agent Orange profile setting forth the types of injuries alleged to be Agent Orange related. To all persons who are identified through the means described above, individual notice would be mailed in strict conformance with Eisen and Rule 23(c)(2).

Defendants persist in consistently confusing the issues of class member identification through use of media and "media notice." Plaintiffs do not propose that notice to the class members who have been individually identified be given through the media. We have pledged to give individual notice to identifiable class members. We do propose, however, to enlist the media in helping to identify those Vietnam veterans who might perchance not be embodied in the specific sources already named.

POINT II

PLAINTIFFS' DETAILED PLAN OF IDENTIFICATION AND  
SUBSEQUENT NOTICE RESOLVED THE BASIC QUESTION OF  
CLASS DEFINITION AND CLASS REPRESENTATION.

Defendants argue that the class is incapable of adequate definition because its composition is dependent upon the subjective feeling or belief of its members that they have been injured (pp.13, 14). The argument is specious because it presupposes that an objective standard defined in terms of injuries cannot be employed to determine the composition of the class. Of course it can. The content of any notice, ultimately approved by the Court will specify the medical profile, or Agent Orange injury profile which plaintiffs claim characterizes the Agent Orange victims.\* While some individuals may erroneously claim that they fall within the class so defined, that fact alone does not undermine the validity of the class. Thus, in a common securities fraud class action, the fact that one who claims class membership did not actually purchase stock in the defendant company during the relevant time period does not invalidate the definition of the class. Those persons who erroneously identify themselves as members of the class will be weeded out at the proof of claim stage.

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\* For example, manifestations of chloracne, testicular and other cancers, liver disorders, birth defects, etc.

A class is properly defined if the membership of the class is capable of ascertainment under some objective standard. Rappaport v. Katz (SD N.Y. 1974) 64 FRD 512, 515. The class of Vietnam veterans and their families certified by the Court is already historically and objectively defined. It is capable of ascertainment through plaintiff's plan of class identification. The Court has already generically defined the members of the class.

"Here, the plaintiff class can be readily identified. They are persons who claim injury from exposure to Agent Orange and their spouses, children and parents who claim direct or derivative injury therefrom." (Pretrial Order No. 26, p.5).

Less precise class definitions have been upheld as sufficient (Yaffe v. Powers (CA 1st 1972) 454 F2d 1362 (class defined as "all other individuals who wish to engage in peaceful political discussion without surveillance and photographing by defendants")); Carpenter v. Davis (CA 5th 1970), 424 F2d 257 (class defined as "all those who wrote for, published, sold or distributed a certain publication or who wished or expected to do so in the future"); Schnell v. City of Chicago, (CA 7th 1969), 407 F2d 1974 ("all news media personnel"); Stanford v. Gas Service Co. (D. Kans. 1972) 346 F.Supp. 717 ("utility customers generally"). Serna v. Portales Municipal Schools (D.N.M. 1972) 499 F2d 1147 ("persons with Spanish surnames"); Gruterrez v. Quinn & Co. (D.N.M. 1972), 55 FRD 395 ("Mexican Americans").

The Court can readily refuse or particularize this description for purposes of media identification and class

notice, by defining the class as including those suffering particular injuries. For this purpose, plaintiff is prepared to submit a medical profile, describing the Agent Orange symptomology, which will permit identification of those members of the class of 2.5 million veterans who are Agent Orange victims.

On submission and acceptance by the Court of an Agent Orange symptomology, the naming of representative plaintiffs can follow as a matter of course.

### POINT III

#### THE DALKON SHIELD CASE IS INAPPOSITE TO THIS LITIGATION.

Defendants next assert that the recent Ninth Circuit case, In Re Northern District of California "Dalkon Shield" IUD Products Liability Litigation, Civ. No. 81-4648 (9th Cir. June 18, 1982), supports their motion in opposition of class certification in this case. The proposition is simply without foundation. In Dalkon Shield, the district court had certified two classes: a Rule 23(b)(1) nationwide class for purposes of deciding whether punitive damages were appropriate and a class composed of California plaintiffs for deciding issues of defendants' liability. The Ninth Circuit reversed both certifications. The procedural and substantive distinctions between Dalkon Shield and the instant case, however, are so blatant that the Ninth Circuit

actually used the court's opinion in this litigation as a model in juxtaposing their facts with a case that was properly one tried through the class action process. Thus, as we demonstrate below, any attempt to use that case as persuasive authority for noncertification here borders on the frivolous.

As a procedural matter, Dalkon Shield was a case in which the trial court, sua sponte, raised the class certification issue and resolved it against the expressed interests of each party to the litigation. Unlike the typical class action, including the present one, in which a plaintiff or plaintiffs voluntarily assume the burden and responsibility of adequately representing absent class members and ensuring that they receive proper notice, the court in Dalkon Shield had thrust these responsibilities on plaintiffs who neither sought nor desired class certification. The case was brought to the Ninth Circuit on an appeal by plaintiffs from a district court order conditionally certifying the nationwide class action on the punitive damage issue and the statewide class on the liability issue. The district court, to which numerous Dalkon Shield cases had been remanded by the Multidistrict Litigation Panel, had ordered the parties to brief the feasibility of a class action to deal with the multiple claims. All but one of the California plaintiffs' counsel had opposed class certification. Non-California plaintiffs had not been notified of the briefing request and had not participated in conferences held to discuss the class action proposal.

Indeed, counsel designated by the court to be lead counsel for the classes attempted to resign. Attorneys for the statewide class asserted that they would recommend that their clients opt out of the Rule 23(b)(3) class. Slip opinion at 15. All defendants originally opposed class certification. Notwithstanding this virtually unanimous rejection of the class action procedure by all parties, including the plaintiffs - whom the class action device was intended to assist in proper cases - the trial court had entered an order certifying the nationwide and California classes. On appeal, in addition to the challenge brought by all plaintiffs to the class certification, one of the three defendants opposed one of the classes and another defendant opposed certification of both classes. Given this procedural history, it is clear that the Ninth Circuit expressed a proper reluctance to impose the class action device on unwilling plaintiffs.

This procedural history stands in marked contrast to the position of plaintiffs and counsel in the instant litigation. Plaintiffs in this case have voluntarily sought class certification. Counsel for plaintiffs have established, and this court has approved, an elaborate system of coordinating legal resources to ensure adequate representation of absent class members. No class member has contested certification of the class or suggested that his interest would be adversely affected by class certification.



Additionally, the classes certified by the Dalkon trial court included a Rule 23(b)(1) class action on the issue of punitive damages. Unlike the situation in the instant case of a Rule 23(b)(3) class, members of the punitive damages class were bound by the Court's determination, without any right to opt out. The binding effect on absent plaintiffs with no opportunity to opt out, notwithstanding their resistance to the class device, again precipitated a more cautious approach by the Ninth Circuit, accentuated by a move to decertify by distant plaintiffs. See, slip opinion at 4. Given the availability of the opt-out procedure in the instant Rule 23(b)(3) class, the concern for binding dissenting class members that precipitated the reversal of the Rule 23(b)(1) class is inapposite.

On the substantive merits, it was as clear to the Ninth Circuit as it was to this Court that class treatment was appropriate to this action. In its discussion of Rule 23(b)(3) class actions, the Ninth Circuit cited this Court's class action decision as establishing and applying the proper standards for class treatment. Indeed, the Ninth Circuit used this Court's opinion as a contrast to the Dalkon Shield cases to demonstrate why the latter failed to meet the "typicality" requirement of Rule 23(a)(3) and the "adequacy of representation" requirement of Rule 23(a)(4). Given the Ninth Circuit's approving citation to this litigation, it does not lie in defendants' mouths to contend that the Dalkon Shield decision mandates decertification here.

Ultimately, the Ninth Circuit rejected class treatment in Dalkon Shield because of defendants' liability, as to which the class had been certified, required investigation into the individual issues that could outnumber common issues for the class. See Slip Opinion at 10. The court determined that inquiries into liability would depend on issues of representations, warranties and injuries which would vary among the plaintiffs and that would require individualized showings of proximate cause. See, Slip Opinion at 15-16. This situation posed difficulties both of commonality and of defining "typical" claims that could be asserted by a manageable number of representative plaintiffs.

These factors that led the Ninth Circuit to decertify the Rule 23(b)(3) class in Dalkon Shield have no analogue in the instant litigation. It must be remedied that to this point, class certification issues have been raised only with respect to the current phase of the case management plan that considers the relationship between the government and the defendants.\* As Judge Pratt stated in his opinion of December 26, 1980, with respect to this issue (and perhaps others as well), commonality exists because "the need (for combined treatment) is compelling, and the benefits are substantial". The court has determined that class treatment of these issues is appropriate "(w)hatever may

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\* The Court has intimated that there may be additional issues, eg., negligence, product liability, and "general causation", where a jury will be able to hear all the evidence relating to the development, manufacture and use of Agent Orange, and the scientific and medical evidence relating to its potential effects, and report its findings in carefully drafted special verdicts", that are appropriate for class action.. 506 F Supp. 763 at 785, 786.

be the individual questions relating to the manner and extent of each veteran's exposure to Agent Orange, and relating to the particular effects of Agent Orange on the veteran when considered along with his/her medical history, circumstances, lifestyle and other unique conditions...". Thus, the very issues of individual plaintiffs' conduct and circumstances that the Ninth Circuit considered inappropriate for class treatment, slip opinion at 16, have not been included at the present time in the series of issues to be tried through the class action procedure. Thus, to contend as defendants do that the complexity of issues regarding individual claims mitigates against class action is to misrepresent the manner in which it is anticipated that these claims will be litigated.

In sum, the deficiencies of the class in Dalkon Shield are irrelevant here. Defendants have ignored or contorted the carefully bifurcated structure of this litigation in a frantic effort to bring this case within the rubric of a Ninth Circuit case that itself distinguished the Agent Orange cases from improper class certifications. This effort should be, at the least, rejected outright.

#### POINT IV

DEFENDANTS' CONTENTIONS EVEN IF ACCURATE, DO NOT  
MANDATE DECERTIFICATION.

Even if defendants' concerns for the ability to identify

and notify the class were well taken, decertification would not be the appropriate remedy. Defendants' allegations of inadequate definition are directed at the nonascertainability of class members. Although we reject this assertion with respect to the entire class, it is certainly clear that these allegations are without foundation with respect to some members of the class. There are a sizeable number of claims in a discrete subclass of known veterans who have already manifested injuries as a result of exposure to Agent Orange. These claimants comprise veterans whose names appear on the Agent Orange Registries and who have filed lawsuits or otherwise sought counsel with respect to injuries alleged to have been suffered through exposure to Agent Orange. These persons constitute a readily ascertainable group of veterans who meet even the excessively narrow criteria proposed by defendants by virtue of being former servicemen with claims of exposure to Agent Orange, regardless of whether they are currently known to plaintiffs' counsel. See Defendants' Supplemental Memorandum at 14-15. Thus, even if this Court were to concede the validity of defendants' claims, a reconstituted class composed of the readily ascertainable veterans would be the appropriate remedy, rather than decertification.

While some of the veterans who are listed on the Registries or who have retained counsel may ultimately be determined not to have valid claims against the defendants, that possibility does not vitiate the utility of class certification for the purposes that this Court has considered appropriate. In any class action

mere membership in the defined class is not tantamount to an award of damages on a finding of liability against defendants. Individual plaintiffs must prove their claims of actual damage. Thus, in the instant case, any award of damages to an individual plaintiff will be contingent on his ability to demonstrate exposure to Agent Orange and damage resulting from that exposure. It is, therefore, of no moment that the class as defined may contain persons who ultimately are shown to have no actual claim. What is important is that the class contain those persons who most probably will be entitled to damages in the event liability is demonstrated. The names on the Registries and the plaintiffs who have actually filed suit or consulted counsel constitute a group with respect to which it is most probabilistic that damages can be shown. It is, therefore, this readily ascertainable group - at a minimum - to which class certification is appropriate.

#### CONCLUSION

The attempt by defendants to raise once again the issue of decertification flies in the face of settled law of this case. On numerous occasions, the Court has rejected the same arguments for decertification and consolidation presented in the Defendants' Supplemental Memorandum. Nevertheless, we feel constrained to point out that decertification at this point of the litigation would impose significant costs on the court and the class.

The simple fact is that decertification cannot transform this litigation to the same point it occupied two years ago. Prospective claimants have reasonably relied on orders of this Court to refrain from pursuing their individual claims. Fundamental fairness demands notification to these claimants of any decertification order. Paradoxically, the same difficulties that defendants contend prevent notification to the class would, if true, bar the requisite notice to prospective claimants that they may no longer rely on this Court's protection. Conversely, any mechanism appropriate to notify prospective claimants of decertification would be similarly effective for Rule 23(c)(2) purposes and would thus render decertification unnecessary.

That decertification has even been mentioned at this stage of the proceeding is due to the irrational posture of the defendants with regard to notice and identification. Plaintiffs have presented a well thought out plan for identification of class members. We then propose, to give individual notice to all members appropriately identified.

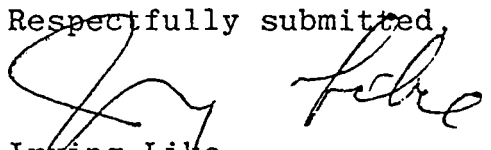
The defendants seek to impose upon hapless, impoverished, desperately injured veterans, who were the conscripted wards of their government, a task which their guardian, the sovereign itself is unable to perform because of the incompleteness and unreliability of its records. There is further irony in the fact that the defendants want to identify every government

document and witness no matter how remote and tenuous their connection to the issues. But defendants do not really want to identify all members of the class who were injured by contaminated Agent Orange herbicides except if the process of identification can be made so burdensome and costly to plaintiffs as to destroy their class and thereby nullify the identification process itself.

In short, defendants here invoke Rule 23(c)(2) and Eisen not to facilitate identification, but to destroy it.

December 30, 1982

Respectfully submitted,



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EXHIBIT A

EXCERPTS FROM GAO/HRD-83-6 REPORT  
10/25/82

10816



### CHAPTER 3

#### VA SHOULD DISCONTINUE THE

#### AGENT ORANGE REGISTRY

VA's computerized agent orange registry does not contain specific diagnoses for the health problems found in Vietnam veterans or veterans' addresses. As a result, the registry is of little use in determining whether veterans are experiencing an unusual incidence of certain health problems, and it cannot be used to locate veterans for followup examinations. Although the registry's deficiencies could be corrected, the corrections would be costly and the data still could not be used as a basis for scientifically valid conclusions about veterans' health. Discontinuing the registry could save almost \$1 million a year in administrative staff and computer costs.

#### THE REGISTRY LACKS ADEQUATE INFORMATION ON HEALTH PROBLEMS EXPERIENCED BY VIETNAM VETERANS

Although VA established the computerized agent orange registry to determine what health problems were being experienced by Vietnam veterans exposed to agent orange, the registry does not contain specific diagnoses of health problems and lacks adequate exposure and medical history information to compare veterans' health problems with their degree of exposure to agent orange or the area of Vietnam where they served.

The registry contains general descriptions of the health problems identified by VA physicians during agent orange examinations, such as the number of veterans with skin diseases, neoplasia (tumors), or birth defects in their children, but it does not identify the specific types of skin conditions, tumors, or birth defects. For example, as of December 1981, the registry showed that 19 percent of the veterans examined had skin diseases, but it did not specify whether the skin problems were chloracne (a symptom of dioxin exposure), a common dermatitis, or a fungal infection, such as athlete's foot. Similarly, the registry showed that about 4 percent <sup>1/</sup> of the veterans examined had neoplasia (tumors), but it did not differentiate between malignant (cancerous) and benign (noncancerous) tumors; identify the location of the tumor; or indicate whether the tumor was a soft tissue sarcoma like those found in humans exposed to phenoxy herbicides, such as agent orange. While the registry indicated that almost 8 percent of the veterans examined reported having children with birth defects, it does not identify the type of defects reported, such as cleft palate or

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<sup>1/</sup>As noted on page 25, VA later found that only about 1 percent of the veterans examined had neoplasia.

renal abnormalities. As a result, the registry cannot be used to determine whether Vietnam veterans are experiencing an unusual incidence of chloracne or other skin conditions, what types of tumors they have and in what locations, or what types of birth defects their children have.

In addition to insufficient descriptions of veterans' health problems, the registry lacks data on the sex of the veterans examined. As a result, VA cannot determine whether (1) the 49 veterans with gynecological diseases represent a significant proportion of the females examined and (2) children of female Vietnam veterans have experienced an unusual incidence of birth defects.

Furthermore, the registry does not contain adequate exposure and medical history data and physical examination findings to permit comparisons of veterans' health problems with their degree of exposure or the area of Vietnam where they served because such information is not elicited in the agent orange examination. As discussed on pages 11 and 12, this problem is primarily because of the poor design of the examination forms.

#### LACK OF ADDRESS INFORMATION PREVENTS USE OF REGISTRY FOR FOLLOWUP

Although the agent orange registry was intended to facilitate followup with veterans who had agent orange examinations, VA had not included veterans' addresses in the agent orange registry, and the locator cards at half the facilities we visited did not contain adequate information for followup contact with veterans. A 1974 World Health Organization report entitled "Current and Future Uses of Registers in Health Information Systems" states that one essential use of a registry is to identify and locate individuals. Although VA's Data Analysis Task Force identified this weakness in 1980, no action has been taken to resolve the problem.

Since 1978, VA medical facilities have been required to maintain a locator card file with the name, complete address (including zip code), and social security number of each veteran who had an agent orange examination. The locator system was intended to facilitate any future followup with veterans. However, only 8 of the 14 medical facilities visited maintained adequate information in the locator card system to permit followup contact with veterans, and none of the facilities routinely updated the locator card files. Based on our review of a random sample of locator cards at each facility, we found that complete addresses were lacking for

--75 percent of the cards reviewed at the Chicago-Westside medical center,

--98 percent of the cards reviewed at the Los Angeles-Wadsworth medical center, and

--98 percent of the cards reviewed at the East Orange medical center.

Generally, the cards were missing the veterans' city, State, and zip code. We also identified at least one veteran in the locator card files at each facility who, according to their medical records, had not completed or never had examinations.

To send our questionnaire to a random sample of about 1,100 veterans who had received agent orange examinations, we asked each medical facility to provide the addresses of veterans in our sample who had their examination at that facility. About 9 percent of the questionnaires we sent out were undeliverable.

REGISTRY CONTAINS INACCURATE  
AND UNRELIABLE DATA

Extensive coding errors and duplicate records have been identified in the registry by VA's Inspector General and program officials. Although the coding sheets are difficult to complete, only 3 of the 14 facilities we visited were reviewing the coding sheets to insure their accuracy, and central office officials had taken few actions to improve the reliability of registry data.

A July 1981 report by VA's Inspector General found that 43 percent of the records entered into the registry during the processing cycle at the end of 1980 contained coding errors. Furthermore, Inspector General staff told us that the registry contained more than one agent orange examination for some veterans because the system could not detect duplicate records. The Inspector General found that examinations entered in the registry, which were later found to be inaccurate and returned to the medical facility for revision, could be reentered into the registry without deleting the previously inaccurate record. The Inspector General's report concluded that, because of the lack of internal controls to prevent duplicate records from entering the system, the number of examinations was overstated, and incorrect statistics were generated which compromised the value and integrity of the registry.

Our review of about 4,000 examinations included in the registry as of October 1980 identified 118 (3 percent) duplicate records. In addition, we identified six veterans entered in the registry who had not completed an examination.

VA central office officials reviewed the examination records of veterans shown in the registry as having tumors because of the unusually high number of tumors diagnosed. They found that three out of every four entries for tumors in the registry were wrong due to coding errors. Nonetheless, as of June 1982, VA central

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office had not corrected the inaccurate tumor data or assessed the reliability of other data in the registry.

The administrative staff at five of the VA medical facilities we visited said that the coding sheets were difficult to complete and may have resulted in coding errors. The staff at one facility said that they had to interpret the physicians' comments because the medical history and physical examination sections of the data collection forms require physicians to provide handwritten descriptions of their findings.

In addition, administrative staff at four facilities said that the coding instructions prepared by VA's central office contribute to inconsistent coding because they permit discretion in coding certain kinds of information. For example, VA staff preparing the coding sheets were instructed to use their "best judgment" in coding the number of exposures and types of contact with agent orange because the questions from the data collection form were general and may result in veterans' providing unspecific responses. VA staff were also instructed to record "unsure" answers regarding the veterans' contact with agent orange as "no the veteran did not experience any of the listed types of contact," although the coding sheet permitted entering uncertain responses. Coding instructions also directed VA staff to record "unknown" answers as "no" answers to such other questions as "Did veteran wear protective gear?"

Although VA medical facilities were instructed in January 1980 to review all coding sheets to insure their completeness and accuracy, only 3 of the 14 medical facilities we visited were reviewing coding sheets. A fourth facility reviewed the coding sheets to see if all the boxes were filled in, but did not review the accuracy of the entries. In March 1981, officials at the Long Beach medical center told us that they had not submitted any coding sheets because they lacked adequate administrative staff to complete them. Subsequently, in April 1981 Long Beach officials initiated action to submit backlogged coding sheets.

#### VA HAS MADE LITTLE USE OF THE REGISTRY

Although VA prepares monthly reports summarizing the data in the registry, the special assistant to the chief medical director for environmental medicine told us that little use has been made of the information because it contains many flaws and is drawn from a self-selected population which cannot be used as a basis for scientific conclusions about the health problems being experienced by veterans.

In October 1980, the Chairman of VA's Data Analysis Task Force responsible for analyzing the information in the agent orange registry told VA's Agent Orange Policy Coordinating Committee that the information in the registry was not suitable for making scientific

conclusions about the health status of Vietnam veterans because the registry data were drawn from a self-selected population. The Task Force recommended that the collection of health data be discontinued and that the registry include only the veteran's name, address, telephone number, and social security number. However, the Committee decided to continue collecting health data for the registry to maintain general information on the health of veterans examined.

While VA is reluctant to release the registry data because it may be construed as an epidemiology study, VA officials believe the registry data would be helpful in planning the epidemiology study mandated by Public Law 96-151 and in conducting followup examinations to determine whether the health status of previously examined veterans had changed. However, as shown on pages 23 and 24, the registry's lack of specific information on veterans' health problems makes it of limited use to researchers planning the epidemiology study. The draft protocol for the epidemiology study relied on the findings of past scientific studies to determine what symptoms should be looked for in veterans. Furthermore, according to a central office agent orange official, VA has no plans to conduct followup examinations with previously examined veterans to see if their health has changed because there is no medical need for the examinations, they would be costly, and the findings would have no scientific value.

#### REVISING THE REGISTRY COULD BE COSTLY

VA estimates indicate that almost \$2.7 million has been spent on the agent orange registry from its inception in January 1980 through August 1982. The registry, however, contains a number of deficiencies. Revising the registry to improve its usefulness would require additional programming and staff which VA officials acknowledge would be costly.

VA estimated that about \$85,000 was spent to start up the registry, including the purchase of equipment and planning, programming, and testing the system. The monthly recurring cost of entering data from agent orange examinations and programming is estimated to be about \$8,500. The largest portion of the registry's cost is for completion of coding sheets at VA medical facilities. According to VA, about \$892,000 is spent annually for the time taken by administrative staff to complete the coding sheets at VA medical facilities.

Several actions would be necessary to correct the registry's deficiencies. First, the addresses of over 89,000 veterans who have had examinations would have to be determined and entered into the registry's computerized data base. Second, VA medical facilities would have to develop procedures for updating veterans' addresses. Third, the data entered into the registry for each veteran would have to be checked against the veteran's examination

record to correct the inaccurate data and delete duplicate records. Finally, VA medical facilities would need to increase administrative staff time to review the coding sheets to insure their accuracy.

Although we did not estimate the cost of revising the registry, the additional computer programming and staff time necessary to make the revisions suggests that it would be significant. Discontinuing the completion of coding sheets at VA medical facilities and entry of data into the computer could save almost \$1 million a year.

#### CONCLUSIONS

VA's computerized agent orange registry is of little use in determining what health problems are being experienced by Vietnam veterans exposed to agent orange and in locating veterans for followup examinations. Limiting the registry to the veteran's name, address, telephone number, and social security number could save almost \$1 million a year in administrative expenses.

#### RECOMMENDATIONS TO THE ADMINISTRATOR OF VETERANS AFFAIRS

We recommend that the Administrator, through the chief medical director, discontinue the computerized agent orange registry and maintain a list of veterans who have had agent orange examinations.

#### AGENCY COMMENTS AND OUR EVALUATION

VA disagreed with our recommendation to discontinue the computerized agent orange registry. In our view, the reasons VA cited for maintaining the registry are not consistent with other comments it provided.

According to VA, the registry is needed because it is the most extensive list of veterans who have had agent orange examinations. Yet, elsewhere in its comments, VA acknowledged that it had established a separate automated mailing list of the same veterans. Also, VA maintained that the registry is an important mechanism for detecting significant health trends in the Vietnam veteran population which may differ from the general population. However, in commenting on another recommendation, VA stated that

"such statistics cannot be used to compare the prevalence of illnesses or disabilities reported by Vietnam veterans with that of the general population because the veterans examined are a self-selected population \* \* \*."

Finally, VA said that the registry enables VA to determine areas requiring more indepth medical or scientific analysis, but disagreed with our recommendation that it do such analyses of skin problems, tumors, and birth defects identified in agent orange examinations.

VA could save almost \$1 million a year by discontinuing the computerized agent orange registry and continuing the automated mailing list.



EXHIBIT B

LETTER FROM ARVIN MASKIN, ESQ.  
10/29/82

10824

Exhibit B





UNITED STATES DEPARTMENT OF JUSTICE

WASHINGTON, D.C. 20530

Address Reply to the  
Division Indicated  
and Refer to Initials and Number

October 29, 1982

AMaskin:emm  
157-0-107

Telephone:  
(202) 724-6744

EXPRESS MAIL

Sol Schreiber, Special Master  
Milberg, Weiss, Bershad  
& Specthrie  
One Pennsylvania Plaza  
New York, New York 10199

Re: In re "Agent Orange" Product  
Liability Litigation, MDL #381

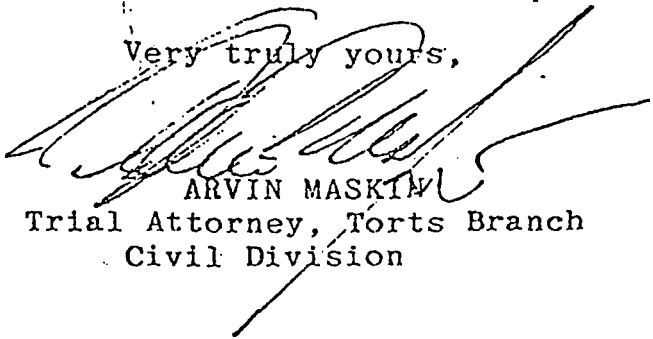
Dear Mr. Schreiber:

As you may recall, when the Government was asked to advise the parties to the "Agent Orange" litigation of sources for names and addresses of veterans who served in Vietnam, it provided a description of available resources within the Veterans Administration.

One of the systems described was the Veterans Administration Discharge System (VADS), which contains a Vietnam service indicator for veterans separated from military service after 1973. The system also contains the addresses of veterans at the time of their separation from military service. There is, however, no program for updating the addresses. Also, the system does not reflect individuals discharged from military service prior to 1973.

There is presently available a computer printout, arranged by Zip Code, of the VADS listing of 539,286 veterans with Vietnam service indicators. If requested to do so, the government is prepared to transmit the listing to the parties, subject, of course, to an appropriate protective order to ensure against unauthorized use of the listing.

Very truly yours,

  
ARVIN MASKIN  
Trial Attorney, Torts Branch  
Civil Division

cc:  
ALL COUNSEL

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UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

-----X  
In Re

"Agent Orange"

MDL No. 381  
(All Cases)

Product Liability Litigation  
-----X

ERRATA

Plaintiffs submit the following errata to Plaintiff's Supplemental Memorandum dated December 30, 1982, supporting class certification.

Page 3, last paragraph, third line, change "April 12" to "July 12".

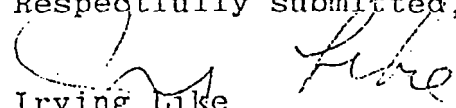
Page 6, third line, change "square" to "cubic".

Page 9, third line, change "reeling" to "feeling".

Page 10, second line from bottom, change "refuse" to "refine".

January 4, 1983

Respectfully submitted,

  
Irving Like  
Yapnacone & Associates  
Counsel for Plaintiffs  
Office & P.O. Address  
P.O. Drawer 109  
Patchogue, New York 11772

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

-----X

In Re

"AGENT ORANGE"

MDL No. 381

(All Cases)

Product Liability Litigation

-----X

NOTICE TO CLASS MEMBERS OF PENDENCY  
OF CLASS ACTION

Attention All Vietnam War Veterans,  
Their Wives, Parents and Children

This notice is given to you pursuant to an order of the United States District Court for the Eastern District of New York. It is to inform you of the pendency of a class action commenced 1979 , of your right to be included as a member of the class, and how to request exclusion from the class if you do not wish to remain a class member.

PART I: NOTICE OF CLASS ACTION DETERMINATION.

A. Nature of the Litigation.

1. Plaintiffs, Vietnam war veterans and members of their families claiming to have suffered serious injury and damage as a result of the veterans exposure to a variety of

herbicides (including "Agent Orange") in Vietnam, commenced these actions against defendant chemical companies.

2. There are four (4) groups of plaintiffs; they include Vietnam veterans; their spouses, their parents, and their children. Another group of plaintiffs includes civilian employees of war-time relief organizations and war-time contractors who may have been affected by the herbicides. They assert numerous theories of liability including strict products liability, negligence, breach of warranty, intentional tort and nuisance. The plaintiff veterans seek to recover for personal injuries caused by their exposure to herbicides including Agent Orange. The family members seek to recover on various derivative claims such as pecuniary loss for wrongful death, loss of society, comfort, companionship, services, consortium, guidance and support; some of the children assert claims in their own right for genetic injury and birth defects caused by their parents' exposure to Agent Orange and other herbicides; some of the veterans' wives seek to recover in their own right for miscarriages.

3. There are now approximately 15,000 suits pending in the Eastern District of New York involving over 15,000 plaintiffs. There are many more, who, have at the Court's request and pending decisions on the plaintiffs' motions for class certifications, refrained from bringing individual

actions.

4. The present plaintiffs who have filed suits or who have appeared as intervening plaintiffs in the litigation come from most of the fifty states, Austrailia, New Zealand and some other foreign nations.

5. The corporate defendants include the Dow Chemical Company, Diamond Shamrock Corporation, The Monsanto Company, T & H Agriculture and Nutrition Company, and Uniroyal, Inc. Motions are pending to rejoin as defendants Hercules, Inc. and Thompson Chemical Corporation, formerly a division of William T. Thompson Company.

6. On December 29, 1980, United States District Court Judge George C. Pratt certified this lawsuit as a class action including all of the approximately 2.5 million Vietnam veterans, as well as their wives, widows, parents and children, wherever they live or are located, who believe they may have been injured, killed, or born deformed because the veterans were exposed while in Southeast Asia to toxic chemicals such as 2,3,7,8-TCDD or, "dioxin", which contaminated the herbicide Agent Orange and certain other herbicides used in Southeast Asia.

7. The defendants have denied all claims asserted against them and have challenged the complaints on various grounds, including plaintiffs' standing to sue, lack of jurisdiction, statute of limitations, insufficiency in law, plaintiffs' contributory negligence, plaintiffs' assumption of known risks, plaintiffs' misuse of products manufactured by the defendants and have raised other defenses which, if proven, may constitute a bar to all claims. In addition, the defendants attempted to sue the United States Government seeking indemnification or contribution in the event the defendants are held liable to the plaintiff. These third party complaints against the U.S. Government have previously been dismissed and the Government is presently not a defendant in these class actions.

8. In their third party complaints against the Government the defendants alleged negligence, misuse of the product, post/discharge failure to warn, implied indemnity, denial of due process and failure to comply with herbicide registration laws.

9. On December 29, 1980, the United States District Court for the Eastern District of New York entered an order which in part rendered the following decision:

A. The Court granted the U.S. Government motion to dismiss the defendants' third party complaints

against the Government;

- B. The Court granted permission for plaintiffs' suit to proceed as a class action under Federal Rules of Civil Procedure 23(b)(3), on behalf of all persons exposed and either injured or at risk of injury from the toxic effects of Agent Orange and other herbicides and various members of their families against the defendant chemical companies. The Court certified the class as consisting of over two million Vietnam veterans and their families;
- C. The Court has denied the remaining defendants' motions for summary judgment and has adopted certain case management plans providing for "phased" trials to determine issues which are common to all class members.

10. The trial of these actions with respect to issues common to all class members is presently set to begin on Monday, May 7, 1984 and is to be presided over by the designated Multi-District Judge, the Hon. Jack B. Weinstein, Chief Judge of the U.S. District Court for the Eastern District of New York, sitting at the U.S. District Courthouse for the aforesaid district located within the City of New York, Borough of Brooklyn.

Some of the issues which will be determined through a trial to commence on said date include whether, from a scientific and medical standpoint of general causation, the Agent Orange herbicide and other herbicides manufactured by the defendants and sold to the United States Government and used in Vietnam were toxic and could cause the injuries to human health alleged by the plaintiffs, whether from a scientific and medical standpoint of proximate causation, the herbicides actually did cause certain specific injuries and damages alleged by certain individual representative plaintiffs, whether the defendants are protected against liability to the plaintiffs under a defense which is known as the "government contract defense" which the defendants assert, if proven, as a bar to all claims, whether the defendants are liable to the plaintiffs under the theories of liability asserted or any of them.

11. If you are either a Vietnam veteran, the wife or widow of a Vietnam veteran, the parent or child of a Vietnam veteran who may be considered a member of the class, certified by the Court, you will be deemed a member of the class unless you request exclusion from the class by the        day of        , 198 .



12. Class members who do not request exclusion may receive the benefit of, and will be bound by any settlement or judgment favorable to the class.

13. Class members who do not request exclusion also will be bound by any judgment adverse to the class, and will not have the right to maintain a separate action even if they have already filed their own action.

14. If you wish to remain a member of the class you need do nothing, however, if you do not request exclusion you may enter an appearance through your counsel.

15. If you wish to be excluded from the class, you must submit a written request for exclusion. For your convenience the request for exclusion may be submitted on a form entitled "Request for Exclusion". If you have received this notice by mail, a Request for Exclusion should accompany it. If you are reading this notice in a newspaper or other publication or seeing this notice on television, or hearing it on radio, or learning of it through any other means, or if you did not receive a Request for Exclusion form in the mail, you may obtain one from Steven J. Schlegel, Attorney at Law, Schlegel & Trafaleet, Ltd., 1 North La Salle Street, Suite 3900, Chicago Illinois, 60602. A written Request for

Exclusion may be submitted without using the Request for Exclusion form, but must refer to the above entitled litigation as "In Re 'Agent Orange Product Liability Litigation', MDL No. 381", and include your name and address in a statement that you request exclusion. Any request for exclusion must be mailed on or before the            day of            , 1984, to the Clerk of the United States District Court for the Eastern District of New York, 225 Cadman Plaza East, Brooklyn, New York.

16. The plaintiffs are represented by a group of attorneys who have been appointed the Agent Orange Plaintiffs Management Committee, and whose members include:

Steven J. Schlegel  
Schlegel & Trafalet, Ltd.  
One North LaSalle Street  
Suite 3900  
Chicago, Illinois 60602

Thomas W. Henderson  
Baskin & Sears  
Frick Bldg., 10th Floor  
Pittsburgh, Pennsylvania 15219

Benton Musselwhite  
609 Fannin  
Suite 517  
Houston, Texas 77002

They have been designated by the Court as lead counsel. Communications with them should be addressed to: Steven J. Schlegel, Schlegel & Trafalet, Ltd., One North LaSalle Street, Suite 3900, Chicago, Illinois 60602. They are being aided in their duties

of representing the interests of the plaintiffs by numerous other law firms, both in the United States and in Australia and in New Zealand.

17. You will be represented by the Agent Orange Plaintiffs Management Committee unless you desire to be represented by your own counsel. If you desire to be represented by your own counsel, you may do so by having your own counsel file a notice of appearance with the Court. Representation by your own counsel will be at your own expense. In addition, you are entitled, but not required, to request to intervene as a party in the class action at your own expense.

18. Examination of pleadings and papers. This notice is not all inclusive. The references to pleadings and other papers and proceedings are only summaries. For the full details of the class action, the claims and defenses which have been asserted by the parties, you or your counsel may desire to contact the Plaintiffs Management Committee by writing Mr. Schlegel, or refer to the pleadings and other papers filed in the class action. You may examine the files on the class action on any weekday from a.m. and to p.m. at the office of the Clerk of the United States District Court for the Eastern District of New York at 225 Cadman Plaza East, Brooklyn, New York.

19. Interpretation of this Notice. Except as indicated in the orders and decisions of the U.S. District Court for the Eastern District of New York, no court has yet ruled on the merits of any of the claims or defenses asserted by the parties in the class action. This notice is not an expression of opinion by the Court on any of such claims or defenses and is being sent to you solely to inform you of the nature of the litigation, certification of the class and the procedures established by the Court for trial of the issues, related discovery and briefing.

United States District Court Judge

Date: \_\_\_\_\_

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

-----X

In Re

"AGENT ORANGE"

MDL No. 381

Product Liability Litigation

-----X

PLAINTIFFS' SUPPLEMENTAL  
CLASS NOTICE  
UTILIZING RADIO MEDIA

January 22, 1981

YANNACONE & ASSOCIATES  
Attorneys for Plaintiffs

10837

## Radio Media Plan

The use of radio as the means of giving the "best practicable notice" is dictated by several considerations:

1. The responsibility and willingness of radio stations to broadcast Public Service Announcements as part of their regular programming;
2. The vast mass audience reached by radio; and
3. The lower cost of radio communication as compared to TV and newspapers as a means of communicating the class notice.

### Public Service Announcement (PSA)

Although the Federal Communications Commission recently repealed a licensing standard that had required radio stations to devote a minimum percentage of their air time to news and public affairs, the broadcasters remain obligated to serve the public interest and to air programs that address issues of importance in the community, including controversial issues.<sup>1</sup>

The plaintiffs propose to have prepared and present to the Court, a brief PSA Class Notice, in tape form, with accompanying script, which would be broadcast over the nation's 8900 radio

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1 New York Times, January 15, 1981, p. 1

stations. The tape would be played in Court by cassette so that the Court and counsel for the parties can hear and comment on the proposed PSA before it is broadcast, to the end that a PSA in form and content, satisfactory to the Court will be communicated to a radio audience whose size and demographic characteristics make it likely that class notice has been given to the class of Vietnam veterans and their families.

#### Radio's Vast Mass Audience

There are a number of statistics upon which advertisers of products rely and on the basis of which they are willing to spend millions of dollars in radio advertising to sell their product. These statistics pertain to the huge audience reached by the 8900 radio stations operating in the United States.

In 1979 there were almost 451 million radio sets in use. These constituted radio's daily circulation as compared to 62 million newspapers sold everyday.

Radio is number one in reach - reaching more people in a day and week than TV or newspapers and dollar for dollar, delivers greater "people" reach and frequency than TV or newspapers.

In other words, for the same budget, radio delivers added reach, more effective reach, greater frequency and increased impressions.

PLAINTIFFS' SUPPLEMENTAL  
CLASS NOTICE  
UTILIZING RADIO MEDIA

In its pre-trial Order No. 26 of December 29, 1980, the District Court addressed the problem of class notice. The Court invited counsel to submit suggestions in writing as to how "the best notice practicable" may be given to the over two million Vietnam veterans and their families who are included in the class, by January 23, 1981, and the Court indicated the possibility of a mix of a mailed notice to veterans on the mailing list of the Veteran's Administration and on membership lists of veteran's organizations as well as the use of news media or other means by which the notice requirement can be fairly and reasonably fulfilled (p. 52).

In accordance with the Court's suggestion, plaintiffs respectfully submit herein a proposed media plan which would utilize the nation's 8900 stations to communicate a Public Service Announcement (PSA) notifying Vietnam veterans and their families of the pendency of the class action.

The radio PSA would be in a form to be approved by the Court as a means of supplementing the more conventional proposed written class notice, a copy of which was previously submitted to the Court.



The greater reach of radio stems from a number of facts which relate to its mobility and ubiquity. Radios are located not only in the home, but in cars, shops, factories and every conceivable place indoors and outdoors. Statistics published by radio trade organizations report that for advertisers who need speed, flexibility and reach with key target audiences, and cost efficiency, radio is more effective than either TV or newspapers.

Furthermore, their research shows that radio delivers the news first in the morning, is the primary news source during day-time, and radio tops other major media as the first news source in normal periods.<sup>2</sup>

Radio is also the most accessible information source because it serves the public through both battery and plug-in sets as an immediate source of news and information.

Radio's cumulative audience reach is 95.9% in a week and 83.0% on an average day,<sup>3</sup> and radio leads other major media in daily/weekly reach.

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2 "Radio Delivers The News First" - ORC Caravan surveys, July, 1975, for CBS Radio; "Radio Tops Other Major Media" - Trendex, July, 1977, New York area survey.

3 "Radio Leads Other Major Media in Daily/Weekly Reach" - Radio: RADAR, Spring, 1978 report, TV: Special Neilsen National Television Survey, Feb. 1977. Newspapers: Newspaper Readership Project, March, 1977, conducted by Audits & Surveys for Newspaper Advertising Bureau.

Apart from the fact that radio reaches more people than any other media, adults in the 18 - 49<sup>4</sup> year age group spend more time with radio than any other medium.

With this data in mind, the plaintiffs propose to broadcast 70 to 100 PSA's twice or three times daily for a period of one month and to target the PSA's so that they reach a demographic age group of 25 years and more.<sup>4a</sup>

The PSA's would be broadcast over as many as possible of the 8900 AM and FM radio stations using the fifteen wired and unwired networks. In this way it is estimated that the PSA Class Notice will reach a population in excess of seventy percent of all persons in the age group 25 and over.

Since the broadcasters are required to keep complete logs of all programming, plaintiffs will furnish the Court with proof that the PSA's have been broadcast through affidavits or other certifications by the stations evidencing the date, time and frequency of the PSAs.

Plaintiffs will also furnish the Court with the name of the station, network, location and the number and frequency of PSAs broadcast and will also furnish quantitative data if required by the Court, as to the number of listeners to each station at any given quarter of an hour and the average number of times each

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<sup>4</sup> Radio: RADAR; TV: A.C. Nielsen national television index;  
Print: TGI.

<sup>4a</sup> It is estimated that all veterans who served in the Vietnam war fall within this age group.

listener was reached with the PSA.

### Cost Considerations

The PSA carries no air charge. PSA production charges are concerned mainly with writing the script, paying the announcer who will read the script, taping the script and distributing it to as many radio stations as possible.

Fifteen wired and unwired networks cover approximately one-half the stations of the United States; hence the use of network radio stations to broadcast the tape reduces production and handling costs while assuring that the PSA will reach a vast listening audience.

In contrast, newspaper and TV costs are much greater. Neither the news or TV media are required by any regulatory agency such as the FCC to print or broadcast a PSA.

A radio audience is reached at lower costs than TV or newspaper and dollar for dollar radio delivers greater "people" reach than TV or newspapers .<sup>5</sup>

Moreover, even if a newspaper were willing to publish a PSA free of charge, the production costs associated with the printing process itself would be prohibitive if plaintiffs had to pay such costs and if the objective were to use newspapers to

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5 "Media Cost-Per Thousand Indices" - McCann-Erickson, Inc., Network and Spot TV/Radio averaged by RAB Research Dept't.

reach the vast audience which can be reached by radio.

Radio Broadcast Is A  
Valid Means of Giving Class Notice

There is ample precedent for giving class notice by publication through communications media where direct notice by mail to the class is not feasible. Danforth v. Christian, 351 F.Supp. 287 (1972) (news releases to the news media); State of Virginia v. Charles Pfizer, 440 F2d 1079 (1971) (newspaper publication); Molop v. Volpe, 333 F.Supp. 1364 (1971) (newspaper publication and radio and TV station broadcast).

The proposed PSA will inform the veteran and his family of how to obtain full details about their rights to be included or excluded in the class action. Those who respond and thereby become identifiable by name and address will be sent an individual mailed notice of the class action.

In summary, therefore:

1. Individual notice will be given to each class member when that member's name and address are reasonably ascertainable. When plaintiffs ascertain the extent to which V.A. and other third-party cooperation is possible, plaintiffs will inform the Court as to their views on allocating the burden of the cost of notice.

2. As a supplement to written mailed notice, plaintiffs submit the radio media plan utilizing PSAs as Class Notice as a two-step notification process. First, the radio stations broadcast the PSA class notice with instructions to the veterans in the listening audience as to how to respond to the message. Secondly, those who do respond will, as their names and addresses are ascertained, then be notified by mail and given individual notices.

#### Other Means of Notice

##### Newspaper and Television

Plaintiffs are currently exploring with newspaper and television media representatives the possibility of using public service announcements to be published in newspapers or broadcast over TV as a further means of transmitting the class notice.

Both of these media are considerably more expensive than radio and are less likely to reach as many of the class of two million veterans and their families as radio. However, despite these problems, plaintiffs are seeking to determine if TV and newspapers can be used as a further supplementary notice at a reasonable cost.

To the extent that it is possible to enlist the cooperation of group, network or chain owners of TV stations and newspapers, it may be possible to substantially reduce the costs of broadcasting or publishing the class notice over these media and simultaneously reach their national circulation<sup>6</sup> and viewing audience.

For example, the ten largest newspaper publishing firms by circulation in 1978 accounted for a daily circulation of 23,887,000 people, or 38.6% of the total daily circulation through 291 daily newspapers.<sup>7</sup>

The newspapers owned by these ten largest groups are published in 46 states and also in Guam, the Virgin Islands and Puerto Rico.<sup>8</sup>

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6 The total daily newspaper circulation in the United States of 1764 newspapers in 1978 was 61,836,000; the total Sunday circulation of 679 newspapers in 1978 was 53,186,000 (Editor and Publisher, International Yearbook Annual Editions 1977 and 1978; Audit Bureau of Circulation.)

7 Knight-Ridder, Gannett, Newhouse, Tribune Co., Scripps-Howard, Dow Jones, Hearst, Times-Mirror, Cox, Thomson; Source: Editor and Publisher, International Yearbook, Audit Bureau of Circulation, 6 months ending September 30, 1978.

8 "Who Owns The Media?" 1979 Knowledge Industries Publications Inc., p. 54, Appendix A2.

Thus, if these newspapers are willing to publish the PSA class notice, it will reach into every corner of the United States.

Plaintiffs respectfully request permission to report to the Court on or before January 30, 1981 the results of its exploration of the use of the TV and newspaper media as a means of giving class notice.

Notice Via Veteran's  
Administration or Defense Department

Another means of achieving notice is through an invitation or direction by the Court to the Veteran's Administration or Defense Department to mail the class notice approved by the Court as part of a regular mailing or mailings, to their mailing list of veterans who served in Vietnam and Southeast Asia during the period 1962 - 1972.

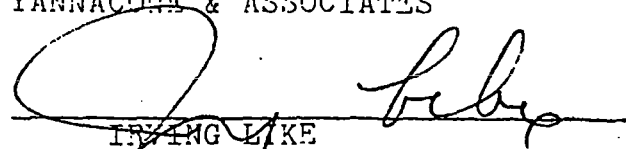
It has not been possible in this transition period between the Carter and Reagan administrations to obtain an indication as yet of the Veteran's Administration or Defense Department's position in this matter.

Plaintiffs' counsel will pursue with government counsel the possibility of government cooperation in this matter and plaintiffs will report to the court the results of their efforts.

Respectfully Submitted,

YANNACONE & ASSOCIATES

By:



IRVING LIKE

REILLY, LIKE & SCHNEIDER

Attorneys for Plaintiffs

Office & P.O. Address

200 West Main Street

Babylon, New York 11702

(516) 669-3000

Dated: January 22, 1981  
Babylon, New York

EUGENE O'BRIEN

Of Counsel

BURKE, CURRY, HAMMILL & O'BRIEN

138 Mineola Boulevard

Mineola, New York 11501



UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

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IN RE

"AGENT ORANGE"

MDL No. 381  
(All Cases)

PRODUCT LIABILITY LITIGATION

-----X

PLAINTIFFS' MEMORANDUM SETTING  
FORTH TEXT OF PROPOSED RADIO  
PUBLIC SERVICE ANNOUNCEMENT

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

-----X  
IN RE

"AGENT ORANGE"

MDL No. 381  
(All Cases)

PRODUCT LIABILITY LITIGATION  
-----X

PLAINTIFFS' MEMORANDUM SETTING  
FORTH TEXT OF PROPOSED RADIO  
PUBLIC SERVICE ANNOUNCEMENT

Plaintiffs previously submitted to the Court a proposed Supplemental Class Notice Utilizing Radio Media, dated January 22, 1981.

The Plaintiffs herewith submit the script of the proposed radio public service announcement to be broadcast over the nation's radio stations:

"Were you or anyone in your immediate family involved in the Vietnam War? Well, if you were or they were, listen carefully to this important message about "Agent Orange", a herbicide used in the Vietnam War from 1962 to 1971.

If you or anyone in your immediate family has reason to believe that injury, illness, disease or birth deformity may have resulted from exposure to

"Agent Orange" in Vietnam, Laos or Cambodia, the United States District Court, Westbury, Long Island, New York, wants you to be aware of your right to be either included in or excluded from a class action lawsuit now pending against certain chemical companies that manufactured "Agent Orange".

For full details about your rights in this class action, "Agent Orange" lawsuit write immediately to Veteran, Box 400, Garden City, New York 11530.

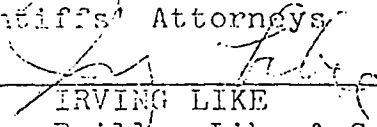
This public service message is approved by the United States District Court, Westbury, Long Island. That address again Veteran, Box 400, Garden City, New York 11530."

This script has been taped and Plaintiffs are prepared, at the Court's convenience, to play the tape so that the Court can hear exactly how the public service announcement will sound as it is broadcast and heard by the class of veterans.

Respectfully submitted,

YANNACONE & ASSOCIATES  
Plaintiffs' Attorneys

Dated: January 29, 1981

By: 

IRVING LIKE  
Reilly, Like & Schneider  
Office and P.O. Address  
200 West Main Street  
Babylon, New York 11702  
(516) 669-3000

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PLAINTIFFS' MEMORANDUM REGARDING  
USE OF TELEVISION NEWS MEDIUM  
FOR TRANSMITTAL OF CLASS NOTICE.

At the March 18, 1982 prehearing conference, the Court gave the parties thirty days in which to come forth with any further suggestions with regard to the means of transmittal of class notice.

Plaintiffs' prior filings have suggested that the radio media could be used to provide class notice.\*

Based upon information we have received from our colleague, Janet F. Phillips, Esq., of the law firm of Rogers, Monsey, Woodbury, Brown & Berggren, Esqs., we respectfully propose a supplemental publication of class notice via national network news coverage. In furtherance of such publication, we propose to assemble a news information portfolio including the form of class notice, setting forth reference to the consortium address, in video readable form, all, of course, subject to the prior approval of the Court. So presented, it is Ms. Phillip's belief that we will receive high-clearance, prime-time coverage of the class notice. Ms. Phillips informs us that she

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\* See, "Plaintiffs' Supplemental Class Notice Utilizing Radio Medium", dated 1/22/81, and "Plaintiffs' Memorandum Setting Forth Text of Proposed Radio Public Service Announcement", dated 1/29/81.

discussed this proposal personally with the president of a major television network on March 19, 1982, and that she was advised that were the network so approached, there is little doubt that the class notice message would be carried on prime-time network news, and further, that such coverage would undoubtedly not be limited to a single broadcast, but would be carried over several days. This would offer coverage of every household using television, which is virtually exposure to all Americans.

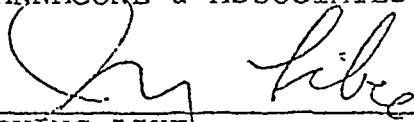
Plaintiffs propose to use the national television news network medium in the same manner as we indicated would be followed with regard to the use of radio media to transmit class notice (1/22/81 Memorandum). The television news broadcast would inform each veteran and their family of how to obtain full details about their rights to be included or excluded in the class action. Those who respond and thereby become identifiable by name and address will be sent an individual mailed notice of the class action.

We respectfully request that the Court guide us as to whether it wishes us to further pursue the use of the television news medium to give class notice. We will then approach the television network officials to work out the logistics and furnish the Court with the same

type of information we provided with regard to the  
radio public service announcement.

Respectfully Submitted  
YANNAONE & ASSOCIATES

BY:



Dated:

April 14, 1982  
Babylon, New York

IRVING LIKE  
REILLY, LIKE & SCHNEIDER  
Attorneys for Plaintiffs  
Office & P.O. Address  
200 West Main Street - Box 218  
Babylon, New York 11702  
(516) 669-3000

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

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IN RE

"AGENT ORANGE"

MDL No. 381

Product Liability Litigation

-----x

PLAINTIFFS' MEMORANDUM REGARDING  
USE OF TELEVISION NEWS MEDIUM  
FOR TRANSMITTAL OF CLASS NOTICE.

April 14, 1982

YANNACONE & ASSOCIATES  
Attorneys for Plaintiffs

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UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

FILED  
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U.S. DISTRICT COURT E.D.N.Y.  
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In Re:  
AGENT ORANGE  
Product Liability Litigation  
MDL No. 381 (All cases)

PLAINTIFFS' INTERROGATORIES, ANNOTATED TO  
SHOW MONSANTO'S OBJECTIONS

For the convenience of the Special Master, Monsanto submits its objections to plaintiffs' interrogatories separately as to each interrogatory. Monsanto objects generally to these interrogatories to the extent they are addressed to phenoxy herbicides other than 2,4,5-T and to dioxins other than 2,3,7 and 8 TCDD. See definitions 15 and 16 at p. 8. It objects to them also to the extent that they require answers based upon analysis of discovery materials (documents, interrogatory answers, deposition transcripts and the like) already made available to plaintiffs in this case. These objections are referred to herein as "General Objections". All objections are indicated on the attached annotated set of plaintiffs' interrogatories.

Dated: New York, New York  
October 24, 1983

TOWNLEY & UPDIKE

By: Philip D. Updike

A Member of the Firm  
405 Lexington Avenue  
New York, New York 10174  
(212) 682-4567

Attorneys for Defendant  
Monsanto Company

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UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

In Re:  
AGENT ORANGE  
Product Liability Litigation  
MDL No. 381 (All cases)

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PLAINTIFFS' INTERROGATORIES RELATIVE TO  
GENERAL CAUSATION DIRECTED TO DEFENDANTS (FIRST SET)

I. INSTRUCTIONS

1. These interrogatories are of a continuing nature and you are required to file and serve supplemental responses if you obtain further or different information after the date of your initial answer and before trial. Such supplementation should be made not later than twenty (20) days after any such information is received.

2. The fact that investigation is continuing or ther discovery is not complete shall not be used as an excuse for failure to answer each interrogatory as fully as possible. The omission of any name, fact or item of information shall be deemed a representation that it is not known to you, your counsel, or your representatives at the time of the service of the answers.

3. If in answering these interrogatories, or any part of them, the responding party encounters any ambiguity in construction of any matter within an interrogatory, the party shall set forth the matter deemed to be "ambiguous", select a reasonable construction and describe the construction chosen in answering the interrogatory.

4. If in answering these interrogatories, or any part of them, the responding party asserts a claim of privilege, identify the privilege and the basis on which privilege is claimed.

5. If the answer to these interrogatories, or any part of them, is not presently known or available to you, include a statement to that effect, specify the portion which cannot be answered completely, and furnish all information that is presently known or available.

6. The application time period for all information requested is 3 years prior to the date you began the manufacture, marketing, distribution, or sale of phenoxy herbicides, particularly 2, 4, 5 T, to the date of your response to these interrogatories unless otherwise specifically indicated. Each change within that period is to be given together with the date of each such change.

7. In addition to identifying any document which may be responsive to an interrogatory, attach to your response a true and correct copy of the document, together with a list identifying the interrogatory, interrogatories, or any part thereof to which the document is responsive.

8. All words of masculine gender shall include the feminine gender thereof; for example, "his" shall include "her".

9. All medical, scientific, accounting, legal and/or technical terms associated with a particular profession, industry, trade or identifiable body of knowledge shall have the meaning customarily and ordinarily associated with those terms within that industry, profession, trade or discipline.

10858

10. If any interrogatory or portion thereof requests information already provided in response to an earlier interrogatory, you may respond by specifying the interrogatory answer, or portion thereof, which contains the information sought.

11. The conjunctions "and" and "or" shall be interpreted conjunctively and shall not be interpreted disjunctively to exclude any information otherwise within the scope of any interrogatory.

12. Whenever relevant, words in the singular shall include the plural thereof; for example, "state the date" shall mean "state the dates" when there is more than one date which is relevant to the answer to the interrogatory.

## II. DEFINITIONS

As used herein, the terms listed below are defined as follows:

1. "Person" or "persons" means any individual or legal entity, including but not limited to, individuals, natural persons, representatives, agencies, associations, proprietorships, companies, corporations, partnerships, limited partnerships, joint ventures, trusts, estates, public agencies, departments, divisions, bureaus and boards.

2. "You", "yours" or "your company" as used herein means the answering defendant, its parents, subsidiaries, affiliates, predecessors or successors, all foreign subsidiaries and affiliates, and all officers, directors, representatives, agents, employees, surrogates, partners, attorneys and all persons acting on its behalf.

3. "Document" shall include the plural and shall mean without limitation:

(a) all written or printed matter of any kind, including the originals and all non-identical copies, whether different from the originals by reason of any notation made on such copies or otherwise (including, without limitation, correspondence, memoranda, notes, diaries, statistics, letters, telegrams, telexes, teletypes, telefax, telecopies, minutes, agenda, contracts, reports, studies, surveys, statements, receipts, returns, summaries, pamphlets, books, prospectuses, inter-office and intra-office communications, offers, notations or any sort of conversations, including telephone conversations and meetings, bulletins, printed matter, computer printouts and records, together with any electronic data maintained or any electronic media, invoices, work

sheets, accountant's notes, workpapers and all drafts, alterations, modifications, changes and amendments of any of the foregoing);

(b) graphic or oral records of representations of any kind (including, but not limited to, blueprints, diagrams, drawings, sepias, sketches, pictures, models, plans, specifications, details, photographs, charts, graphs, microfiche, microfilm, videotape, records, motion pictures); and

(c) electronic, mechanical or electric records or representations of any kind (including, but not limited to, tapes, cassettes, discs and recordings).

"All documents" means every document as defined above, whether an original or a copy, and whether or not in your possession, custody or control, which is known to you and every document which can be located or discovered by reasonably diligent efforts.

4. "Date" shall mean the exact day, month and year, if ascertainable, or, if not, the best approximation thereof in relation to other events.

5. "Describe" shall mean to set forth fully and clearly every fact or event of which you have knowledge relevant to the answer called for by the interrogatory.

6. "Identify" or "identification", when referring to a natural person, shall require you to provide the following information concerning that person: (a) their full name; (b) present or last known address; (c) the last date when such address was known or believed to be correct; (d) their present or last known business affiliation, title and occupation; (e) each position, title or job description during the period of time

covered by any answer referring to such person; (f) any person or persons for whom the person was representing or acting for or on behalf of during the period of time covered by any answer referring to such person.

7. "Identify" or "identification", when referring to a corporation, shall require you to provide the following information about the corporation: (a) its full name; (b) the name of the state or other jurisdiction under whose law it is incorporated; (c) the address of its principal place of business; and (d) whether it is publically or privately owned.

8. "Identify" or "identification", when referring to an entity other than a natural person or corporation (for example, association, partnership, etc.) shall require you to provide the following information: (a) the full legal name or description of the entity; (b) the name of the state or other jurisdiction under whose law it is organized; and (c) the address of its principal place of business.

9. "Identify" or "identification", when referring to an oral communication or oral statement, shall require you to: (a) state the date of each oral communication or statement; (b) state the place where each oral communication or statement occurred; (c) identify the persons making each oral communication or statement; (d) the person or persons to whom such communication was directed; (e) identify all other persons present at the time each oral communication or statement was made who may have heard such communication; and (f) if the oral communication or statement was by telephone: (i) identify each person participating in the telephone conversation; (ii) identify the place where each person

participating in the call was located at the time of the call); (g) summarize the substance of each oral communication or statement.

10. "Identify" or "identification", when referring to an act, shall require you to: (a) describe the substance of the event or events constituting each act; (b) identify the location, date and persons involved; (c) identify any documents arising from, reflecting, recording, or relating to each act.

11. "Identify" or "identification", when used in reference to any document, shall require you to: (a) state the type of document (e.g., letter, memorandum, telegram, invoice, etc.); (b) state its date; (c) state its title (if any); (d) describe its general subject matter and contents; (e) identify its present location; (f) identify its author or originator; (g) identify its present custodian; (h) if the document is no longer in your possession, identify its last known custodian, describe the circumstances under which it passed from your control to that person and identify each person having knowledge of such circumstances and/or the present location of the document.

12. "Identify" or "identification", when used in reference to a thing other than a document, oral communication, act or person, shall require you to state the nature of the thing, its location, and to provide a description sufficient to distinguish it from other similar things.

13. "Communications" shall mean conversations (whether face to face, by telephone or otherwise), correspondence, telegram or any other type of document or memorandum. Where there is a request to identify a communication, set forth the type of communication (e.g., conversation,

letter, telephone call, etc.), date and time of the communication and all persons who participated in the communication, observed, heard, read or otherwise received such communication at the time of its occurrence and state the substance of the communication.

14. "Referring" and "relating" as used herein means showing, disclosing, advertizing to, comprising, evidencing, constituting, or revealing, either directly or indirectly, in whole or in part.

15. "Phenoxy herbicide" or "herbicides" mean any herbicide product containing any phenoxy compound, and includes, but is not limited to, 2, 4, 5-trichloro-phenoxy acetic acid, its esters and salts.

16. "Contamination" shall mean any impurity, e.g., 2, 3, 7, 8-TCDD, in any phenoxy herbicide as defined above.

17. "Trade association" shall mean any group, association, council, conference, institute or information center, (including but not limited to the National Agricultural Chemical Association, and any of its "Task Forces", and the Manufacturing Chemists Association), and all others, the members of which, or participants in which, consist in whole or in part of manufacturers, producers, formulators, sellers, distributors, advertisers and promoters of any phenoxy herbicide product.

18. "Government agency" means any governmental body, agency, or commission of the United States of America or any of the fifty individual states.

19. "Belief" or "believed" means any awareness, acceptance, conviction, opinion, or supposition by any officer, director, employee or agent.

20. "Suspicion" or "suspected" means any question, intimation, impression, or perception by any officer, director, employee or agent.

10864



1. Please state the name and location of each and every facility now or previously owned or controlled by you which at any time manufactured any dioxin contaminated product. As to each such facility, please state:

(a) its years of operation;

(b) the dioxin contaminated products it manufactured in each year of its operation; and

(c) whether the facility is still in operation, and if not, why and when did manufacturing operations stop.

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OBJECTIONS

General objections.

10865

2. Please state by weight, volume and level (ppm, ppb, ppt) the dioxin contamination of all such products manufactured and sold by you.

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OBJECTIONS

General objections.

10866

3. Please state the years during which each product identified in Interrogatory #2 was manufactured and/or sold by you.

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OBJECTIONS

General objections.

4. Have you ever manufactured any dioxin contaminated product under any trade name, brand name or registered trademark? If so, please state the name or trade name of each such product and with whom it was registered and when.

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OBJECTIONS

General objections.

5. Please state each and every phenoxy herbicide manufactured and/or sold by you which contained dioxin in any form or quantity, setting forth the specific dates of such manufacture and/or sale.

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OBJECTIONS

General objections.

10869

6. If you have discontinued manufacturing and/or selling such phenoxy herbicides which contained dioxin in any form or quantity, please indicate when and state the reason(s) therefor for each product discontinued.

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OBJECTIONS

General objections.

10870

7. Please state each and every product manufactured and/or sold by you which contained dioxin in any form or quantity, setting forth the specific dates of such manufacture and/or sale.

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OBJECTIONS

General objections.

10871

8. If you have discontinued manufacturing and/or selling any such dioxin-containing product, please indicate when and state the reason(s) therefor for each product discontinued.

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OBJECTIONS

General objections.

10872



9. Please state each and every product manufactured and/or sold by you which contained dioxin in any form or quantity in which 2, 4, 5-T was a raw material or intermediate, setting forth the specific dates of such manufacture and/or sale.

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OBJECTIONS

General objections..

10873

10. If you have discontinued manufacturing and/or selling any such dioxin-containing product in which 2, 4, 5-T was a raw material or intermediate, please indicate when and state the reason(s) therefor for each product discontinued.

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OBJECTIONS

General objections.

10874

11. Did the phenoxy herbicides manufactured and/or sold by you contain any caution, warning, caveat or other statement or explanation on the product or its packaging?

(a) If so, when did the warning or statement first appear?

(b) What was the precise wording of the warning or other statement when it first appeared?

(c) Has the warning or statement been altered, amended or changed in any manner? If so, how and when was it amended?

(d) Where was the warning or statement located on each product or packaging?

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OBJECTIONS

General objections.

Post 1970 warnings irrelevant and not a proper subject of discovery (FRE 407).

12. Do the phenoxy herbicides now manufactured and/or sold by you contain any caution, warning, caveat or other statement or explanation on the product or its packaging? If so, when did such warning or other statement first appear, giving precise present language and its location on each product or packaging?

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OBJECTIONS

General objections.

Post 1970 warnings irrelevant and not a proper subject of discovery (FRE 407).

10876

13. Did the dioxin contaminated products manufactured and/or sold by you contain any caution, warning, caveat or other statement or explanation on the product or its packaging?

(a) If so, when did the warning or statement first appear?

(b) What was the precise wording of the warning or other statement when it first appeared?

(c) Has the warning or statement been altered, amended or changed in any manner? If so, how and when was it amended?

(d) Where was the warning or statement located on each product or packaging?

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OBJECTIONS

General objections.

Post 1970 warnings irrelevant and not a proper subject of discovery (FRE 407).

10877

14. Do the dioxin contaminated products now manufactured and/or sold by you contain any caution, warning, caveat or other statement or explanation on the product or its packaging? If so, when did such warning or other statement first appear, giving precise present language and its location on each product or packaging?

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OBJECTIONS

General objections.

Post 1970 warnings irrelevant and not a proper subject of discovery (FRE 407).

15. State if any health-related person employed or otherwise retained by you (including but not limited to chief medical officer, physician, medical consultant, industrial hygienist, toxicologist, analytical chemist, epidemiologist, biostatistician, immunologist, and clinician) at any time ever made any recommendations and/or suggestions to you pertaining to the risks or hazards to persons involved in the manufacturing or use of phenoxy herbicides. If so, please state:

- (a) When were such recommendations and/or suggestions made?
- (b) To whom were such recommendations and/or suggestions made?
- (c) By whom were these recommendations and/or suggestions made?
- (d) The substance of the recommendations and/or suggestions.
- (d) Produce all documents prepared which forms the basis of the answers to this interrogatory.

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OBJECTIONS

General objections.

10879

16. State if any health-related person employed or otherwise retained by you (including but not limited to chief medical officer, physician, medical consultant, industrial hygienist, toxicologist, analytical chemist, epidemiologist, biostatistician, immunologist, and clinician) at any time ever made any recommendations and/or suggestions to you pertaining to the risks or hazards to persons involved in the manufacturing or use of dioxins. If so, please state:

(a) When were such recommendations and/or suggestions made?

(b) To whom were such recommendations and/or suggestions made?

(c) By whom were these recommendations and/or suggestions made?

(d) The substance of the recommendations and/or suggestions.

(e) Produce all documents prepared which forms the basis of the answers to this interrogatory.

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OBJECTIONS

General objections.

10880



17. Please identify all of your writings (employee newsletters, posters, directives, flyers, letters, etc.) which were at any time provided to or directed to your employees, and which contain any caution, warning, direction, suggestion or recommendation as to the safe handling of phenoxy herbicides or any dioxin contaminated product.

If applicable, please attach a copy of all such writings identified in this interrogatory.

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OBJECTIONS

General objections.

Post 1970 actions irrelevant and not a proper subject of discovery (FRE 407).

10881

18. Please identify all sales brochures, sales catalogs, advertising literature, diagrams, samples and photographs (color and black and white) pertaining to the products and boxes, packaging or other containers for phenoxy herbicides and all other dioxin contaminated products. Please attach a copy of all writings and photographs (color and black and white) identified in this interrogatory.

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OBJECTIONS

Irrelevant and burdensome.

General objections.

10282

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19. Please state the names and addresses of your chief medical officers from 1945 until the present time, listing the periods of time each such medical officer was employed by you in that capacity.

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OBJECTIONS

No objection.

10883

20. Please state to whom in the corporate structure the chief medical officer reports, also giving that person's position or job title.

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OBJECTIONS

No objection.

10884

21. Please state the duties and responsibilities of your chief medical officer, including if, when and how such duties and responsibilities have changed since 1945.

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OBJECTIONS

No objection.

10885

22. Please state the names and addresses of all physicians, including consultants, who were employed, retained or otherwise engaged by you at any of its facilities from 1945 until the present time.

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OBJECTIONS

Too broad considering utility of information.

10886

23. State the names and addresses of all persons employed by you from 1945 until the present time who functioned as industrial hygienists. Please state:

(a) the facility or office to which they were assigned;  
and

(b); their complete and precise duties and responsibilities.

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OBJECTIONS

Too broad considering utility of information.

10887

24. State the names and addresses of all persons employed by you from 1945 until the present time who functioned as analytical chemists. In addition, please state:

(a) the facility or office to which they were assigned;  
and

(b) their complete and precise duties and responsibilities.

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OBJECTIONS

Too broad considering utility of information.

10888



25. State the names and addresses of all persons employed by you from 1945 until the present time who functioned as toxicologists. In addition, please state:

(a) the facility or office to which they were assigned;  
and

(b) their complete and precise duties and responsibilities.

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OBJECTIONS

Too broad considering utility of information.

10889

26. State the names and addresses of all persons employed by you from 1945 until the present time who functioned as epidemiologists.

In addition, please state:

(a) the facility or office to which they were assigned;  
and

(b) their complete and precise duties and responsibilities.

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OBJECTIONS

Too broad considering utility of information.

27. State the names and addresses of all persons employed by you from 1945 until the present time who functioned as biostatisticians.

In addition, please state:

(a) the facility or office to which they were assigned;  
and

(b) their complete and precise duties and responsibilities.

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OBJECTIONS

Too broad considering utility of information.

28. State the names and addresses of all persons employed by you from 1945 until the present time who functioned as immunologists.

In addition, please state:

(a) the facility or office to which they were assigned;  
and

(b) their complete and precise duties and responsibilities.

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OBJECTIONS

Too broad considering utility of information.

10892

29. Please state the scientific or medical periodicals to which you subscribed during the period between 1945 and the present time.

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OBJECTIONS

Too broad considering utility of information.

10893

30. Please list all scientific and medical periodicals and journals, both American and foreign, in which you claim the toxic effects of dioxin were reported at any time prior to 1970; and, give the specific references to such reports for each such periodical or journal.

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OBJECTIONS

General objections.

31. Please list all scientific and medical periodicals and journals, both American and foreign, in which you claim the toxicity, or potential toxicity, of dioxin contaminated 2, 4, 5-T herbicide was reported at any time prior to 1970; and, give the specific references to such reports for each such periodical or journal.

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OBJECTIONS

No objection.

10895

32. Please list all scientific and medical periodicals and journals, both American and foreign, in which you claim the contamination of the phenoxy herbicides, in particular 2, 4, 5-T by 2, 3, 7, 8 TCDD was reported at any time prior to 1970; and, give the specific references to such reports for each such periodical or journal.

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OBJECTIONS

General objections.

10896



33. Please state whether you have ever had a department, division or section devoted to scientific and/or medical research. If so, please state when it was first formed.

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OBJECTIONS

No objection.

34. State whether you ever made, or caused to be made, any investigation, study, test, or analysis of a medical, scientific or technical nature relating to suspected or known health hazards, physical disorders, injuries, irritations, diseases or disability associated with exposures to or use of phenoxy herbicides.

If your answer is affirmative, state or identify:

(a) the date when such "investigation, study, test, or analysis" commenced;

(b) the person who conducted the investigation, study, test or analysis;

(c) the substance of the investigation, study, test or analysis;

(d) all documents prepared, compiled, or reviewed in connection with any such investigation, study, test or analysis;

(e) all reports or findings regarding any such investigation, study, test or analysis;

(f) the results of, or conclusions reached, after any such investigation, study, test or analysis;

(g) whether you publicized, published or announced the results or conclusions identified in subparagraphs (e) and (f) and, if so, where and when;

(h) all documents which refer, reflect, relate to, or embody the information sought by this interrogatory; and

(i) produce all such documents.

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OBJECTIONS

General objections.

35. State whether you have ever made, or caused to be made, any investigation or inquiry relating to the concealment of the test results, reports, conclusions or findings referred to in subparagraphs (d), (e) or (f) of the preceding interrogatory. If your answer is affirmative, state or identify:

(a) the person interviewed in connection with the investigation or inquiry;

(b) all documents prepared, compiled, or reviewed in connection with such investigation or inquiry;

(c) all reports or findings regarding such investigation or inquiry;

(d) the results of, or the conclusions reached after, any such investigation or inquiry; and

(e) produce any such reports or findings or such documents.

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OBJECTIONS

General objections.

36. State whether you ever made, or caused to be made, any investigation, study, test, or analysis of a medical, scientific or technical nature relating to suspected or known health hazards, physical disorders, injuries, irritations, diseases or disability associated with exposures to or use of dioxins.

If your answer is affirmative, state or identify:

(a) the date when such "investigation, study, test, or analysis" commenced;

(b) the person who conducted the investigation, study, test or analysis;

(c) the substance of the investigation, study, test or analysis;

(d) all documents prepared, compiled, or reviewed in connection with any such investigation, study, test or analysis;

(e) all reports or findings regarding any such investigation, study, test or analysis;

(f) the results of, or conclusions reached, after any such investigation, study, test or analysis;

(g) whether you publicized, published or announced the results or conclusions identified in subparagraphs (e) and (f) and, if so, where and when;

(h) all documents which refer, reflect, relate to, or embody the information sought by this interrogatory; and

(i) produce all such documents.

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OBJECTIONS

General objections.

10900

37. State whether you have ever made, or caused to be made, any investigation or inquiry relating to the concealment of the test results, reports, conclusions or findings referred to in subparagraphs (d), (e) or (f) of the preceding interrogatory. If your answer is affirmative, state or identify:

(a) the person interviewed in connection with the investigation or inquiry;

(b) all documents prepared, compiled, or reviewed in connection with such investigation or inquiry;

(c) all reports or findings regarding such investigation or inquiry;

(d) the results of, or the conclusions reached after, any such investigation or inquiry; and

(e) produce any such reports or findings or such documents.

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OBJECTIONS

General objections.

10901

38. Please state whether you or anyone acting in your behalf ever engaged in any research on phenoxy herbicides and the biological effects of such phenoxy herbicides on persons coming in contact with such herbicides. If so, please state:

- (a) the date when such research commenced;
- (b) the names and addresses of the individuals or groups engaged in such research;
- (c) the complete results of said research;
- (d) what recommendations, if any, were made as a result of said research; and
- (e) if either the results or recommendations of such research were written, produce all such documents.

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OBJECTIONS

Complete objection to the words "phenoxy herbicides and" in line 2 and "such" in line 3.

General objections.

39. Please state whether you or anyone acting in your behalf ever engaged in any research on dioxins and the biological effects of such dioxins on persons coming in contact with such dioxins. If so, please state:

- (a) the date when such research commenced;
- (b) the names and addresses of the individuals or groups engaged in such research;
- (c) the complete results of said research;
- (d) what recommendations, if any, were made as a result of said research; and
- (e) if either the results or recommendations of such research were written, please attach copies of either or both.

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OBJECTIONS

Complete objection to the words "dioxins and" in line 2 and "such" in line 3.

General objections.

40. State the names and addresses of any organizations, groups, inter-company or industrial organizations to which the defendant belongs or belonged which conducted studies or researched the relationship between exposure to phenoxy herbicides and human pathologies.

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OBJECTIONS

General objections.

10904



41. In reference to Interrogatory 40, please state:

- (a) the type or nature of the studies;
- (b) when the studies were conducted;
- (c) the complete results of the studies;
- (d) the recommendations of the studies;
- (e) the resulting implementation of the studies by  
defendant;
- (f) the date when first implemented;
- (g) whether the studies were published and if so, provide  
the names of medical and/or trade journals with them, giving year, volume  
and page.

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OBJECTIONS

General objections.

10905

42. State the names and addresses of any organizations, groups, inter-company or industrial organizations to which the defendant belongs or belonged which conducted studies or researched the relationship between exposure to dioxins and human pathologies.

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OBJECTIONS

General objections.

43. In reference to Interrogatory 42, please state:

- (a) the type or nature of the studies;
- (b) when the studies were conducted;
- (c) the complete results of the studies;
- (d) the recommendations of the studies;
- (e) the resulting implementation of the studies by

defendant;

- (f) the date when first implemented; and

(g) whether the studies were published and if so, provide the names of medical and/or trade journals with them, giving year, volume and page.

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OBJECTIONS

General objections.

44. Please state the amount spent (including budget for in-house activities) or contributed by annually from 1945 until the present time for research into the relationship between the exposure to phenoxy herbicides and any human pathology.

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OBJECTIONS

Complete objection on ground of relevance.

General objections.

45. Please state the amount spent by you (including budget for in-house activities) or contributed by you annually from 1945 until the present time for research into the relationship between the exposure to dioxins and any human pathology.

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OBJECTIONS

Complete objection on ground of relevance.

General objections.

46. Please state the amount annually contributed by you to any independent medical research group or groups conducting research into the relationship between exposure to phenoxy herbicides and any human pathology.

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OBJECTIONS

Complete objection on ground of relevance.

General objections.

47. Please state the amount annually contributed by you to any independent medical research group or groups conducting research into the relationship between exposure to dioxins and any human pathology.

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OBJECTIONS

Complete objection on ground of relevance.

General objections.

48. State whether you knew health hazards, physical disorders, injuries, irritations or diseases were associated with exposure to, or use of, phenoxy herbicides, including but limited to the industrial synthesis (during and after) of 2, 4, 5-T. If your answer is affirmative, state or identify:

- (a) the date you acquired such knowledge;
- (b) the manner in which you gained such knowledge;
- (c) the type of health hazards, physical disorders,

injuries, irritations or diseases, including but not limited to:

chloracne; porphyria cutanea tarda; hyperpigmentation; hyperkeratosis; hirsutism; asthenia; weakness in lower 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; neurasthenia; 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; fibrosarcomatous 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; and

(d) all documents and communications which refer, reflect, relate to, or embody the information sought by this interrogatory.

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#### OBJECTIONS

General objections.

Date and manner of post-1970 acquisition of information [subdivisions (a) and (b)] irrelevant.



49. State whether you believed health hazards, physical disorders, injuries, irritations or diseases were associated with the exposure to, or use of, phenoxy herbicides, including but limited to the industrial synthesis (during and after) of 2, 4, 5-T. If your answer is affirmative, state or identify:

- (a) the date you acquired such belief;
- (b) the manner in which you gained such belief;
- (c) the type of health hazards, physical disorders,

injuries, irritations or diseases, including but not limited to:

chloracne; porphyria cutanea tarda; hyperpigmentation; hyperkeratosis; hirsutism; asthenia; weakness in lower 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; neurasthenia; 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; fibrosarcomatous 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;

and

- (d) all documents and communications which refer, reflect, relate to, or embody the information sought by this interrogatory.

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#### OBJECTIONS

Complete objection to request for "belief" as defined (see definition 19 at p. 8).

General objections.

Date and manner of post-1970 acquisition of information [subdivisions (and (b))] irrelevant.

50. State whether you suspected health hazards, physical disorders, injuries, irritations or diseases were associated with the exposure to, or use of, phenoxy herbicides, including but limited to the industrial synthesis (during and after) of 2, 4, 5-T. If your answer is affirmative, state or identify:

- (a) the date you acquired such suspicion;
- (b) the manner in which you gained such suspicion;
- (c) the type of health hazards, physical disorders,

injuries, irritations or diseases, including but not limited to:

chloracne; porphyria cutanea tarda; hyperpigmentation; hyperkeratosis; hirsutism; asthenia; weakness in lower 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; neurasthenia; 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; fibrosarcomatous 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;

and

(d) all documents and communications which refer, reflect, relate to or embody the information sought by this interrogatory.

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#### OBJECTIONS

Complete objection to request for "suspicion" as defined (see definition 20 at p. 8).

General objections.

Date and manner of post-1970 acquisition of information [subdivisions (a) and (b)] irrelevant.

51. State whether you knew health hazards, physical disorders, injuries, irritations or diseases were associated with exposure to, or use of, dioxins. If your answer is affirmative, state or identify:

- (a) the date you acquired such knowledge;
- (b) the manner in which you gained such knowledge;
- (c) the type of health hazards, physical disorders,

injuries, irritations or diseases, including but not limited to:

chloracne; porphyria cutanea tarda; hyperpigmentation; hyperkeratosis; hirsutism; asthenia; weakness in lower 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; neurasthenia; 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; fibrosarcomatous 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; and

(d) all documents and communications which refer, reflect, relate to, or embody the information sought by this interrogatory.

---

#### OBJECTIONS

General objections.

Date and manner of post 1970 acquisition of information [subdivisions (a) and (b)] irrelevant.

52. State whether you believed health hazards, physical disorders, injuries, irritations or diseases were associated with the exposure to, or use of, dioxins. If your answer is affirmative, state or identify:

- (a) the date you acquired such belief;
- (b) the manner in which you gained such belief;
- (c) the type of health hazards, physical disorders,

injuries, irritations or diseases, including but not limited to:

chloracne; porphyria cutanea tarda; hyperpigmentation; hyperkeratosis; hirsutism; asthenia; weakness in lower 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; neurasthenia; 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; fibrosarcomatous 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;

and

- (d) all documents and communications which refer, reflect, relate to, or embody the information sought by this interrogatory.

---

#### OBJECTIONS

Complete objection to request for "belief" as defined (see definition 19 at p. 8).

General objections.

Date and manner of post 1970 acquisition of information [subdivisions (a) and (b)] irrelevant.

53. State whether you suspected health hazards, physical disorders, injuries, irritations or diseases were associated with the exposure to, or use of, dioxins. If your answer is affirmative, state or identify:

- (a) the date you acquired such suspicion;
- (b) the manner in which you gained such suspicion;
- (c) the type of health hazards, physical disorders,

injuries, irritations or diseases, including but not limited to:

chloracne; porphyria cutanea tarda; hyperpigmentation; hyperkeratosis; hirsutism; asthenia; weakness in lower 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; neurasthenia; 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; fibrosarcomatous 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;

and

- (d) all documents and communications which refer, reflect, relate to or embody the information sought by this interrogatory.

---

OBJECTIONS

Complete objection to request for "suspicion" as defined (see definition 20 at p. 8).

General objections.

Date and manner of post 1970 acquisition of information [subdivisions (a) and (b)] irrelevant.

54. State whether you knew there were dangers associated with the exposure to or the use of dioxin contaminated products, including but not limited to phenoxy herbicides.

If your answer is affirmative, for each danger and/or risk, state or identify:

- (a) the date you obtained the knowledge of the danger or risk;
- (b) the manner in which you obtained knowledge;
- (c) the source of the knowledge;
- (d) the type of danger or risk;
- (e) whether you publicized, published or announced the dangers or risks;
- (f) all documents and communications which refer, reflect relate to, or embody the information sought by this interrogatory; and
- (g) produce all such documents and records of communication.

---

OBJECTIONS

Complete objection as repetitious of 48.

General objections.

Date, manner, source and dissemination of post 1970 information [subd. (a), (b), (c), (e)] irrelevant.

55. State whether you believed there were dangers associated with the exposure to or use of dioxin contaminated products, including but not limited to phenoxy herbicides.

If your answer is affirmative, for each danger and/or risk, state or identify:

- (a) the date you obtained the belief of the danger or risk;
- (b) the manner in which you obtained belief;
- (c) the source of the belief;
- (d) the type of danger or risk;
- (e) whether you publicized, published or announced the dangers or risks;
- (f) all documents and communications which refer, reflect, relate to, or embody the information sought by this interrogatory; and
- (g) produce all such documents and records of communication.

---

OBJECTIONS

Complete objection as repetitious of 49.

Complete objection to request for "belief."

General objections.

Date, manner, source and dissemination of post 1970 information [subd. (a), (b), (c), (e)] irrelevant.

56. State whether you suspected there were dangers associated with the exposure to or use of dioxin contaminated products, including but not limited to phenoxy herbicides.

If your answer is affirmative, for each danger and/or risk, state or identify:

(a) the date you obtained the suspicion of the danger or risk;

(b) the manner in which you obtained suspicion;

(c) the source of the suspicion;

(d) the type of danger or risk;

(e) whether you publicized, published or announced the dangers or risks;

(f) all documents and communications which refer, reflect, relate to, or embody the information sought by this interrogatory; and

(g) produce all such documents and records of such communications.

---

OBJECTIONS

Complete objection as repetitious of 50.

Complete objection to request for "suspicion."

General objections.

Date, manner, source and dissemination of post 1970 information [subd. (a), (b), (c), (e)] irrelevant.



57. Identify all trade associations of which you are or were a member, or in which you participate or have participated.

---

OBJECTIONS

Complete objection. Burden outweighs utility.

58. For each trade association identified in your answer to Interrogatory 57, state:

- (1) the dates of your membership or participation;
- (2) the requirements for membership;
- (3) all tests, studies, analyses or reports prepared by or on behalf of each trade association in connection with the effects of, or reactions to, exposure to or the use of phenoxy herbicides or dioxins.
- (4) whether you publicized, published or announced the results, conclusions or findings of the tests, studies, analyses or reports identified in subparagraph (c) and, if so, identify where and when;
- (5) all present and former members or other participants;
- (6) each person who represented you, and set forth each person's title or position, if any, in the trade association and the date the person held such position; and
- (7) all documents and communications which refer, reflect, relate to, or embody the information sought by this interrogatory.

---

OBJECTIONS

Complete objection. Burden outweighs utility.

To the extent arguably relevant [subd. (3) subject to General Objections; subd. 4 prior to 1970], questions have been asked in prior interrogatories (48, 54).

59. Identify all government agencies to which you have submitted information or data about phenoxy herbicides and/or dioxins and for each government agency state or identify:

- (a) the date of the submission;
  - (b) the substance of the submission;
  - (c) the reason for the submission;
  - (d) the conclusions, findings or reports of the government agency; and
  - (e) all documents and communications which refer, reflect, relate to, or embody the information sought by this interrogatory.
- 

#### OBJECTIONS

Too Broad unless limited to health effects

General objections

Post 1970 submissions are irrelevant.

60. State whether you have ever submitted information or data about phenoxy herbicides to committees of the United States House of Representatives, United States Senate, or any other state and/or local body of elected officials, and for each submission state or identify:

- (a) the date of the submission;
- (b) the substance of the submission;
- (c) the reason for this submission;
- (d) the conclusions, reports, results, or findings of the committee;
- (e) all documents and communications which refer, reflect, relate to, or embody the information sought by this interrogatory: and
- (f) produce all such documents.

---

OBJECTIONS

Too Broad unless limited to health effects

General objections

Post 1970 submissions are irrelevant.

10924

61. State whether you have ever submitted information or data about dioxin to committees of the United States House of Representatives, United States Senate, or any other state and/or local body of elected officials, and for each submission state or identify:

- (a) the date of the submission;
- (b) the substance of the submission;
- (c) the reason for this submission
- (d) the conclusions, reports, results, or findings of the committee;
- (e) all documents and communications which refer, reflect, relate to, or embody the information sought by this interrogatory; and
- (f) produce all such documents.

---

OBJECTIONS

Too Broad unless limited to health effects

General objections

Post 1970 submissions are irrelevant.

10925

62. State whether you knew that any government agency, including but not limited to the Environmental Protection Agency, the United States Department of Agriculture, and the Food and Drug Administration, claimed there were defects or dangers in or associated with the use of phenoxy herbicides.

If you answer is affirmative, state or identify:

- (a) the government agency;
- (b) the defect or danger;
- (c) the date of the claimed defect or danger;
- (d) the manner in which and when you obtained your knowledge of the claimed defect or danger;
- (e) the action, if any, taken by the government agency, including but not limited to bans, cease and desist orders, or requirements to limit the use of phenoxy herbicides; and
- (f) all documents which refer, reflect, relate to, or embody the information sought by this interrogatory.

---

#### OBJECTIONS

General objections.

Details as to post 1970 acquisition of knowledge [subd.

(a), (c), (d), (e)] irrelevant.

63. State whether you believed that any government agency, including but not limited to the Environmental Protection Agency, the United States Department of Agriculture, and the Food and Drug Administration, claimed there were defects or dangers in or associated with the use of phenoxy herbicides.

If your answer is affirmative, state or identify:

- (a) the government agency;
- (b) the defect or danger;
- (c) the date of the claimed defect or danger;
- (d) the manner in which and when you obtained your belief of the claimed defect or danger;
- (e) the action, if any, taken by the government agency, including but not limited to bans, cease and desist orders, or requirements to limit the use of phenoxy herbicides; and
- (f) all documents which refer, reflect, relate to, or embody the information sought by this interrogatory.

---

OBJECTIONS

Complete objection to "belief."

General objections.

Details as to post 1970 acquisition of knowledge [subd.

(a), (c), (d), (e)] irrelevant.

64. State whether you suspected that any government agency, including but not limited to the Environmental Protection Agency, the United States Department of Agriculture, and the Food and Drug Administration, claimed there were defects or dangers in or associated with the use of phenoxy herbicides.

If your answer is affirmative, state or identify:

- (a) the government agency;
- (b) the defect or danger;
- (c) the date of the claimed defect or danger;
- (d) the manner in which and when you obtained your suspicion of the claimed defect or danger;
- (e) the action, if any, taken by the government agency, including but not limited to bans, cease and desist orders, or requirements to limit the use of phenoxy herbicides; and
- (f) all documents which refer, reflect, relate to, or embody the information sought by this interrogatory.

---

OBJECTIONS

Complete objection to "suspicion."

General objections.

Details as to post 1970 acquisition of knowledge [subd.

(a), (c), (d), (e)] irrelevant.

10928



65. Please state each scientific conference, public meeting or educational course concerning phenoxy herbicides, conducted prior to April 15, 1970, which was attended by any of your officers or employees. As to each such conference, meeting or educational course please state:

- (a) its date(s);
- (b) its sponsoring organization;
- (c) all such officers or employees who attended it;
- (d) whether any such corporate representative presented any papers or reports, or participated in any discussions; and
- (e) produce any such papers or reports.

---

OBJECTIONS

Too broad unless limited to health effects.

General objections.

10929

66. Please state each scientific conference, public meeting or educational course concerning phenoxy herbicides, conducted any time after April 15, 1970, which was attended by any of your officers or employees. As to each such conference, meeting or educational course please state:

- (a) its date(s);
- (b) its sponsoring organization;
- (c) all such officers or employees who attended it;
- (d) whether any such corporate representative presented any papers or reports, or participated in any discussions; and
- (e) produce any such papers or reports.

---

OBJECTIONS

Too broad unless limited to health effects.

General objections.

10930

67. Please state each scientific conference, public meeting or educational course concerning dioxins, conducted prior to April 15, 1970, which was attended by any of your officers or employees. As to each such conference, meeting or educational course please state:

- (a) its date(s);
- (b) its sponsoring organization;
- (c) all such officers or employees who attended it;
- (d) whether any such corporate representative presented any papers or reports, or participated in any discussions; and
- (e) produce any such papers or reports.

---

OBJECTIONS

Too broad unless limited to health effects.

General objections.

68. Please state each scientific conference, public meeting or educational course concerning dioxins, conducted any time after April 15, 1970, which was attended by any of your officers or employees. As to each such conference, meeting or educational course please state:

- (a) its date(s);
  - (b) its sponsoring organization;
  - (c) all such officers or employees who attended it;
  - (d) whether any such corporate representative presented any papers or reports, or participated in any discussion; and
  - (e) produce any such papers or reports.
- 

#### OBJECTIONS

Too broad unless limited to health effects.

General objections.

10932

69. Please state each private meeting or discussion held at any time before April 15, 1970 between any of your officers or employees and any officer or employee of any other manufacturer or seller of dioxin contaminated products in which the safety of any dioxin contaminated product was a subject of discussion. As to each meeting or discussion, please state:

- (a) its date(s);
- (b) the participants in the meeting or discussion identified by name, title and business affiliation;
- (c) a description of all statements made by each participant concerning the safety of any dioxin contaminated product;
- (d) identify all writings pertaining in any manner to the matters covered in this interrogatory and
- (e) produce a copy of all writings identified in this interrogatory.

---

OBJECTIONS

Too broad unless limited to health effects.

General objections.

10933

70. Have you ever conducted any testing in the field, that is, where your dioxin contaminated phenoxy herbicides were being used, to determine what levels of dioxin existed in air, water or soil. If so, please state the following:

- (a) the person responsible for conducting each such test;
- (b) each person conducting every such test;
- (c) the date of each such test;
- (d) the location of each such test;
- (e) the method of sampling utilized in each such test;
- (f) the result of each such test;
- (g) whether such tests results were reported to any governmental agency or medical or health organization and provide the name of the agency or organization, and when the results were reported; and
- (h) produce all documents referred to which forms the basis of the answers to this interrogatory.

---

OBJECTIONS

General objections.

Subdivision (g) is irrelevant post 1970.

10934

71. Did you ever determine that any other product could be used in place of dioxin contaminated phenoxy herbicides such as 2, 4, 5-T?

- (a) When was that determination made?
- (b) What was the chemical composition of that product?
- (c) When was the product above referenced first marketed?
- (d) Under what trade name was the product marketed?
- (e) For what purposes or applications was the product marketed?

---

OBJECTIONS

Complete objection based upon relevance, FRE 407.

72. State whether there have been any adjudications against you in any jurisdiction in either a court of law or equity, or before an administrative or other tribunal, for claims of damages associated with exposure to phenoxy herbicides.

If your answer is affirmative, state or identify:

- (a) the date and nature of the adjudication;
- (b) the nature of the proceeding at which the adjudication was rendered;
- (c) all documents which refer, reflect, relate to, or embody the information sought by this interrogatory; and
- (d) produce all such documents.

---

OBJECTIONS

Complete objection based upon relevance.

General Objections.

If answer is required, it should be limited to title of proceeding.



73. State whether you are, or have been, a party to any litigation or administrative proceedings involving claims that are similar or substantively the same as those raised in this suit.

If your answer is affirmative, state or identify:

(a) the complete caption of the case, including the name and location of the Court or tribunal having jurisdiction of the matter;

(b) the nature of the claims presented;

(c) the procedural posture of the case;

(d) the names of counsel representing all parties;

(e) all documents and communications which refer, reflect, relate to, or embody the information sought by this interrogatory; and

(f) produce all such documents and evidence of such communications.

---

#### OBJECTIONS

Complete objection based upon relevance.

General objections.

If answer is required, it should be limited to title of proceeding.

74. Please state whether any of your present or former employees has ever made a claim for one or more of the following:

chloracne; porphyria cutanea tarda; hyperpigmentation; hyperkeratosis; hirsutism; asthenia; weakness in lower 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; neurasthenia; 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; fibrosarcomatous 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;

as a result of alleged exposure to phenoxy herbicides, including but not limited to 2,4,5-T, during and after its industrial synthesis, and/or other dioxin contamination, under the Occupational Disease or Workmen's Compensation Statute of any state or any Federal Compensation Statute.

If so, please state:

- (a) the date that you first received notice of each such claim;
- (b) the date, name, state, and stated basis for each such claim;
- (c) the disposition of each such claim;
- (d) if documents exist pertaining to any such claim, please identify all such writings; and
- (e) produce all such documents.

---

OBJECTIONS

General objections.

75. Please state whether any of your present or former

employees has been awarded benefits for one or more of the following:

chloracne; porphyria cutanea tarda; hyperpigmentation; hyperkeratosis; hirsutism; asthenia; weakness in lower 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; neurasthenia; 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; fibrosarcomatous 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;

as a result of alleged exposure to phenoxy herbicides, including but not limited to 2,4,5-T, during and after its industrial synthesis, and/or other dioxin contamination, under the Occupational Disease or Workmen's Compensation Statute of any state or any Federal Compensation Statute.

If so, please state:

- (a) the date that you first received notice of each such claim;
- (b) the date, name, state, and stated basis for each such claim;
- (c) if documents exist pertaining to any such claim, please identify all such writings; and
- (d) produce all such documents.

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OBJECTIONS

General objections.

10939

76. Please state whether any of your present or former employees are known by you to be suffering from, having suffered from or whose deaths have been attributed to one or more of the following:

chloracne; porphyria cutanea tarda; hyperpigmentation; hyperkeratosis; hirsutism; asthenia; weakness in lower 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; neurasthenia; 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; fibrosarcomatous 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;

who were at any time exposed to phenoxy herbicides, including but not limited to 2,4,5-T, during and after its industrial synthesis, and/or other dioxin contamination, giving the date when such diseases of any present or former employee was first known by you.

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#### OBJECTIONS

General objections.

77. Identify each expert witness, if any, whom you expect to call at trial, including, but not limited to, medical, scientific or technical experts. For each expert, state the subject matter on which each expert is expected to testify and summarize the ground for each opinion.

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OBJECTIONS

Wholly objectionable as premature until plaintiffs' contentions are known.

78. For all persons identified in your answer to subpart (a) Interrogatory 3, set forth the curriculum vitae of each of those experts and include: (1) the schools each attended; (2) the years in attendance and the degrees received; (3) the experience in particular fields; (4) the name of each professional society or association of which each is a member; (5) a list of all publications authored by each person or contributed to by each person, including the title, name of the periodical or book and date of printing; (6) the cases in which each has testified as an expert and the substance of the expert opinion rendered; and (7) the cases in which each has acted, been retained or contacted as an expert consultant and the subject matter on which each was consulted.

---

OBJECTIONS

Wholly objectionable as premature until plaintiffs' contentions are known.

Not permitted by FRCP 26(b)(4)(A)(i).

10942

79. Identify each expert whom you have retained, contacted or consulted concerning the subject matter of this litigation, and whether or not you expect to call such expert as a witness at trial, including, but not limited to, medical, scientific or technical experts, bodies or organizations.

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OBJECTIONS

Not permitted by FRCP 26(b)(4)(A)(i).

10943

80. For all persons identified in your answer to subpart (a), Interrogatory 4, set forth the curriculum vitae of each of those experts and include: (1) the schools each attended; (2) the years in attendance and the degrees received; (3) the experience in particular fields; (4) the name of each professional society or association of which each is a member; (5) a list of all publications authored by each person or contributed to by each person, including the title, name of the periodical or book and date of printing; (6) the cases in which each has testified as an expert and the substance of the expert opinion rendered; and (7) the cases in which each has acted, been retained or contacted as an expert consultant and the subject matter on which each was consulted.

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OBJECTIONS

Not permitted by FRCP 26(b)(4)(A)(i).



81. (a) State whether you were covered by or were the subject of any policy of liability insurance, umbrella policy and/or excess coverage for injuries and/or damages arising out of the exposure to dioxin contaminated products, specifically phenoxy herbicides such as 2, 4, 5-T.

(b) If the answer to subparagraph (a) of this interrogatory is affirmative, state the following as to each such policy of insurance:

- (1) The name of each insured under the policy;
- (2) The period of the policy;
- (3) The type of policy;
- (4) The name of the carrier by which the policy was issued;
- (5) The amount of coverage provided by the policy for each occurrence and in the aggregate;
- (6) The amount of coverage remaining for satisfaction of judgment in this case;
- (7) The amount of self-insured retention, if any, for any such policy;
- (8) The amount of any deductible contained in any such policy, if applicable, providing all particulars; and
- (9) The allocation of the obligation relating to "duty to defend" between you and any such insurer.

(c) If the answer to subparagraph (a) of this interrogatory is affirmative, state whether any Exclusion under the policy is or may be applicable to any claim presented by plaintiffs' complaint.

(d) If the answer to subparagraph (a) of this interrogatory is affirmative, state the precise language of each Exclusion which is or may be applicable and, in summary form, the facts on the basis of which it is contended each such Exclusion is or may be applicable.

(e) State whether this case is being defended by any attorney who has entered an appearance on your behalf subject to a reservation of rights agreement between you and your insurance carrier.

(f) If the answer to subparagraph (e) of this interrogatory is affirmative, as to each reservation of rights agreement, state the following:

- (1) The name of the party to the agreement;
- (2) The date the agreement was entered into;
- (3) The legal basis for execution of the reservation of rights agreement; and
- (4) In summary form, the facts on the basis of which the reservation of rights agreement was entered into.

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OBJECTIONS

Wholly objectionable. All insurance information required by Special Master to be furnished has been furnished.

10946

82. Is there any other coverage available from public or private entities for the injuries and/or damages arising out of the instant case. If so:

(b) Identify the source of said coverage.

(c) Set forth the amount of coverage available for the injuries arising out of the instant case.

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OBJECTIONS

Wholly objectionable. All insurance information required by Special Master to be furnished has been furnished.

10247

83. Identify all persons (name, address and job title) who (a) participated in the preparation of the answers to these interrogatories; and (b) were consulted in answering these interrogatories. With respect to each such person, indicate what specific interrogatories those persons either "participated in the preparation" or "were consulted".

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OBJECTIONS

Wholly objectionable as burdensome and unnecessary.

BASKIN AND SEARS, P.C.

By Thomas D. Henderson

On behalf of the Agent Orange  
Plaintiffs' Class Action  
Management Committee

10948

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

-----X

IN RE :

"AGENT ORANGE" :

PRODUCT LIABILITY LITIGATION :  
-----X

MDL No. 381  
(ALL CASES)

DEFENDANTS' INTERROGATORIES  
TO UNITED STATES OF AMERICA

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

★ OCT 18 1983 ★

U.S. DISTRICT COURT  
E.D. N.Y.

PLEASE TAKE NOTICE that, pursuant to Rule 33 of the Federal Rules of Civil Procedure, the undersigned defendants demand that the United States of America herein serve and file answers to each of the following Interrogatories in writing and under oath within thirty (30) days of service, in accordance with the instructions and definitions contained herein.

These interrogatories are continuing interrogatories. If at any time after service of answers hereto the United States obtains or becomes aware of additional information pertaining to any of the interrogatories, the United States shall, within thirty (30) days of such time and in no event later than five (5) days before trial, serve supplemental sworn written answers setting forth such additional information.

DEFINITIONS AND INSTRUCTIONS

1. The following definitions apply herein:

a. "Agent Orange" means any herbicide containing 2,4,5-trichlorophenoxyacetic acid, or any ester, amine, salt or

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other form thereof and all its components and impurities.

b. "Agent Orange operation" means any operation, mission, project, exercise, experiment and task where Agent Orange was disseminated in Vietnam and includes but is not limited to defoliation and crop destruction missions.

c. "Aerial Agent Orange operation" means any Agent Orange operation where Agent Orange was dispensed from airplanes or helicopters.

d. "Chemical operation" means any operation, mission, project, exercise, experiment and task where chemical(s) including but not limited to insecticides, CS, CN pesticides, and herbicides other than Agent Orange were dispensed in Vietnam.

e. "Dioxin" means all halogenated dibenzo-p- dioxins (PCDDs) and all halogenated dibenzofurans (PCDFs).

f. "Document" is used in the broadest possible sense and means any written or graphic matter of whatever kind or nature, or any other means of preserving thoughts or expression (including, without limitation, tape recordings and/or transcriptions thereof), and all tangible things from which information can be processed or transcribed, whether originals, copies or drafts (including without limitation, non-identical copies), however produced or reproduced. Note that a document with handwritten or typewritten notes, editing or other marks,

etc., is not and shall not be deemed identical to one without such notes, marks, etc. "Documents" also means all graphic, mechanical, or electronic reproductions, representations, recordings, or compilations of data of any kind, including but not limited to, drawings, charts, abstracts, summaries, graphs, motion picture films, microfilms, microfiles, photographs, tape recordings, computer stored information, videotapes, any transcripts or printouts produced therefrom, and all drafts of any of the foregoing.

g. "Draft" means any earlier, preliminary, preparatory or tentative version of all, or part of the document, whether or not such draft was superseded by a later draft, and whether or not the terms of the draft are the same as, or different from the terms of the final document.

h. "Government" means THE UNITED STATES OF AMERICA and its offices, departments, bureaus, agencies, representatives, department heads, agency heads, bureau chiefs, agents, attorneys, employees, or any other persons, acting or purporting to act for, or on behalf of THE UNITED STATES OF AMERICA, under the authority or control of THE UNITED STATES OF AMERICA, or any one or more of the foregoing.

i. "Identify" when used with reference to a natural person means state:

- (i) his full name and present address (or if his present address is not known, his last known address); and
- (ii) his present (or if his present is not known, his last known) job, position, rank, military unit, and/or professional affiliations, and the same information for the time of the acts or other matters to which the Interrogatory is addressed.

j. "Identify" when used with reference to any person other than a natural person means state:

- (i) the full name thereof;
- (ii) the nature of the activity engaged in;
- (iii) the address and principal place of business; and
- (iv) if applicable, the jurisdiction under the laws of which it has been organized and the date of such organization.

k. "Identify when used with reference to an agency or organization means state:

- (i) the full name thereof;
- (ii) the nature of the activity engaged in;
- (iii) the supervising or overseeing person(s) for the time of the acts or other matters to which the Interrogatory is addressed; and



- (iv) if applicable, the name of the larger entity of which the agency or organization is a subpart.

1. "Identify" when used with reference to a document means state:

- (i) its nature (e.g., letter, telegram, memorandum, chart, report, list, etc.), date, and the identity of the author and addressees;
- (ii) the identity of each person who signed the document and each person who participated in preparing the document;
- (iii) its citation, title or heading;
- (iv) its substance;
- (v) its present (or, if the present is not known, the last known) location and custodian; and
- (vi) its source.

m. "Identify" when used with reference to a communication, meeting or transaction means state:

- (i) its nature (e.g., telephone conversation, face-to-face conversation or meeting, letter, memorandum, etc.);
- (ii) the date and place thereof (and if a telephone conversation, the place each participant was located);
- (iii) the identity of each person participating in, present during, or witness to, all or any part thereof; and

(iv) the substance thereof.

n. "Identify" when used with reference to a compound, substance, chemical or ingredient means state its full chemical formulation and any trade name or other names by which it is known.

o. "Identify" when used with reference to illness means state its type, variety or specific classification, symptoms and the site of and target organ(s) of any illness named.

p. "Identify" when used with reference to a project, study, experiment or test means state its title, full citation and any other names by which it was known, its purpose or goal, the dates it began or is to begin and the dates it ended or is expected to end, the locations at which it was conducted, or is being conducted, and identify separately persons:

- (i) who approved or authorized its undertaking;
- (ii) who were, or are responsible for its operational management;
- (iii) who were responsible for evaluating its results;
- (iv) who were responsible for sponsoring or initiating it.

q. "Identify" when used in any context other than hereinabove set forth means describe the pertinent act, work,

situation, event, etc., as fully as possible, and identify each person in any way involved therein and each document or communication in which such act, work, situation, event, etc., is recorded, described, discussed or otherwise referred to.

r. "Illness" means any illness, mental or psychological disturbance, adverse health effect, disease or injury, medical symptom birth defect, death, drug abuse, alcohol abuse, or any other medical complication.

s. "Military personnel" means all persons in Vietnam who were serving or acting on behalf of or at the request or direction of the United States Armed Forces or government.

t. "Person" means any natural person, individual, partnership, company, corporation, government body or any other entity.

u. "2,4,5-T" means 2,4,5-trichlorophenoxyacetic acid and any ester, amine, salt or other form thereof.

v. "2,4-D" means 2,4-dichlorophenoxyacetic acid and any ester, amine, salt or other form thereof.

w. "Target area" means the geographic area that was selected as an intended site for an Agent Orange operation or was the purposeful subject of an Agent Orange operation.

x. "Vietnam" means the country of Vietnam and every location in Southeast Asia where defoliation agents were used

and where representatives of the United States government and its allies, including military personnel were between 1960 and 1973.

2. Each Interrogatory is to be answered to the extent of all information available to you, including all documents and other sources of knowledge within your possession, custody or control, or within the possession, custody or control of your attorneys, wherever located, and including your documents placed in independent storage facilities.

3. Except where explicitly indicated otherwise, each Interrogatory herein should be construed independently and not by reference to any other paragraph for the purpose of limitation.

4. If the answer to all or any part of an Interrogatory is not now known or you are otherwise not able to answer fully, so state in response to such Interrogatory or part thereof, state the reasons, and furnish whatever responsive information is now known or otherwise available.

5. If any privilege is claimed as to any information called for, or as to any document required to be identified by an Interrogatory:

(i) state the nature of the privilege claimed (e.g., attorney-client, work product, etc.);

- (ii) state the jurisdictional basis for the privilege claimed;
- (iii) state the basis for claiming the privilege as to the specific information or document;
- (iv) if the privilege is claimed with respect to any information, identify each person who has knowledge of such information, or to whom such information has been communicated in any way, at any time; and
- (v) if the privilege is claimed as to any document, identify such document.

6. In lieu of identifying any document the identity of which is called for by any interrogatory, you may produce a true copy of such document for inspection and copying by defendants' attorneys, together with an explicit reference to the specific interrogatory in response to which such document is produced.

7. As used herein and as the context may require, the masculine shall be construed to include the feminine and the singular shall be construed to include the plural. "And" as well as "or" shall be construed either disjunctively or conjunctively as necessary to bring within the scope of the specification all responses which might otherwise be construed to be outside its scope. "Each" shall be construed to include the word "every" and "every" shall be construed to include the word "each". "Any" shall be construed to include the word

"all" and "all" shall be construed to include the word "any".  
"Including" shall be construed to include the phrase "without limitation".

### INTERROGATORIES

#### Handling and Storage Procedures

1. Set forth the procedures established or caused to be established and if different, the procedures actually utilized by the government for the handling and storage of Agent Orange from the time the government assumed custody or control of it until its dissemination or disposal.
2. Identify all persons, military units and all organizations responsible for handling and storing Agent Orange prior to its use.
3. Identify the person responsible for supervising or overseeing the handling and storage of Agent Orange.
4. Identify and describe all equipment, including but not limited to tanks, drums, forklifts, vehicles, pumps, hoses, protective gear and receptacles of any sort used for Agent Orange handling and storage.
5. Identify each report of unintended or unauthorized use or misuse, or use contrary to the established procedures described in response to Interrogatory 1, of Agent

Orange or the equipment identified in response to Interrogatory 34 including:

- (a) the author of the report;
- (b) the extent of the use or misuse;
- (c) date of the use or misuse;
- (d) the person responsible for the use or misuse;
- (e) the consequences of the use or misuse;
- (f) the actions taken to prevent further unauthorized uses or misuses.

6. Set forth all instances of leakage of Agent Orange during storage including:

- (a) volume of Agent Orange lost through leakage;
- (b) reason or cause for leakage;
- (c) witnesses to leakage;
- (d) reports of leakage;
- (e) site of occurrence of the leakage;
- (f) reports of human contact with Agent Orange leakage.

7. Identify each and every document that contains any information sought by Interrogatories 1, 2, 3, 4, 5 and 6, or which the government utilized or consulted in responding to Interrogatories 1, 2, 3, 4, 5 and 6. Specify which documents pertains to each Interrogatory.

8. With respect to each manufacturer of Agent Orange identify the respective areas of Vietnam in which its Agent Orange was deployed and the dates the Agent Orange was shipped, disseminated, or disposed of.

9. With respect to each manufacturer, identify each and every document that contains any information concerning such manufacturer's Agent Orange shipment, or handling, or use in Vietnam, or disposal.

Safety Instructions

10. Identify all documents that discuss, describe or relate to operating procedures, handling procedures, safety precautions, technical guidelines and instructions of any sort pertaining or applicable to Agent Orange that were utilized by any military personnel.

11. Identify all persons, military units and organizations responsible for developing, preparing and disseminating the documents identified in response to Interrogatory 10.

12. Identify each and every person who was responsible in whole or in part for supervising, monitoring or overseeing the procedures and instructions referred to in the documents identified in response to Interrogatory 10.



13. Identify any reports of incidents of violations of safety precautions, operating procedures, handling procedures, technical guidelines and instructions of any sort pertaining or applicable to Agent Orange and identify any records of enforcement or sanctions pertaining to those safety violations.

Disposal and Recycling

14. Identify and describe all procedures developed and implemented for the recycling, disposal or use of receptacles or equipment that contained or came in contact with Agent Orange.

15. Identify all persons responsible for the recycling, disposal or use of receptacles or equipment that contained or came in contact with Agent Orange.

16. Identify all procedures developed and implemented for the disposal or other use of products that had contained Agent Orange or had come in contact with Agent Orange.

17. Identify all persons responsible for the disposal or other use of products that had contained Agent Orange or had come in contact with Agent Orange.

18. Identify each and every document that contains any information sought by Interrogatories 14, 15, 16, and 17 above or which the government utilized or consulted in

responding to Interrogatories 14, 15, 16 and 17. Specify which document pertains to each Interrogatory.

Selection of Target Areas

19. Set forth the manner in which target areas were approved for Agent Orange operations, including but not limited to:

- (a) identification of all persons involved in the suggestion or selection of target areas for Agent Orange operations;
- (b) identification of all persons involved in the approval of target areas;
- (c) all criteria used in selecting or approving target areas.

20. Identify all procedures used in the preliminary analysis and reconnaissance of a proposed selected target area including but not limited to aerial overflights and ground observations.

21. Identify all maps, charts, aerial photos or other documents used in preparation of coordinates for Agent Orange operations.

22. Identify the organization units and persons responsible for the preparation, selection and approval of the documents listed in response to Interrogatory 21.

23. Identify each and every document that contains any information sought by Interrogatory 19, 20, 21 and 22 above or which the government utilized or consulted in responding to Interrogatory 19, 20, 21 and 22. Specify which document pertains to each Interrogatory.

Aerial Agent Orange Operations

24. For each and every aerial Agent Orange operation between the years 1961 and 1972 set forth the following:

- (a) the coordinates of the target area to be sprayed;
- (b) the year, month, day, and hour of the Agent Orange operation;
- (c) the person responsible for supervising or monitoring the Agent Orange operation;
- (d) the amount of active ingredient dispensed in the Agent Orange operation;
- (e) the identity and amount of any and all inert ingredients;
- (f) the type and density of foliage present at the target area prior to the Agent Orange operation;
- (g) the weather conditions present at the time of the Agent Orange operation;
- (h) the geographic terrain of the target area;
- (i) the equipment used to dispense the Agent Orange including but not limited to type of aircraft and type of sprayer;

- (j) any and all equipment malfunctions occurring during the Agent Orange operation;
- (k) the maximum and minimum size of the Agent Orange droplets dispensed.

25. Set forth all standard operating procedures for aerial Agent Orange operations including but not limited to:

- (a) altitude of the disseminating aircraft during distribution of Agent Orange;
- (b) speed of the disseminating aircraft during distribution of Agent Orange;
- (c) maximum and minimum ground temperature permissible during Agent Orange operations;
- (d) maximum wind speed permissible during Agent Orange operations;
- (e) number and spacing of aircraft per Agent Orange operation;
- (f) number and duties of military personnel in each aircraft.

26. Identify those person(s) responsible for the creation and adoption and implementation of the procedures set forth in response to Interrogatory 25.

27. Identify each and every document, which contains any information sought by Interrogatories 24, 25, and 26 or which

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the government utilized or consulted in responding to Interrogatories 24, 25, and 26.

28. Identify all films or photographs of Agent Orange operations.

29. Set forth the procedures for providing weather information for use by those engaged in aerial Agent Orange operations including but not limited to the identification of

- (a) the organization and individual responsible for providing weather information services
- (b) the equipment and personnel available for ascertaining weather conditions.

#### Aerial Chemical Operations

30. For each and every aerial operation that dispensed any chemical or compound other than Agent Orange between the years 1960 and 1973 set forth the following:

- (a) the coordinates of the target area to be sprayed;
- (b) the year, month, day and hour of the chemical operation;
- (c) the person responsible for supervising or monitoring each chemical operation;
- (d) the identity and amount of active ingredient dispensed;
- (e) the identity and amount of inert ingredient dispensed;

- (f) the type and density of foliage present at the target area prior to the chemical operation;
- (g) the weather conditions present at the time of the chemical operation;
- (h) the geographic terrain of each target area;
- (i) the equipment used to dispense the chemical including but not limited to type of aircraft and type of sprayer;
- (j) any and all equipment malfunctions occurring during the chemical operation.

31. Set forth all standard operating procedures for each aerial chemical operation including but not limited to:

- (a) altitude of the disseminating aircraft during distribution of the chemical;
- (b) speed of the disseminating aircraft during distribution of the chemical;
- (c) maximum wind speed permissible during chemical operations;
- (d) number and spacing of aircraft per chemical operation;
- (e) number and duties of military personnel in each aircraft.

32. Identify those persons responsible for the creation and adoption and implementation of the procedures set forth in response to Interrogatory 31.

33. Identify each and every document which contains any information sought by Interrogatories 30, 31, and 32 or which the government utilized or consulted in responding to Interrogatories 30, 31 and 32. Specify which document pertains to each Interrogatory and its subsections.

Presence of Military Personnel in Target Area

34. For each any every target area identified in response to Interrogatory 24 identify the military units and the number of personnel in each unit in the target area at the time of each Agent Orange operation.

35. For each and every target area identified in response to Interrogatory 24 identify the military units, and number of personnel in each unit, who entered the target area subsequent to each Agent Orange operation of same area.

36. For each military unit identified in Interrogatory 35 set forth the times of each and every entry into the target area after each Agent Orange operation of the same area.

37. Set forth the manner whereby the presence or absence of military personnel in the target area was ascertained prior to each Agent Orange operation including but not limited to communications or orders or other memoranda transmitted between those responsible for or involved in

scheduling or conducting Agent Orange operations, and ground troop commanders or others responsible for, or cognizant of movements of military personnel.

38. Identify each and every document that contains information sought in Interrogatories 34, 35, 36 and 37 or which was utilized in any way by the government to respond to Interrogatories 34, 35, 36 and 37. Specify which document pertains to each Interrogatory.

39. State whether there was a standing order at any time from 1961 to 1972 that military personnel were not to be present in a defoliation area during or for a period of time after dissemination of Agent Orange.

40. If the response to Interrogatory 39 is in the affirmative, with respect to each order identify:

- (a) the date of the order;
- (b) the contents of the order;
- (c) the signatory of the order;
- (d) the time period or dates during which the order was in effect;
- (e) who approved the order;
- (f) when the order was approved;
- (g) who was responsible for implementing or enforcing the order;



- (h) to whom the order was communicated, and by what means;
- (i) the facts or basis upon which and the purpose for which, the government promulgated the order.

41. State whether there was a policy or practice at any time from 1961 to 1972 that military personnel were not to be present in a defoliation area during or for a period of time after dissemination of Agent Orange, and, if so, identify:

- (a) the date the policy or practice began or took effect;
- (b) the substance of the policy or practice;
- (c) the time period or dates during which the policy or practice was in effect;
- (d) who promulgated, implemented and approved the policy or practice;
- (e) who was responsible for implementing or enforcing the policy or practice;
- (f) to whom the policy or practice was communicated, and by what means;
- (g) the facts or basis upon which, and the purpose for which, the government promulgated the order.

42. Identify each and every document which contains any information sought by Interrogatories 39, 40 and 41 or

which was utilized in any way by the [REDACTED]

Interrogatories 39, 40 and 41. Specify which document pertains to each Interrogatory and its subsections.

NonAerial Agent Orange Operations

43. For all Agent Orange operations other than those identified in response to Interrogatory 24 set forth:

- (a) the method and manner used to dispense the Agent Orange;
- (b) the equipment used for each method of dissemination of Agent Orange;
- (c) the amount of Agent Orange disseminated per acre by each method;
- (d) the amount of Agent Orange dispensed by each method for each year of the years 1961-71;
- (e) the number of acres treated by each method for each year of the years 1961-71.

44. For each and every Agent Orange operation other than those identified in response to Interrogatory 24 set forth:

- (a) the coordinates of the target area to be sprayed;
- (b) the year, month, day, and hour of the Agent Orange operation;
- (c) the person responsible for supervising or monitoring the Agent Orange operation;

- (d) the amount of active ingredient dispensed in the Agent Orange operation;
- (e) the identity and amount of any and all inert ingredients dispensed in the Agent Orange operation.
- (f) the type and density of foliage present at the target area prior to the Agent Orange operation;
- (g) the weather conditions present at the time of the Agent Orange operation;
- (h) the geographic terrain of the target area;
- (i) the equipment used to dispense the Agent Orange including but not limited to type of vehicle and type of sprayer;
- (j) any and all equipment malfunctions occurring during the Agent Orange operation;
- (k) the proximity of military personnel other than Agent Orange operators and the proximity of military living quarters to the target area.

45. For each method of dispensing Agent Orange identified in response to Interrogatory 43 identify:

- (a) the military organizational unit responsible for dispensing the Agent Orange.
- (b) the person responsible for supervising or monitoring the Agent Orange operations and the operations of the dispensing equipment.

46. Identify each and every document that contains information sought in Interrogatories 43, 44 and 45 or which was utilized by the government in any way to respond to Interrogatories 43, 44, and 45. Specify which document pertains to each Interrogatory and its subsections.

#### Post Operation Inspection

47. Identify all memoranda, communications, aerial photographs or any documents that discuss, describe or relate to post operation surveys or reviews of the target areas.

48. Identify all documents that discuss, describe or relate to reports, complaints or other communications of property damage resulting from Agent Orange operations, including but not limited to requests for reparations.

#### Chain of Command

49. Set forth the organizational chain of command for each and every military unit or other government organization responsible for the dissemination of Agent Orange.

#### Accidents

50. For each and every instance where an Agent Orange operation (1) resulted in a failure to deposit the Agent Orange on the target area, or; (2) resulted in the deposit of Agent

Orange on other than a target area, or; (3) resulted in equipment malfunction that exposed military personnel to Agent Orange, or; (4) resulted in the dissemination of Agent Orange in greater concentrations than intended for the operation, set forth:

- (a) the date and time of the Agent Orange operation;
- (b) the area that was subjected to Agent Orange;
- (c) the amount of Agent Orange per acre dispensed;
- (d) the number of military personnel exposed to Agent Orange.

51. For each and every Agent Orange operation listed in response to Interrogatory 50 set forth the reasons for:

- (1) failure to deposit the Agent Orange on the target area, and;
- (2) deposit of Agent Orange on other than a target area, and;
- (3) equipment malfunction that exposed military personnel to contact with Agent Orange, and;
- (4) the immediate dissemination of the Agent Orange in greater concentrations than intended.

52. Identify each and every document that contains information sought in Interrogatories 50 and 51 or which was utilized by the government in any way to respond to

Interrogatories 50 and 51. Specify which document pertains to each Interrogatory and its subsection.

53. Identify each and every item of equipment and equipment systems used in Agent Orange operations in Vietnam including but not limited to their military designation, trade name and description.

54. Set forth the function of each and every item of equipment identified in response to Interrogatory 53.

55. Identify the person responsible for designing, developing the specifications, or selecting each and every item of equipment identified in response to Interrogatory 53.

56. For each and every item of equipment identified in response to Interrogatory 53 identify those persons that were responsible for testing inspecting or otherwise insuring compliance with specifications or other performance requirements.

57. For each and every item of equipment identified in response to Interrogatory 53, set forth every modification thereto, including the person responsible for the design of the modification, the date of the modification, and the reason for the modification.

#### Alternative Possible Causes

58. Identify every substance or compound (hereinafter "compound"), other than Agent Orange, including but not limited

to insecticides, bacteriacides, fungicides, slimicides, rodenticides, herbicides, antimalarial compounds, antibiotics, medicinals, other drugs and chemicals, pest control compounds and insect repellents, which the government introduced or utilized or had reason to know was introduced or being utilized in Vietnam and which the government knew or knows to possess the capacity to cause, in whole or in part, any illness in humans.

59. Identify every compound other than Agent Orange, including but not limited to insecticides, bacteriacides, fungicides, slimicides, rodenticides, herbicides, antimalarial compounds, antibiotics, medicinals, other drugs and chemicals, pest control compounds and insect repellents, which the government introduced or utilized or had reason to know was introduced or being utilized in Vietnam and which the government knew or knows to possess the capacity to cause, in whole or in part, any illness in animals.

60. With respect to each compound set forth in response to Interrogatory 58 identify:

- (a) the purpose for which it was introduced or utilized in Vietnam;
- (b) the illness associated with or resulting from use or exposure;
- (c) the date on which the government first learned of each association identified in subsection (b) above;

- (d) the circumstances and method by which the government first learned of each association identified in subsection (b) above;
- (e) the source from which the government first learned of each association identified in subsection (b) above;
- (f) the person in the government who first learned of each association with illness identified in subsection (b) above;
- (g) any studies, test, experiments, research or investigations performed by the government or caused to be performed by the government concerning the health effects of each such substance or compound;
- (h) the source of the compound and where the compound was obtained.

61. With respect to each compound set forth in response to Interrogatory 59 identify:

- (a) the purpose for which it was introduced or utilized in Vietnam;
- (b) the illness associated with or resulting from use or exposure;
- (c) the date on which the government first learned of each association identified in subsection (b) above

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- (d) the circumstances and method by which the government first learned of each association identified in subsection (b) above;
- (e) the source from which the government first learned of each association identified in subpart (b) above
- (f) the person(s) in the government who first learned of each association identified in subsection (b) above;
- (g) any studies, test, experiments, research or investigations performed by the government or caused to be performed by the government concerning the health effects of each such substance or compound;
- (h) the source of the compound and where the compound was obtained.

62. Identify each and every study, test, experiment, research project or investigation performed by the government, or caused to be performed by the government, concerning each illness or possible illness associated with exposure to any of the compounds identified in response to Interrogatories 58 and 59.

63. Identify each and every document which contains any information sought by Interrogatories 58, 59, 60, 61, and 62 or which the government utilized or consulted in responding to Interrogatories 58, 59, 60, 61, and 62. Specify which document pertains to each Interrogatory and its subsection.

Claimed Health Problems

64. Identify each and every person reported to the government by any person while in Vietnam who was or is claimed to be attributed, in whole or in part, to exposure to Agent Orange, and as to each identify:

- (a) the date of the report;
- (b) who made the report;
- (c) to whom the report was made;
- (d) where the person claimed to be exposed;
- (e) how the person claimed to be exposed;
- (f) the symptoms identified;
- (g) the diagnosis rendered and the date thereof;
- (h) the facts upon which the diagnosis was based;
- (i) the person rendering the diagnosis;
- (j) any treatment rendered;
- (k) the result of any treatment;
- (l) the duration of the illness;
- (m) the nature and extent of the medical examination or treatment of the person.

65. Identify each and every person reported to the government with respect to any military personnel who had departed Vietnam, which illness is attributed or claimed to be attributed, in whole or in part, to exposure to Agent Orange, and as to each identify:

- (a) the date of the report;
- (b) who made the report;
- (c) to whom the report was made;
- (d) where the person claimed to be exposed;
- (e) how the person claimed to be exposed;
- (f) the symptoms identified;
- (g) the diagnosis rendered and the date thereof;
- (h) the facts upon which the diagnosis was based;
- (i) the person rendering the diagnosis;
- (j) any treatment rendered;
- (k) the result of any treatment;
- (l) the duration of the reported illness;
- (m) the nature and extent of the medical examination or treatment of the person.

66. Identify each and every illness reported to the government by any person while in Vietnam that is or was attributed or claimed to be attributed in whole or in part, to exposure to any of the compounds or substances identified in response to Interrogatories 58 and 59, and as to each identify:

- (a) the date of the report;
- (b) who made the report;
- (c) to whom the report was made;
- (d) where the person claimed to be exposed;
- (e) how the person claimed to be exposed;

- (f) the symptoms identified;
- (g) the diagnosis rendered, and the date thereof;
- (h) the facts upon which the diagnosis was based;
- (i) the person rendering the diagnosis;
- (j) any treatment rendered;
- (k) the result of any treatment;
- (l) the duration of the reported illness;
- (m) the nature and extent of any medical examination and treatment of the person.

67. Identify each and every report that was reported to the government with respect to any person who was in Vietnam after that person departed Vietnam, which illness is or was attributed or claimed to be attributed, in whole or in part, to exposure to any of the compounds or substances identified in response to Interrogatories 58 and 59 and as to each identify:

- (a) the date of the report;
- (b) who made the report;
- (c) to whom the report was made;
- (d) where the person claimed to be exposed;
- (e) how the person claimed to be exposed;
- (f) the symptoms identified;
- (g) the diagnosis rendered, and the date thereof;
- (h) the facts upon which the diagnosis was based;
- (i) the person rendering the diagnosis;

- (j) any treatment rendered;
- (k) the result of any treatment;
- (l) the duration of the reported illness;
- (m) the nature and extent of any medical examination or treatment of the person.

68. Identify each and every illness that was reported to the government by any person while in Vietnam that was or is attributed or claimed to be attributed, in whole or in part, to any climatic or environmental factor of Vietnam including indigenous viruses, insects or bacteria, and as to each identify:

- (a) the factor to which it is or was attributed or is claimed to be attributed;
- (b) the date of the report;
- (c) who made the report;
- (d) to whom the report was made;
- (e) the symptoms identified;
- (f) the diagnosis rendered, and the date thereof;
- (g) the facts upon which the diagnosis was based;
- (h) the person rendering the diagnosis;
- (i) any treatment rendered;
- (j) the result of any treatment;
- (k) the duration of the reported illness;
- (l) the nature and extent of any medical examination or treatment of the person.

69. Identify each and every illness that was reported to the government with respect to any person who was in Vietnam after that person departed Vietnam, which illness is or was attributed or claimed to be attributed, in whole or in part, to any climatic or environmental factor including indigenous viruses, insects or bacteria of Vietnam, and as to each identify:

- (a) the factor to which it was attributed or is claimed to be attributed;
- (b) the date of the report;
- (c) who made the report;
- (d) to whom the report was made;
- (e) the symptoms identified;
- (f) the diagnosis rendered, and the date thereof;
- (g) the facts upon which the diagnosis was based;
- (h) the person rendering the diagnosis;
- (i) any treatment rendered;
- (j) the result of any treatment;
- (k) the duration of the reported illness;
- (l) the nature and extent of any medical examination or treatment of the person.

70. Identify each and every document which contains any information sought by Interrogatories 64, 65, 66, 67, 68, and 69 or which the government utilized or consulted in responding to Interrogatories 64, 65, 66, 67, 68, and 69. Specify which document pertains to each Interrogatory and its subsections.

10982

### Medical Training

71. Identify any training provided or caused to be provided by the government to persons conducting medical examinations or providing treatment of military personnel in Vietnam with respect to any illnesses resulting from military service in Vietnam.

72. Identify any training provided or caused to be provided by the government to persons conducting medical examinations or providing treatment of former military personnel who claimed illnesses resulting from military service in Vietnam.

73. Identify each and every document which contain any information sought by Interrogatories 71 and 72 or which the government utilized or consulted in responding to Interrogatories 71 and 72. Specify which document pertains to each Interrogatory.

### Studies

74. Identify each and every study, test, experiment, research project or investigation performed by the government, or caused to be performed by the government, concerning possible health effects associated with exposure to Agent Orange.

75. Identify each and every study, test, experiment, research project or investigation performed by the government,

or caused to be performed by the government, concerning possible health effects associated with exposure to dioxin.

76. Identify each and every study, test, experiment, research project or investigation performed by the government, or caused to be performed by the government, concerning possible health effects associated with exposure to the waste stream which may result from the production process of 2,4,5-T and 2,4,5-trichlorophenol.

77. Identify each and every study, test, experiment, research project or investigation performed by the government, or caused to be performed by the government, concerning possible health effects associated with exposure to 2,4,5-T and 2,4,5-trichlorophenol.

78. Identify each and every study, test, experiment, research project or investigation performed by the government, or caused to be performed by the government, concerning any illness experienced by military personnel who served in Vietnam.

79. Identify each and every study, test, experiment, protocol, investigation, or research of any description performed by the government, or caused to be performed by the government, concerning the absorption of Agent Orange, 2,4,5-T, 2,4-D or dioxin including but not limited to soil, plant, human and animal absorption studies.



80. Identify each and every study, test, experiment, protocol, investigation, or research of any description performed by the government, or caused to be performed by the government, concerning exposure or potential exposure to Agent Orange incurred or potentially incurred by individual military personnel, or groups of military personnel, as a consequence of application of Agent Orange by the government.

81. Set forth all orders, policies and procedures governing or concerning consumption by military personnel of water or food grown in Vietnam and identify all documents that discuss, describe or relate to such orders, policies and procedures.

82. Identify each and every study, test, experiment, protocol, investigation, or research of any description performed by the government, or caused to be performed by the government, concerning the consumption of water or food or fish grown or harvested in Vietnam.

83. Identify each and every document which was generated or produced in the course of, or which refer to, every study, test, experiment, protocol, investigation, or research of any description identified in response to Interrogatory 74, 75, 76, 77, 78, 79, 80 and 82. Specify which document pertains to each Interrogatory.

84. State whether at any time the government performed, or caused to be performed, any study to determine

whether Agent Orange, 2,4,5-T, 2,4-D or dioxin was the cause, in whole or in part, of any illness or whether any such study is now being performed or is now contemplated.

85. If the answer to Interrogatory 84 is in the affirmative, identify:

- (a) all studies, including but not limited to proposals for studies, protocols, investigations, tests or research of any description, that relate to or were performed or are being performed in connection with determining whether a causal relationship exists between any illness or symptoms of illness and Agent Orange.
- (b) the reason or motivating factor for the initiation of each and every study identified in response to subsection (a) above.
- (c) the resulting determination of the government.

86. Identify each and every document which was generated or produced in the course of or which refers to every study, test, experiment, research project or investigation identified in response to Interrogatory 85.

87. Identify all nonpublic or unpublished studies known to the government other than those identified in Interrogatories 74, 75, 76, 77, 78, 79, 80, 82, 83 and 85 concerning possible health effects or illnesses associated in

whole or in part with Agent Orange or dioxin or 2,4,5-T or 2,4-D or 2,4,5-trichlorophenol.

88. Identify all persons who were consulted or who assisted in any way in the preparation of the responses to the above Interrogatories. For each person specify the Interrogatory response that he was consulted on or that he assisted in preparing.

DATED: October 10, 1983  
New York, N.Y.

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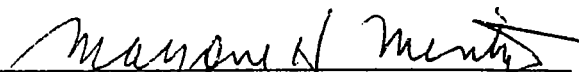
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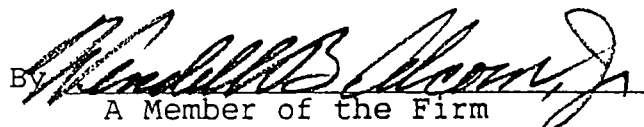
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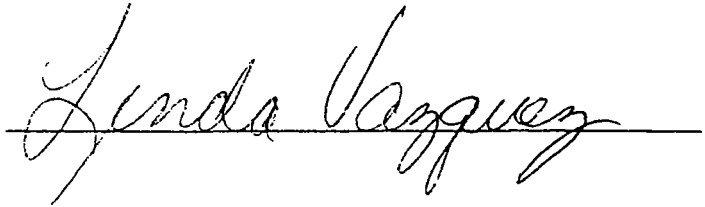
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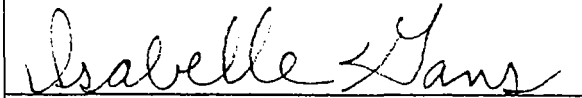
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Also on October 11, 1983, a copy of the above described document was delivered by EXPRESS MAIL upon:

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Sworn to before me this  
14<sup>th</sup> day of October, 1983

  
Notary Public

ISABELLE GANS  
Commissioner of Deeds  
City of New York 2-4028  
Certificate Filed in New York County  
Commission Expires Oct. 1, 1985

10990

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

In Re:

"Agent Orange"

Products Liability Litigation

MDL No. 381  
(All Cases)

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

★ OCT 18 1983 ★  
TIME A.M.             
P.M.           

REPLY MEMORANDUM OF DEFENDANT THE  
DOW CHEMICAL COMPANY ON THE APPLI-  
CATION OF THE MICHIGAN PHYSICIAN-  
PATIENT PRIVILEGE TO PLAINTIFFS'  
DISCOVERY REQUEST

10991

#1471

RIVKIN, LEFF, SHERMAN & RADLER  
ATTORNEYS AND COUNSELLORS AT LAW  
100 GARDEN CITY PLAZA, GARDEN CITY, N.Y. 11530

This reply memorandum is submitted on behalf of defendant, The Dow Chemical Company ("Dow"), in response to plaintiffs' recent submission in support of their request for production of certain files and records maintained by Dow's corporate medical department.

#### INTRODUCTION

As set forth in Dow's initial memorandum in opposition to plaintiffs' discovery request, the records in question are privileged from disclosure under Michigan law. See Dow's Memorandum on the Application of the Physician-Patient Privilege to Plaintiffs' Discovery Request, dated September 16, 1983 (hereinafter "Dow Memo at \_\_\_\_").

In an effort to avoid the uncontroverted Michigan authority relied upon by Dow, plaintiffs argue that Michigan law does not apply but rather that the issue is governed by federal law or, in the alternative, that New York law is controlling. Finally, without citation to any Michigan authority, plaintiffs suggest that limited disclosure is nonetheless appropriate under Michigan law. See Plaintiffs' Supplemental Memorandum on the Inapplicability of the Physician-Patient Privilege to the Discovery of Dow's Occupational Record Files, dated September 30, 1983 (hereinafter "Plaintiffs' Memo at \_\_\_\_").

For the reasons set forth below and in its prior submission, Dow respectfully submits that New York's principles of



conflict of laws mandate application of Michigan law to resolve this question. In this instance, Michigan law poses an absolute bar to plaintiffs' discovery request.

## ARGUMENT

### POINT I

#### MICHIGAN LAW IS APPLICABLE TO THE ISSUE OF WHETHER THE DOW RECORDS SOUGHT BY PLAINTIFFS ARE PRIVILEGED

Pursuant to the direction of the Special Master, plaintiffs and defendants have previously addressed the issue of whether the government contract defense is a matter of state or federal common law.\* Consistent with the Second Circuit's decision on federal common law, defendants maintain that the defense is a matter of state law and that as a federal court sitting in diversity, this Court must look to state law to resolve the substantive issues of this litigation. Should the Court adopt defendants' view, plaintiffs do not dispute that Rule 501 of the Federal Rules of Evidence requires the Court look to state law to resolve privilege questions.

Plaintiffs contend that the government contract defense is a matter of federal common law; consequently, the Court would

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\* See Defendants' Memorandum of Law Regarding the Law Applicable to the Government Contract Defense, dated September 15, 1983; Plaintiffs' Memorandum in Favor of the Application of Federal Law to the Government Contract Defense, dated September 30, 1983.

be required to look to federal common law to resolve privilege questions. Plaintiffs overlook the fact that even if the Court concludes that the government contract defense is governed by federal law, Rule 501 would still require resolution of any privilege question under state law. As we have already noted, Dow Memo at 1 n.\*\*, the Phase I trial envisioned by the Court in Pre-Trial Order No. 51 would involve issues of liability and causation, unquestionably matters of state law. Thus, evidentiary privilege questions under Rule 501 must be determined in accordance with state law.

Plaintiffs also seek to avoid the application of Michigan law by arguing that the presence of New York plaintiffs in the Agent Orange litigation is sufficient to "justify" application of the New York law of privilege under New York's principles of conflict of laws. Plaintiffs' argument suffers from two serious flaws.

Plaintiffs premise their argument in support of the application of New York law on New York's interest in the welfare of its plaintiff-veterans. Reliance upon this nebulous interest is misplaced. As noted in Dow's initial memorandum, New York courts give "controlling effect to the law of the jurisdiction which . . . has the greatest concern with the specific issue raised in the litigation." Babcock v. Jackson, 12 N.Y. 473, 481, 240 N.Y.S.2d 743, 749 (1963). In this instance, the specific issue is whether the medical records of Dow employees may be disclosed without their consent. Michigan's paramount interest

in this issue is well documented. Dow Memo at 7-8.

Understandably, plaintiffs do not dispute Michigan's paramount interest in protecting the privacy of its residents.

This Court's application of the Babcock test in Mazzella v. Philadelphia Newspapers, Inc., 479 F. Supp. 523 (E.D.N.Y. 1979), constitutes clear precedent for rejection of plaintiffs' argument. In Mazzella (discussed in the Dow Memo at 7), a New York plaintiff instituted a libel action in New York. During pre-trial discovery, plaintiffs sought to force the defendant newspaper to disclose the confidential source of the information on which the allegedly libelous story was based. Defendant, a Pennsylvania newspaper, invoked the Pennsylvania newsman's privilege. Utilizing the Babcock test, the court concluded that "Pennsylvania has the greatest concern with the question of the newsman's privilege." Id. at 527.

Plaintiffs' argument is also flawed in that New York's purported interest in its plaintiff-veterans is no greater or lesser than the undefined interests of the thirty-seven other states including Michigan, the District of Columbia and Australia in their respective plaintiff-veterans. At this stage of the litigation, where New York is the forum solely for the purpose of consolidated pre-trial discovery, there is no sound reason why New York law should predominate over the law of any other jurisdiction, particularly where, as here, Michigan's paramount interest in the privilege issue is clear.

POINT II

MICHIGAN LAW POSES AN ABSOLUTE  
BAR TO PRODUCTION OF THE DOW  
RECORDS SOUGHT BY PLAINTIFFS

The Michigan statutory and judicial authority relied upon by Dow is thoroughly discussed in its initial submission, Dow Memo at 8-14, and remains unchallenged by plaintiffs.\* Briefly stated, Michigan law provides an absolute bar to the disclosure of the records sought by plaintiffs.

Without citation to any Michigan authority, plaintiffs continue to suggest that Dow can make limited production of its employees' medical records and workmen compensation files without their consent. This unsupported assertion flies in the face of both Michigan case law and Michigan legislation.

Michigan state courts and the federal district court in Michigan have uniformly held that "all material which comes within the [physician-patient] privilege is immune to pre-trial discovery." Boyd v. Wrisley, 228 F. Supp. 9, 11 (W.D. Mich. 1964). Moreover, the Michigan legislature has gone to great lengths -- indeed to the point of imposing criminal sanctions -- to protect the confidentiality of occupational disease claims submitted by Michigan workers. Dow Memo at 11-12.

In sum, Michigan law precludes disclosure of the medical records and workmen's compensation files of Dow's employees absent their consent.

\* Indeed, plaintiffs have not cited a single Michigan case or statute for the proposition that discovery of the records in question would be appropriate.

CONCLUSION

Plaintiffs should be denied access to the medical records and workmen's compensation files of Dow's employees.

Dated: Garden City, New York  
October 17, 1983

RIVKIN, LEFF, SHERMAN & RADLER  
Attorneys for Defendant  
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STATE OF NEW YORK )  
 ) SS.:  
COUNTY OF NASSAU )

THERESA A. MENNA , being duly sworn, deposes and says:

That deponent is not a party to this action, is over 18 years of age and resides in Lynbrook, NY

That on the 17th day of October , 1983 , deponent served the within Reply Memorandum of Defendants The Dow Chemical Company on the Application of the Michigan Physician-Patient Privilege to Plaintiffs' Discovery Request

upon the attorneys below set forth representing the parties, as indicated, at the addresses shown, said addresses being designated by said attorneys for that purpose, 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 Post Office Department within the State of New York.

See Attached Service List

*Theresa A. Menna*  
THERESA A. MENNA

Sworn to before me this 17th  
day of October , 1983

*Susan Sharkey*  
NOTARY PUBLIC

SUSAN SHARKEY  
Notary Public, State of New York  
No. 30-4727870  
Qualified in Nassau County  
Commission Expires March 30, 1984

10998

RIVKIN, LEFF, SHERMAN & RADLER

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Clerk of the Panel  
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10999

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

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

★ SEP 21 1983 ★

TIME A.M. \_\_\_\_\_  
P.M. \_\_\_\_\_  
MDL 381  
(ALL CASES)

"AGENT ORANGE"  
Product Liability Litigation  
-----X

Please take notice that counsel for plaintiffs will take the depositions of the following listed people in accordance with instructions given by the Special Master at the hearing on September 7, 1983:

1. Lindley DeAtley
2. Gene Douglas
3. Willis Hart
4. Don Fuhlhage
5. Jack Howland
6. Ed Chapman
7. Harold Howard
8. Thomas Hogard
9. Bill Shirley
10. John Sambol
11. Bob Maskill
12. R. E. Ballinger
13. Mr. Goode

Pursuant to the Special Master's directions on September 7, 1983, T.H. Agriculture and Nutrition Company, Inc. is to begin producing on September 22, 1983 three witnesses per week for three weeks out of each succeeding month. Unless agreed otherwise by counsel for plaintiff and by counsel for T.H. Agriculture and Nutrition Company, Inc., depositions are to be conducted in the offices of Clark, Gagliardi & Miller

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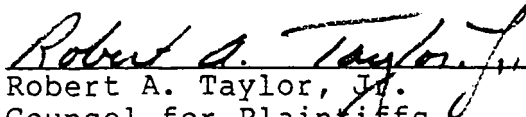


beginning at 9:30 in the morning. Deponents are to be called for deposition in the order in which they appear in the foregoing list.

T.H. Agriculture and Nutrition Company, Inc. is to appoint at least one deponent pursuant to Fed. R. Civ. P. 30(b)(6) to testify on behalf of the corporation. Deponents are to bring with them copies of any and all documents authored in whole or in part by them and/or upon which their name appears if relevant to the instant litigation where such documents are in the deponent's personal possession or in the possession of his counsel.

RESPECTFULLY SUBMITTED,

Ashcraft & Gerel

  
Robert A. Taylor, Jr.  
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CERTIFICATE OF SERVICE

Robert A. Taylor, Jr., states under penalty of perjury:

That deponent is not a party to the action, is over 18 years of age and resides in Washington, D.C.;

That on the 9th day of September, 1983, deponent mailed via first class mail postage pre-paid the foregoing Plaintiffs' Notice to Take Depositions addressed to the Clerk of Court, United States District Court, Eastern District of New York, Uniondale Avenue, Hempstead Turnpike, Uniondale, NY 11553; and Special Master Sol Schreiber, Milberg, Weiss, Bershad & Specthrie, One Pennsylvania Plaza, New York, New York 10119 and

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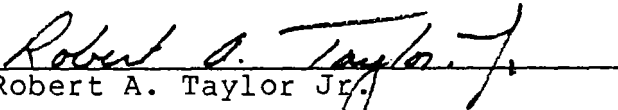
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BARRY A. STIEFEL  
JULIA H. BUTLER  
MICHAEL W. HEAVISIDE  
RICHARD E. TRODDEN  
JAMES E. SWIGER

September 9, 1983

Clerk of Court  
United States District Court, EDNY  
Uniondale Avenue  
Hempstead Turnpike  
Uniondale, NY 11553

Re: MDL 381

Dear Sir:

Enclosed please find for filing the Plaintiffs' Notice  
to Take Depositions.

Thank you for your assistance in this matter.

Sincerely,

*Robert A. Taylor, Jr.*  
Robert A. Taylor, Jr.

RAT/kmk  
Enclosures

cc: See Attached Service List

11005

SERVICE LIST

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11007

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

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

★ SEP 13 1983 ★

-----X TIME A.M. ....  
P.M. ....

In re

MDL No. 381

"AGENT ORANGE"

(All Cases)

Product Liability Litigation

-----X

NOTICE OF CONFIDENTIALITY  
AND UPDATED INDEX OF  
CONFIDENTIAL DOCUMENTS OF  
DEFENDANT THE DOW CHEMICAL  
COMPANY

11008

RIVKIN, LEFF, SHERMAN & RADLER  
ATTORNEYS AND COUNSELLORS AT LAW  
100 GARDEN CITY PLAZA, GARDEN CITY, N.Y. 11530

1421



UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

-----X

In re

"AGENT ORANGE"

Product Liability Litigation

NOTICE OF CONFIDENTIALITY  
AND UPDATED INDEX OF  
CONFIDENTIAL DOCUMENTS OF  
DEFENDANT THE DOW CHEMICAL  
COMPANY

MDL No. 381 (GCP)  
(All Cases)

-----X

Defendant, The Dow Chemical Company, ("Dow"), pursuant to the Protective Order regarding Production of Confidential Documents by Defendants dated February 6, 1981 (the "Confidentiality Order"), annexes hereto a Notice of Confidentiality (Exhibit A) and updated pages for insertion in the Notice of Confidentiality and updated index of Confidential documents of Defendant The Dow Chemical Company dated March 1, 1983 (Exhibit B) for those documents referenced in the Defendant The Dow Chemical Company's Answers to Plaintiffs' Interrogatories to Defendants (First Wave), dated February 13, 1981, which Dow has designated as "CONFIDENTIAL."

In accordance with paragraph 14 of the Confidentiality Order. Dow reserves its right to prepare and distribute further notices of confidentiality and indexes as the need arises, and to avail itself of the procedures set forth in the Confidentiality Order for the documents identified therein.

Dated: Garden City, New York  
August 31, 1983

RIVKIN, LEFF, SHERMAN & RADLER

BY: Maryanne A. McIntyre  
A Member of the Firm  
Attorneys for The Dow Chemical Company  
100 Garden City Plaza  
Garden City, New York 11530  
(516) 746-7500

11009

NOTICE OF CONFIDENTIALITY AND  
UPDATED INDEX OF CONFIDENTIAL  
DOCUMENTS OF THE DOW CHEMICAL  
COMPANY

NOTICE OF CONFIDENTIALITY

11011

| <u>Dow Number</u>   | <u>Date</u> | <u>Author</u> | <u>Recipient</u> |
|---------------------|-------------|---------------|------------------|
| 0235174-<br>0235311 | 670000      | Dow           |                  |
| 2020658-<br>2020682 | 630820      |               |                  |

11012

Distributees

General Subject Matter

Supplement  
Renegotiation Report

Amstutz, FC  
Baker, GA  
Chase, FI  
DeLisle, NG  
Robertson, JH  
Sulati, JJ  
Teal, JL  
Waste Control Eng.  
File

UPDATED INDEX OF  
CONFIDENTIAL DOCUMENTS

11013

| <u>Dow Number</u>    | <u>Date</u> | <u>Author</u>               | <u>Recipient</u> |
|----------------------|-------------|-----------------------------|------------------|
| 0201109*             | 650929      | Taylor, N.                  | Delisle, NG      |
| 0201110-<br>0201111* | 651012      | Churchman, JW               | Bosscher, H      |
| 0201112*             | 651018      | Churchman, JW               |                  |
| 0201113-<br>0201114* | 651000      | Wehn, WE<br>Wappenhensch, O |                  |
| 0201115*             | 000000      | H.A.S.                      |                  |
| 0201116*             | 650526      | Churchman, JW               |                  |
| 0201117*             | 650608      | Bosscher, H                 | Branch, CB       |
| 0201118*             | 650622      | Henske, JM<br>Doedens, JD   | Branch, CB       |
| 0235174-<br>0235311  | 670000      | Dow                         |                  |
| 0278385-<br>0278390* | 540106      | Dow<br>Wolf, MA             |                  |
| 0278390-<br>0278392* | 531230      |                             |                  |

Distributees

General Subject Matter

Hutchenreuther, C  
Timm, WC  
Goergen, GG  
Mitchel, JE  
Moore, HJ

Manning of new  
Trichlorophenol plant

Overrun 245-Trichloropheno  
new facility

245-Trichlorophenol new  
facility (economic summary  
39458-65)

245-Trichlorophenol (cost  
estimate)

245-Trichlorophenol New  
facility (Dow Bd. of Dir.  
agenda)

245-Trichlorophenol new  
facility economic summary

245-Trichlorophenol new  
facilities

245-Trichlorophenol new  
facilities

Supplement  
Renegotiation Report

M-213 (Acute oral  
toxicity)

M-213 (Acute oral  
toxicity)



| <u>Dow Number</u>    | <u>Date</u> | <u>Author</u>                          | <u>Recipient</u> | <u>Distributees</u>                                                                                                                                                                                                                     | <u>General Subject Matter</u>                                                                                       |
|----------------------|-------------|----------------------------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| 1766944-<br>1766948* | 000000      | Dow                                    |                  |                                                                                                                                                                                                                                         | 245 Trichlorophenol operations 804 Building                                                                         |
| 1768247-<br>1768249* | 650317      | REA                                    |                  |                                                                                                                                                                                                                                         | Trichlorophenol Reactor Cycle                                                                                       |
| 1770187-<br>1770195* | 661104      | Widiger, A<br>Johnson, RL<br>Dugan, GF |                  | Widiger, A<br>Johnson, RL<br>Dugan, GF<br>Coulter, KE<br>Thurston, D<br>Haberstroh, WH<br>Sauers, RC<br>Wolf, RR<br>Poffenberger, N<br>Goergen, GG<br>Bender, S<br>Louck, A<br>Bailey, CZ<br>Putnam, MS<br>Nielson, WH<br>Staehling, EC | Phenol 245-Trichloro study of chloracne problem preparation of 245-Trichlorophenol from Trichlorobenzene, PL2064-13 |
| 1770705-<br>1770709* | 700525      | Brady, P                               |                  | Schmidtke, DJ<br>Haberstroh, WH<br>Williams, L<br>Vogelsang, P<br>Chase, FI<br>Kensicki, RF                                                                                                                                             | Manufacture of Phenoxy Herbicides                                                                                   |
| 2020658-<br>2020682  | 630820      |                                        |                  | Amstutz, FC<br>Baker, GA<br>Chase, FI<br>DeLisle, NG<br>Robertson, JH<br>Sulati, JJ<br>Teal, JL<br>Waste Control Eng.<br>File                                                                                                           |                                                                                                                     |

The following 2,4-D related documents have been deleted:

0725773-0725777, 0981364, 1298570, 1298598, 1580108-1580109, 1630525, 1631287-1631289, 1631290, 1631291,

AFFIDAVIT OF SERVICE

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

SUSAN SHARKEY, being duly sworn, deposes and says:

That deponent is not a party to the action, is over 18 years of age and resides at Garden City, New York.

That on the 31st day of August , 1983 deponent served the within Notice of Confidentiality and Updated Index of Confidential Documents of Defendant The Dow Chemical Company upon:

SEE ATTACHED SERVICE LIST

the address designated by said attorney(s) for that purpose by depositing a true copy of same enclosed in a post-paid properly addressed wrapper, in a post office-official depository under the exclusive care and custody of the United States Postal Service within the State of New York.

Susan Sharkey  
SUSAN SHARKEY

Sworn to before me this

31st day of August , 1983.

Colleen A. Carney  
COLLEEN A. CARNEY  
NOTARY PUBLIC, STATE OF NEW YORK  
NO. 4714759  
QUALIFIED IN SUFFOLK COUNTY  
COMMISSION EXPIRES MARCH 30, 1984

11016

RIVKIN, LEFF, SHERMAN & RADLER

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1101

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

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

In re

"AGENT ORANGE"

Product Liability Litigation

★ SEP 13 1983 ★  
MDL 381  
(All Cases)  
TIME A.M. ....  
P.M. ....

SIRS:

PLEASE TAKE NOTICE, that plaintiffs demand that the following witnesses be produced by or on behalf of Dow Chemical Company, a defendant in this action, for oral deposition at the offices of counsel for defendant Dow Chemical Company in Garden City, New York, commencing the 19th day of September, 1983 at 9:30 a.m. in the forenoon of that day and continuing from day to day until such depositions are concluded.

The order in which such witnesses shall be presented is left to the convenience of defendant provided depositions continue from day to day until concluded.

Dated: Carle Place, New York  
September 1, 1983

  
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11018  
1418

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Clark, Gagliardi & Miller  
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Inn of Courts  
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- 1) Dr. U.K. Rowe - Director of Toxicological Lab and Assistant Director of Biochemical Research Lab
- 2) D.D. McCollister - Manager Registration Section - Agricultural Department
- 3) H.C. Spencer (title unknown)
- 4) Julius E. Johnson - Manager Agricultural Chemicals Department
- 5) Mr. Ray Holmes - Plant Manager - 199 Building
- 6) Mr. Ross Mulholland - Manager of Bio Products at Dow Chemical of Canada
- 7) Marguerite L. Leng, M.D. - Registration Section - Agricultural Products Department
- 8) B.A. Schwetz - Chemical Biology Research Department
- 9) P.J. Gehring, D.V.M. and Ph.D. - Toxicology Research Laboratories
- 10) Benjamin B. Holden, M.D. - Medical Department
- 11) Howard Gill - Bio Products
- 12) Mr. Jack Peterson (title unknown)
- 13) Dr. Larry G. Silverstein - Biochemical Research
- 14) Mr. Donald K. Ballman - Sales Department
- 15) Mark G. Wiltse - Bio Products
- 16) Mr. J.D. Doedens - (title unknown)
- 17) Dr. George E. Lynn - Director of Registration Section - Agricultural Chemical Research
- 18) A.P. Beutel - V.P. Director of Government Affairs
- 19) R.A. Hickman - Manager - U.S. Government Marketing
- 20) H.R. Hoyle - Biochemical Research Lab
- 21) Mark H. Wolf - Toxicology
- 22) W.W. Sunderland - Supervisor Specifications Labeling and Registration Section
- 23) W.P. Falsey - Bio Products Department
- 24) Grady E. Holdeman - Agricultural Products Department
- 25) Etcyl H. Blair - Manager of Research and Development Agricultural Products Department

- 26) W.R. Nummy - Manager Agricultural Products Department
- 27) Virgil B. Robinson, D.V.M., Ph.D. - Head of Department of Pathology and Toxicology
- 28) Dr. Eugene E. Kenaga - Environmental Specialist - Bio Products Department
  
- 29) James K. Leasure
- 30) R.D. Wilcox                      All Dow Employees who attended August 10th and  
                                         11th, 1965, Army Conference on defoliant at
- 31) W.P. Schambra                      Ft. Dietrich



UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

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

★ JUL 1 1983 ★  
TIME A.M. 10  
P.M. 00

----- x  
IN RE "AGENT ORANGE" PRODUCT :  
LIABILITY LITIGATION :

MDL #381 (GCP)

----- x  
ALL CASES

UNITED STATES' MOTION FOR A PROTECTIVE  
ORDER CONCERNING REQUESTS FOR PRODUCTION  
FROM THE DEPARTMENT OF DEFENSE

Pursuant to Rules 37(a) and 26(c) of the Federal Rules of Civil Procedure, the United States hereby moves this Court to enter a Protective Order. This motion stems from the unduly burdensome and oppressive effects imposed upon the United States and, in particular, the Department of Defense, by Defendants' Motion to Compel Production of Department of Defense Documents, received April 11, 1983, and by defendants' continued renewal of requests for documents that the United States previously has produced or cannot locate in the pertinent files.

In support of the present Motion, the United States requests that the Court make reference to the attached Memorandum in Opposition to Defendants' Motion to Compel Production of Department of Defense Documents and In Support of the United States' Motion for Protective Order.

11023

1370

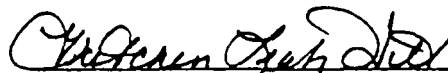
Respectfully submitted,

J. PAUL McGRATH  
Assistant Attorney General  
Civil Division

RAYMOND J. DEARIE  
United States Attorney



ARVIN MASKIN  
Trial Attorney, Torts Branch



GRETCHEN LEAH WITT  
Trial Attorney, Torts Branch  
Civil Division  
U.S. Department of Justice  
521 12th Street, N.W.  
Washington, D.C. 20530  
Telephone: (202) 724-6725

Attorneys for the United States  
of America.

DATED:

April 27, 1983

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

- - - - - x  
IN RE "AGENT ORANGE" PRODUCT : MDL #381 (GCP)  
LIABILITY LITIGATION : ( SS)  
- - - - - x

ALL CASES

UNITED STATES' MEMORANDUM IN OPPOSITION TO  
DEFENDANTS' MOTION TO COMPEL PRODUCTION OF  
DEPARTMENT OF DEFENSE DOCUMENTS AND IN  
SUPPORT OF THE UNITED STATES' MOTION FOR  
A PROTECTIVE ORDER

I. INTRODUCTION

By Motion dated April 8, 1983 defendants moved that the Special Master issue an order compelling production by the United States of Department of Defense documents. Because the facts do not warrant issuance of such order by the Special Master, the United States opposes that motion and order.

The order sought by defendants would have such a burdensome and oppressive effect upon the United States that the Government is compelled not only to seek denial of the order, but also to move for a protective order pursuant to Rule 37(a) of the Federal Rules of Civil Procedure. The requested protective order would prevent a significant burden to the Government by prohibiting defendants from renewing the requests contained in their pending motion after disposition of the motion by the Court.

## II. ARGUMENT

### A. The Special Master Should Deny Defendants' Motion Because The United States Has Conducted Diligent Searches And Has Produced All Located Documents.

Defendants' Memorandum In Support of Motion To Compel Production of Department of Defense documents (hereafter "Defs. Mem.") distorts the record of government production of Department of Defense documents. Contrary to defendants' representations, the Government has diligently searched for those documents that defendants have previously requested. Indeed, the Government has made significant and extensive production from the Department of Defense (hereafter "DOD"). As a consequence, the United States strongly objects to any insinuations by defendants that it has conducted less than adequate searches in its good faith effort to provide the parties with all pertinent DOD documents that may still exist in government files.

From the beginning of discovery in this litigation in 1979, defendants have sought massive and virtually boundless discovery from DOD. Details of the United States' extensive record of DOD production, which is already well documented, is unnecessary for the purposes of this memorandum. The Government has made significant production of DOD documents starting in 1980. On February 13, 1981, as part of a voluntary response to defendants' Phase I, First Wave Interrogatories, the United States alerted defendants that it would soon make available a microfilm index of government document production. Notice To All Counsel, February 13, 1981 at 1. That list, released by the end of February, 1981, contained

numerous pages of entries demonstrating extensive production of DOD documents in 1980. See, United States' Index of Document Production.

During 1980, DOD's various departments and agencies conducted extensive sweeps of their files in response to Dow's requests for documents generally relevant to this litigation. Each branch assumed responsibility for their own production and used varying means of making the pertinent information available to the parties. The Air Force, for example, conducted a dragnet sweep of its files and produced all responsive documents it located. That search produced over 42,000 documents totalling well over 165,000 pages. In accordance with normal procedure in this litigation, the United States had these documents microfilmed. The resulting 44 rolls of microfilm, each containing up to 2500 frames of information, generally became available to the parties by late 1980. \*/

The Army took a slightly different approach. In response to defendants' discovery requests in 1980, the Government voluntarily undertook to issue two separate directives to all Army installations around the world to not only compile a count of all potentially pertinent documents, but also describe the materials and their content. See, Declaration of Major Wittmayer at 2, attached as Exhibit A. On February 13, 1981, the Government advised defendants that the 335 page TWIX inventories were being microfilmed

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\*/ Since 1980, of course, Air Force and DOD have continued to make substantial document production.

for production and that "[i]f any party desires to examine materials referenced in these inventories, they [should] notify [government counsel] in writing". Notice To All Counsel, February 13, 1981 at 2. Although these materials have been available since this announcement, defendants failed to avail themselves of this production until mid-March, 1983.

Despite the United States' invitation to defendants to select those documents they desired from the TWIX index, defendants were not satisfied with Army production. Consequently, on May 17, 1982 defendants issued a subpoena for production of Chemical Systems Laboratory or Edgewood documents. In response to this subpoena, the United States conducted a specific search at Edgewood. That search located approximately 2,500 pages of responsive material beyond the almost 5,400 pages of Edgewood material already produced. The United States had this material microfilmed and produced to the parties.

In addition, defendants sought and obtained access to the Military Assistance Command, Vietnam (hereafter "MACV") collection. When the Government received the first MACV request on December 8, 1980, it declined to respond simply because it could no longer viably volunteer discovery to a party -- the defendants -- who themselves flatly refused to participate in document production of their own. After Judge Pratt later ordered all parties to proceed with document discovery, the Government was advised by defendants' representative that the MACV request was withdrawn. In its stead, defendants filed interrogatories with the Government,

demanding answers within thirty days. These interrogatories were so convoluted and burdensome that they were effectively unanswerable and, in fact, were never legitimized by either Judge Pratt or the Special Master. Defendants nevertheless refused to reinstate their initial MACV request until March 1982 and, despite the Government's repeated request for a subpoena, the December 5, 1980 MACV request -- supplemented by a second list -- was not submitted in proper subpoena form until July 2, 1982. See, United States' Response to Select Defendants' Motion For A One-Year Trial Adjournment (hereinafter "U.S. Response") at 46-47.

Notwithstanding Government requests to further prioritize the approximately 300,000 pages of MACV documents thought by defendants to be relevant to this litigation, defendants nevertheless insisted on production of all documents originally selected. In an attempt to accelerate the defendants' direct access to the massive MACV collection without impairing government privileges, the Government submitted a protective order on December 3, 1982, which set forth procedures providing, inter alia, for immediate access to the 300,000 pages of documents at issue for the limited purpose of determining which documents, in defendants' view, were relevant to the litigation. For the next two months defendants would argue that various provisions of the Government's protective order were "unacceptable." See, Letter dated December 17, 1982 to C. Mattingly from A. Maskin.

Significantly, of the 300,000 pages of supposedly "relevant" documents, upon review, the defendants found less than 6% of the collection actually relevant. The Government has completed its review of those documents for privilege and has produced the majority of the documents requested by the defendants.\*/ See, Notice To All Counsel, April 8, 1983 at 3.

Other defendant document requests and the attendant government production are too numerous to detail. Briefly, they include almost 8500 pages of Operation Ranch Hand and its source material, 3,000 pages of material from the Kapalama document repository, and over 6,200 pages of information from the Advanced Research Projects Agency. Beyond these broad document requests, defendants have subjected the United States to a continual and steady stream of specific informal document requests directed toward DOD. The United States has responded to these requests as they have been made. In response to over fifteen requests, many of which defendants have renewed in their pending motion, the United States has sent out over eleven Notices To All Counsel announcing the production of approximately 22 batches of documents. These batches equalled over 11,000 pages of information and have been made available to the parties as soon as possible.

The United States has spent untold manhours ferreting out the often obscure documents defendants claim to need so badly.

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\*/ The Army has made significant production other than MACV, Edgewood and the TWIX indexes, primarily including material from Ft. Detrick. See, United States' Index of Document Production.



Those searches, made almost continually, have resulted in a total production of over 525,000 pages of Defense documents, including the 300,000 pages of MACV material made available to the parties for inspection. Yet defendants profess their dissatisfaction with the Government's performance of DOD document production. Through wave after wave of discovery requests, they continually seek additional discovery or renewal of settled requests despite the burdensome effect this has had on the Government. In view of the extraordinary efforts DOD has made on their behalf, to require either additional searches or responses to new requests would be unduly burdensome to the United States. As a result, the Special Master should deny the defendants' motion outright.

B. The Special Master Should Deny Defendants' Motion To Compel Production Because The Motion Includes New Requests To Which The Government Has Had No Opportunity To Respond.

Contrary to their claim that the "documents [requested in the motion] have previously been requested by defendants", Defs. Mem. at 1, the defendants' proposed order includes at least thirteen requests for documents that defendants had never previously raised with DOD. See, e.g., Defendants' Proposed Order, Items 1, 2, 4, 5, 6, 7, 8, 9, 13, 19, 20, 24 and 25. These demands include requests that defendants have not previously directed at DOD, requests the Government had not received prior to receipt of this motion, requests allegedly made in letters that actually make no such requests and requests never made in any form prior to this motion. Although the United States recognizes that, as defendants have proceeded with discovery, they may have developed interest

in new areas, it seems singularly inappropriate for defendants to raise large numbers of new requests at the close of discovery.

Among defendants' newly-raised requests are some of which defendants have had full knowledge for months. For example, defendants request all documents that the Commodity Manager for the Weldon Springs project was required to prepare under his charter. Proposed Order, Item 25. Although defendants assert that General Stone identified these documents at his deposition, they fail to mention that General Stone was deposed on October 26, 1982. Defendants, being fully aware of these documents for six months, have waited until now, the closing days of discovery, to raise the request. Such delay requires that defendants' request be denied.

Other examples of defendants' inaction are no less egregious and deserve similar disposition. Items 1 and 2 of defendants' proposed order, for example, which seek documents allegedly requested by letter dated March 11, 1982, are actually new requests raised for the first time in this motion. Examination of the letter referenced as the original request reveals that defendants included no such request in that letter. The closest that letter comes to requesting the documents is a citation of certain documents of the Army Environmental Hygiene Agency as an unfilled "gap" in production. Letter from M. Gordon to J. Bernott, March 11, 1982 at 3. Defendants' item 8 of their proposed order has a similar deficiency. Again, although defendants assert that they requested these documents in a May 4, 1981 letter, examination of that

letter fails to locate any such request among its contents. See, Letter from M. Gordon to J. Bernott, May 4, 1981. Any attempted averral by defendants that they have been patiently waiting for the United States to produce these documents is not credible. Quite simply, they never made any such requests until the day they filed the pending motion.

In this motion, defendants also raise for the first time a request regarding certain Commerce Department documents allegedly in DOD files. In 1981, the United States identified, but withheld production of, approximately 90 documents the Commerce Department generated pursuant to its activities under the Defense Production Act. At that time, the United States did everything required under the Act to properly withhold these documents in discovery. Defendants now claim that they "believe that information [in these documents] was communicated to the Department of Defense," Defs. Mem. at 6, and seek to acquire these same privileged documents from DOD. Defendants, however, have never previously sought production of these documents from DOD. Because defendants have known about these documents for over two years, counsel for the United States have difficulty believing the defendants never conceived the notion that Commerce might have communicated this information to DOD prior to April 8, 1983. It seems incredible that they have not previously made this possible connection. Besides, one of the principles to which all defendants devoutly subscribe, is that if a document is privileged, it must contain "relevant" material. Truth notwithstanding, defendants will adhere closely to this theme throughout trial. The Special

Master, therefore, should not accept defendants' delay in seeking new avenues to obtain these documents and should deny the request.

Finally, defendants' proposed order contain two requests from one letter allegedly sent April 5, 1983. Proposed Order, Items 19 and 20. In this letter, defendants request production of documents identified during the deposition of Dr. William Summerson. By the time we received the pending motion on April 11, 1983, the United States still had not received this letter. Indeed, we did not receive this request, sent by regular mail, until April 15, 1983. By citing this letter, defendants have again improperly created the impression that the United States has withheld production of requested documents. The United States respectfully submits that it is difficult to respond to requests which we have not received. If defendants feel compelled to take such liberties with the facts to support their motion, it should not be at the expense of the United States. In any event, with the trial date rapidly approaching, it seems most inappropriate to initiate new requests rather than attempting to clean up the outstanding discovery which defendants have claimed is so vast.

Moreover, it seems oppressive for defendants to demand compelled production by the United States before they have ever given the Government an opportunity to respond. The Federal Rules of Civil Procedure provide for a procedure of discovery that "encourages extrajudicial discovery with a minimum of court

intervention." Fed.R.Civ.P., Depositions and Discovery, Advisory Committee's Explanatory Statement Concerning 1970 Amendments of Discovery Rules at 67. Rule 37(a) provides that:

. . . if a party, in response to a request for inspection submitted under Rule 34, fails to respond that inspection will be permitted as requested or fails to permit inspection as requested, the discovering party may move for an order compelling . . . inspection in accordance with the request.

Fed.R.Civ.P. 37(a). As the comment to the rule states: "Rule 37(a) provides relief to a party seeking discovery against one who, with or without stated objections, fails to afford the discovery." Fed.R.Civ.P. 37(a), Advisory Committee Note. The Rules do not anticipate or sanction requests, such as that of defendants, for an order compelling production where there has been no prior request for the documents.

The Special Master should strike defendants' newly raised requests (Items 1, 2, 4, 5, 6, 7, 8, 9, 13, 19, 20, 24 and 25) on two grounds. First, because defendants have never previously made these requests, the Special Master should deny them as inappropriate for inclusion in an order compelling production. Second, and more importantly, the Special Master should deny these requests because defendants have waited until the final hours of discovery to initiate them. With the trial due to begin in two months, defendants must begin to bring discovery to a close rather than continuing to open new areas of interest. The United States would be significantly burdened if, at the same time it was attempting to complete outstanding discovery,

it had to divert resources and time to explore new and, as always, "critical" areas of discovery. The United States, having fully met its discovery obligations throughout this litigation, should not suffer the consequences of defendants' insatiable discovery whims.

C. The Special Master Should Deny Defendants'  
Motion To Compel To The Extent It Seeks  
Material That Is Irrelevant To This Litigation

Defendants' proposed order seeks no less than five categories of documents pertaining to the Riot Control Agent "CS". Proposed Proposed Order, Items 26, 27, 28, 29 and 30. As the defendants know full well, the United States strenuously contends that the subject matter of CS has no relevance whatsoever to the issues involved in this litigation. Notice To All Counsel dated December 16, 1982; Tr. Hearing Before Special Master Schreiber, December 13, 1982 at 2562.

Defendants' preoccupation with CS arose out of the deposition of Mr. Sigmund Eckhaus. Mr. Eckhaus apparently stated that he first learned about chloracne in connection with CS production at Edgewood. Tr. Eckhaus deposition at 77-78. The defendants, not bothering to determine whether CS is in fact a compound capable of producing chloracne, seized upon Mr. Eckhaus' statements and began incessant exploration into CS and a related Riot Control Agent "CN" during depositions. At first, the United States generously allowed considerable latitude into this area. However, as it became apparent that defendants were beginning to dwell on the subject of CS to an inordinate extent, the United States made

its position known. Until filing this motion, defendants have never formally challenged the validity of the United States' position that CS has no relevance to this litigation.

Defendants now contend that the relevance of the requested documents derives from the fact that CS and CN "concern the incidence of chloracne at Edgewood and the government's [sic] response to that situation." Defs. Mem. at 13. The United States admits that it has produced documents pertaining to chloracne throughout this lawsuit. However, despite the cited testimony, no real link between CS and chloracne exists.

A noted expert in the field, Dr. Renate Kimbrough, Medical Officer, Center for Environmental Health, Centers for Disease Control, has informed us that "CS is not a compound that can cause chloracne." Letter to Major Wittmayer from Dr. Kimbrough dated December 15, 1982 at 2, attached as Enclosure 7 to Wittmayer Declaration. That is not to say that CS could not cause some type of contact dermatitis. Id. That skin irritation, however, is not chloracne. Id. Surely defendants are not arguing that any compound causing any skin irritation is relevant to this litigation. Yet their highly attenuated and strained argument on behalf of the relevance of CS seems to do exactly that. The United States submits that this proffer by defendants fails miserably as an attempt to carry their burden of demonstrating the relevance of this subject.

In any event, because CS does not cause chloracne, none of the documents defendants seek exist. \*/ Counsel for Dow filed a Freedom of Information Act ("FOIA") request on September 29, 1982 that sought all documents pertaining to "an outbreak of chloracne at Edgewood Arsenal associated with the manufacture of the anti-riot agent CS". Letter from L. Andre, Rivkin, Leff, Sherman & Radler to Department of the Army, dated September 29, 1982, attached as Enclosure 6 to Wittmayer Declaration. A search by FOIA officers failed to discover any documents connecting chloracne and CS. Letter from R. Christian to L. Andre dated December 10, 1982, attached as Enclosure 6 to Wittmayer Declaration. They did discover some documents pertaining to a skin irritation caused by CS and were advised that this irritation constituted the effects referred to by Mr. Eckhaus. Id. We have not supplied these documents to the parties because they do not involve any subjects pertinent to this litigation, unless of course defendants now insist that any skin irritation is relevant.

In conclusion, it is evident that defendants have seized upon an incorrect usage of the term chloracne by a non-expert as their *raison d'etre* for extensive discovery in this area. However, the connection they seek to explore is simply too attenuated to support their requests. The United States has provided evidence that chloracne and CS are unconnected. Defendants have provided

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\*/ In item 30, however, defendants merely seek documents "relating to the synthesis or production of "CS", and any precursors, intermediates, and raw materials." Proposed Order at 6. Such documents may perhaps exist. However, contrary to defendants' earlier statement, these documents do not pertain to chloracne and are therefore irrelevant per se.



no evidence to the contrary. Without that connection, defendants have no basis upon which to demand this discovery. For that reason, the Special Master should deny all requested discovery regarding CS as irrelevant to this litigation.

D. The United States Specifically Objects To  
The Document Requests Embodied In Defendants'  
Motion To Compel Production Of Department  
Of Defense Documents

The United States makes the following specific objections to defendant's requests for documents as contained in defendants' proposed order compelling production of documents:

1. Documents in the possession of the Army Surgeon General, especially the Research and Development Division, pertaining to contract number VA-49-007-MD-411 with the Department of Dermatology of the University of Chicago.

Contrary to the statements in their memorandum, this constitutes a request that defendants have not previously made. See, Declaration of Major Wittmayer at 3. The letter defendants reference as the source of this request does not actually contain a request that in any manner resembles the request made at this time or that could be reasonably construed as such a request. See, Letter from M. Gordon to J. Bernott, March 11, 1982. Defendants' initiation of this new request at this late date imposes a significant burden on the United States and will detract from our ability to complete outstanding discovery. It seems inappropriate to open new areas of discovery at a time when the Special Master and the parties are attempting to bring discovery to a close. Defendants cannot realistically assert that they were without knowledge of the possible relevance of Army Surgeon General documents prior

to the date of this motion. Consequently, their apparent delay in initiating this request should constitute a waiver of this discovery. In addition, as a new request to which the United States has not yet had an opportunity to respond, this request is improper in an order to compel production.

In any event, this request is overly broad and, therefore, unduly burdensome. Defendants place no temporal limitations upon their request. More importantly, defendants fail to provide sufficient specificity concerning the documents they seek. As phrased, the request would force the United States to comb a wide variety of files to locate virtually any piece of paper mentioning the subjects defendants cite, even though the mention is only in passing. Requiring such effort by the United States at a point when defendants should be focusing and narrowing their final discovery is burdensome to the point of oppressiveness.

2. Documents in the possession of the Headquarters of the Army Surgeon General relating to the Army Environmental Hygiene Agency's work on the restriction of the use of herbicides around water supplies.

Contrary to the arguments in their memorandum, this constitutes a request that defendants have not previously made.<sup>\*/</sup> See, Declaration of Major Wittmayer at 3. The letter defendants reference as the source of this request does not actually contain a request that in any manner resembles the request made at this time or that could be reasonably construed as such a request. See, Letter

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<sup>\*/</sup> The Army production responding to the Avellino document request, however, did include documents on this subject. See, Declaration of Major Wittmayer at 3.

from M. Gordon to J. Bernott, March 11, 1982. Defendants' initiation of this new request at this late date imposes a significant burden on the United States and it will detract from our ability to complete outstanding discovery. Inauguration of new areas and subjects of discovery at a point when the Special Master and the parties are drawing discovery to a close seems both inadvisable and improper. Defendants cannot realistically assert that they had no knowledge of the possible importance of the Army Surgeon General prior to the date of their motion. Consequently, their apparent delay in initiating this request should constitute a waiver of this discovery. In addition, as a new request to which the United States has not yet had an opportunity to respond, this request is inappropriate to an order to compel production.

In addition, this request is overly broad and therefore unduly burdensome. Defendants place no temporal limitations upon their request. More importantly, defendants fail to provide sufficient specificity concerning the documents they seek. As phrased, the request would force the United States to comb a wide variety of files to locate virtually any piece of paper mentioning the subjects defendants cite, even though the mention is only in passing. Requiring such effort by the United States at a point when defendants should be focusing and narrowing their final discovery is burdensome to the point of oppressiveness.

3. Documents in the possession of the Preventative Medicine Division of the Army Surgeon General pertaining to its July 22, 1966 request to the National Academy of Sciences for toxicity information on 2,4,5-T and other herbicides. This

request includes any information sent to the Preventative Medicine Division by the National Academy of Sciences and documents in the possession of the Army Surgeon General Headquarters relating to this request.

Despite the fact that defendants made this request immediately prior to serving this pending motion, in reality it constitutes a new request that the Special Master should deem waived. Defendants have implied that they only recently learned of the correspondence requested. See, Memorandum in Support of Undersigned Defendants' Motion For An Adjournment of the Date for Trial of the Government Contract Defense at 31-33. To the contrary, defendants initiated a Freedom of Information Act request for these same documents through their agent, Carr, Jordan, Coyne & Savits, on November 10, 1982. See, Letter from T. Lazon to FOIA Officer, Office of Surgeon General, dated November 10, 1982, attached as Enclosure 3 to Wittmayer Declaration. Defendants then delayed over four months before introducing a virtually identical request in discovery. See, Declaration of Major Wittmayer at 3. Their inexcusable delay should constitute a waiver of the requested discovery. In addition, since the search pursuant to FOIA failed to reveal any responsive records, see, Letter from R. Chally to T. Lazon, dated January 26, 1983, attached as Enclosure 4 to Wittmayer Declaration, requiring a second search would be unduly burdensome and oppressive to the United States.

4. Documents in the possession of the Army Environmental Hygiene Agency and/or the Army Surgeon General Headquarters pertaining to AEHA's recommendations on the proposed military specification MIL-H-51310, herbicides, N-butyl esters, concerning a precautionary label on the product. AEHA transmitted its recommendation on December 9, 1968.

This constitutes a request that defendants have not previously made in any form. See, Declaration of Major Wittmayer at 3. Inauguration of new areas of discovery at a time when discovery is drawing to a close seems both inadvisable and inappropriate. Defendants' initiation of this new request at this late date imposes a significant burden on the United States and will detract from our ability to complete outstanding discovery. Defendants' delay in initiating this request should constitute a waiver of this discovery. Moreover, as a specific request to which the United States has not yet had an opportunity to respond, this request is inappropriate to an order compelling production.

In any event, the United States has previously conducted a search for relevant documents of the Army Environmental Hygiene Agency and included them on the TWIX inventories supplied to all parties on April 15, 1981. Defendants, for whatever reason, failed to make use of the these inventories until such a late date that the Court denied them any right to those documents. Pre-Trial Order No. 50, April 21, 1983. By this request, defendants seek to obtain the TWIX documents by another method. To require the United States to produce these documents would be unduly burdensome and oppressive.

5. Documents in the possession of the Command Surgeon of the Air force Logistics Command and the Headquarters of the Air Force Logistics Command pertaining to reports from Dr. Walter Melvin or his Agency concerning the results of evaluations of herbicides.
- 1960-7

This constitutes a request that defendants have not previously made in any form. Inauguration of new areas of discovery at a time

when discovery is drawing to a close seems both inadvisable and inappropriate. Defendants' initiation of this request at this late date imposes a significant burden on the United States and will detract from our ability to complete outstanding discovery. Defendant's delay in initiating this request should constitute a waiver of this discovery. In addition, as a specific request to which the United States has not yet had an opportunity to respond, this request is inappropriate to an order compelling production.

Moreover, this request is overly broad and therefore unduly burdensome. Defendants place no temporal limitations upon their request. More importantly, defendants fail to provide sufficient specificity concerning the documents they seek. As phrased, the request would force the United States to comb a wide variety of files to locate virtually any piece of paper mentioning the subjects defendants cite, even though the mention is only in passing. Requiring such effort by the United States at a point when defendants should be focusing and narrowing their final discovery is burdensome to the point of oppressiveness.

6. Documents in the possession of the Surgeon General of the Air Force pertaining to work at Eglin Air Force Base on evaluations of herbicides. *(EXHIBIT)*

This also constitutes a request that defendants have not previously made in any form. Inauguration of new areas of discovery at a time when discovery is drawing to a close seems both inadvisable and inappropriate. Defendants' initiation of this request at this late date imposes a significant burden on the United States and will detract from our ability to complete outstanding discovery.

Defendant's delay in initiating this request should constitute a waiver of this discovery. Moreover, as a specific request to which the United States has not yet had an opportunity to respond, this request is inappropriate to an order compelling production.

In addition, this request is overly broad and therefore unduly burdensome. Defendants place no temporal limitations upon their request. More importantly, defendants fail to provide sufficient specificity concerning the documents they seek. As phrased, the request would force the United States to comb a wide variety of files to locate virtually any piece of paper mentioning the subjects defendants cite, even though the mention is only in passing. Requiring such effort by the United States at a point when defendants should be focussing and narrowing their final discovery is burdensome to the point of oppressive.

7. The "approximately 90 documents" described in the Government's Response to Defendants' Interrogatories and Notice To All Counsel dated April 15, 1981, which were generated by the Commerce Department in connection with its responsibilities under the Defense Production Act.

Although defendants properly identify the Department of Commerce as the originating agency of this material, defendants' motion constitutes the first instance in which defendants have directed this request to the Department of Defense. See, supra, at 9. Defendants have known about both these documents and their privileged nature since February 13, 1981. See, Notice To All Counsel dated February 13, 1981. Contrary to defendants' claims, see, Defs. Mem. at 6-7, the Government provided defendants with substantial information about these documents, including a fairly

detailed subject matter summary, and the statutory prohibitions against their disclosure. Notice To All Counsel dated April 15, 1981 at 2 and Tab D. Defendants have never sought compelled production of these documents from the Commerce Department. For them to wait two years without excuse and to then attempt another avenue for discovery of this material should constitute a waiver of this discovery.

8. Correspondence and documents relating to the production of 2,4,5,-T and explosions in manufacturing plants in the United States, and more specifically, a May 1, 1967 letter in which BDSA advised DGSA that "the production of 2,4,5-T is more complex and more dangerous than the production of 2,4-D and in recent several U.S. plants have exploded."

Contrary to defendants' implication by referencing a letter in their memorandum, Defs. Mem. at 16, they never made this request prior to the filing of their pending motion. The letter referenced as the original source of this request does not reflect any such request. See, Letter from M. Gordon to J. Bernott dated May 4, 1981. Inauguration of new areas of discovery at a time when discovery is drawing to a close seems both inadvisable and improper. Defendants' initiation of this request at this late date imposes a significant burden on the United States and will detract from our ability to complete outstanding discovery. Defendants cannot reasonably to claim ignorance of this subject matter until recently, particularly where they cite a 1981 letter as their supposed "request" for this information. Their delay in specifically requesting this material should constitute a waiver of this discovery.



In addition, this request is overly broad and therefore unduly burdensome. Defendants place no temporal limitations upon their request. More importantly, defendants fail to direct this request to a particular office or branch of the vast Department of Defense. Other than the identification of a single letter, defendants fail to provide sufficient specificity concerning the documents they seek. As phrased, the request would force the United States to comb a wide variety of files to locate virtually any piece of paper mentioning the subjects defendants cite, even though the mention is only in passing. Requiring such effort by the United States at a point when defendants should be focusing and narrowing their final discovery is burdensome to the point of oppressiveness.

9. Correspondence and documents in the files of the DGSA concerning the procurement of 2,4,5-T from "off-shore sources," including materials which indicate familiarity with incidents of chloracne or knowledge concerning the dioxin assays of foreign manufacturers.

This constitutes a request which defendants have not previously made in any form. Inauguration of new areas of discovery at a time when discovery is drawing to a close seems both inadvisable and inappropriate. Defendants' initiation of this request at this late date imposes a significant burden on the United States and will detract from our ability to complete outstanding discovery. Defendants cannot seriously contend that they were not aware of this subject matter until recently. Therefore, their inexcusable delay in initiating this request should constitute a waiver of this discovery. In addition, as a new request to which the

United States has not yet had an opportunity to respond, this request is inappropriate to an order compelling production.

In any event, this request is overly broad and therefore unduly burdensome. Defendants place no temporal limitations upon their request. More importantly, defendants fail to provide sufficient specificity concerning the documents they seek. As phrased, the request would force the United States to comb a wide variety of files to locate virtually any piece of paper mentioning the subjects defendants cite, even though the mention is only in passing. Requiring such effort by the United States at a point when defendants should be focusing and narrowing their final discovery is burdensome to the point of oppressiveness.

10. All documents referring or relating to compound 125413, including the name of the source of that compound.

The United States has previously provided defendants with these documents. See, Notice To All Counsel, dated March 7, 1983; Declaration of Major Wittmayer at 4; Notice To All Counsel, dated March 30, 1983 at 2. In addition, by Notice To All Counsel dated April 25, 1983, the United States supplied to all parties, under seal, the name of the source of that compound. See, Notice To All Counsel dated April 25, 1983, attached as Exhibit B. To our best knowledge, no documents exist that reflect the name of that source in relation to that compound. This request is therefore repetitive and unnecessary. If defendants are contending that an additional search is required, any such search would be unnecessary and unduly burdensome.

11. Documents showing the identity of the source who submitted CS 66422 to the Army Chemical and Medical Research Laboratories' Industrial Liaison Office.

The United States first received this request approximately one month ago and indicated on March 30, 1983 that it would respond as quickly as possible. See, Notice to All Counsel dated March 30, 1983 at 2-3. By Notice to All Counsel dated April 25, 1983, the United States supplied to all parties, under seal, the name of the source of that compound. Notice To All Counsel dated April 25, 1983. In addition, that Notice provided notification of the microfilming of the one document, a Commercial Source Record Log, reflecting the name of that source. Id; see, Declaration of Major Wittmayer at 4. This request is therefore repetitive and unnecessary. If defendants are contending that an additional search is required, the request is unduly burdensome and oppressive.

12. Classified paper on use of herbicides, presented by Gen. F. Delmore at April 26, 1963 meeting at Edgewood Arsenal.

The Army has conducted repeated searches for this twenty year old document but has failed to locate any report by General Delmore that has any connection to the referenced April 26, 1963 meeting at Edgewood Arsenal. See, Declaration of Major Wittmayer at 5. The Army has previously produced the General's report on his 1961-1962 mission to Vietnam, which fully documents the information developed during that mission. See, Tr. Delmore Deposition, Ex. 3. Requiring further searches to locate this document would not enhance the likelihood of discovering the requested report and would be both burdensome and oppressive.

13. Copy of volume containing results of toxicological studies by Dr. B. McNamara, which was transmitted by him to various government officials in or about 1962 or 1963 (including the names of the officials).

Although defendants have requested production of this volume from the Department of Agriculture, see, Letter from J. Burke to Arvin Maskin, dated February 1, 1983, they have not previously requested this document from DOD. See, Declaration of Major Wittmayer at 5. Defendants learned of this document on August 17, 1982 when they deposed Dr. Shaw. Defendants never requested this document from any Government agency until six months after that deposition. They then delayed for an additional two months before requesting the document from DOD. Defendants' inexcusable eight month delay in requesting this document from DOD should constitute a waiver of this discovery.

In any event, the Army has previously produced any relevant toxicological studies by Dr. McNamara that may still be extant in Army files. See, Declaration of Major Wittmayer at 5. In searching for any such studies, the Army examined all files likely to contain these documents, including CSL Toxicology Branch files, Dr. McNamara's former files and the CSL Technical Library. Id. An additional search at this time would be unlikely to yield any further information or documents. Requiring any such search would therefore be unreasonable, unduly burdensome and oppressive.

14. All relevant material responsive to defendants' First Wave Interrogatories dated January 15, 1981 and to the subpoena to the United States Army Chemical Systems Laboratory, dated May 17, 1982 from the personal files of F. Vocci, including but not limited to: (a) notes of F. Vocci pertaining to a meeting of the medical panel for NATO held at WRAIR; (b) handouts and minutes distributed at an earlier meeting at WRAIR; and (c) list of names of those responsible for distributing minutes of NATO meeting.

The United States has previously responded to this request.<sup>\*</sup>/  
See, Declaration of Major Wittmayer at 6. The Army recovered all relevant documents from Mr. Vocci's personal files and forwarded them to our office in mid-March. Id. On April 8, 1983, the United States announced production of this material on microfilm as Batch No. 1988. Notice To All Counsel, dated April 8, 1983 at 2. Mathias and Carr has this batch available for purchase by the parties. This request is therefore repetitive and unnecessary.

15. The film, "The CRDL Story," and other films relating to research done at Edgewood Arsenal, including rabbit ear tests and methods of introduction of toxic substances.

The United States has previously responded to this request. See, Declaration of Major Wittmayer at 6. In mid-March, the Army forwarded "The CRDL Story" and one other film to our office. Id. On April 8, 1983 we announced our intent to schedule a screening of these films. Notice To All Counsel dated April 8, 1983 at 2. Subsequently at the April 20, 1983 hearing, however, we put these films in the custody of counsel for Dow to either make duplicates of the films or schedule a screening. This request is therefore repetitive and unnecessary.

16. Reports relating to herbicides, dioxins or furans sent to F. Vocci upon completion of "task force" projects.

The United States conducted a thorough search for these materials in response to the December 6, 1982 request. See,

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<sup>\*</sup>/It is interesting to note that, although defendants list a and b of their request separately, the deposition transcript reflects that these refer to the same documents. See, Tr. Vocci deposition at 12-13.

Declaration of Major Wittmayer at 6. The Chemical Systems Laboratory searched its files, the files of the Toxicology Branch and its Technical Library for responsive materials. Id. The Army did not locate any documents that it had not previously produced to the parties either during voluntary discovery or in response to defendants' May 17, 1982 subpoena. Id. This request is therefore repetitive and unnecessary. To require an additional search at this late date would impose a significant burden upon the United States and would be unlikely to yield any additional responsive material.

17. Data books of Dr. B. McNamara, C. Punte, F. Vocci or others relating to testing with respect to toxicity of herbicides, dioxins or furans.

The United States conducted a thorough search for these materials in response to the December 6, 1982 request. See, Declaration of Major Wittmayer at 6. The Chemical Systems Laboratory searched its files, the files of the Toxicology Branch and its Technical Library to locate any responsive material. Id. The Army did not locate any documents that it had not previously produced to the parties either during voluntary discovery or in response to defendants' May 17, 1982 subpoena. Id. This request is therefore repetitive and unnecessary. To require an additional search at this late date would impose a significant burden upon the United States and would be unlikely to yield any additional responsive material.

18. Tables of organization, or lists with specific names, of those assigned at Edgewood Arsenal to the position of Branch Chief and above during the 1960's.

The United States conducted a thorough search for these materials in response to the December 6, 1982 request. See, Declaration of Major Wittmayer at 6. The Chemical Systems Laboratory searched its files, the files of the Toxicology Branch and its Technical Library to locate any responsive documents. Id. The Army did not locate any documents that it had not previously produced to the parties either during voluntary discovery or in response to defendants' May 17, 1982 subpoena. Id. This request is therefore repetitive and unnecessary. To require an additional search at this late date would impose a significant burden upon the United States and would be unlikely to yield any additional responsive material.

19. All relevant material responsive to defendants' First Wave Interrogatories dated January 15, 1981 and to the subpoena to the United States Army Chemical Systems Laboratory dated May 17, 1982, from the personal files of Dr. William A. Summerson.

Although defendants' request for this material is dated April 5, 1983, the United States did not receive this letter request until April 15, 1983. Inauguration of new areas of discovery at a time when discovery is drawing to a close seems both inadvisable and inappropriate. For defendants to initiate this request at this late date will impose a burden upon the United States and will detract from our ability to complete outstanding discovery. Although the documents are located, the

Army must nevertheless divert resources to review these documents before they can be released to the parties. Defendants' efforts to open this new area of discovery should be denied. In any event, as a request to which the United States has not had any opportunity to respond, this request is inappropriately included in defendants' proposed order to compel production.

20. The Trip Report prepared by Dr. Summerson describing his trip to Vietnam in the mid-1960's.

Although defendants' request for this material is dated April 5, 1983, the United States did not receive this letter request until April 15, 1983. Inauguration of new areas of discovery at a time when discovery is drawing to a close seems both inadvisable and inappropriate. For defendants to initiate new areas of discovery at this late date will impose a significant burden upon the United States and will detract from our ability to complete outstanding discovery. In any event, as a request to which the United States has not had any opportunity to respond, this request is inappropriately included in defendants' proposed order to compel production.

21. Complete copies of those articles from the reprint files of Dr. B. McNamara that contain any underlining of annotation and which were assigned the following identifying numbers by Lester Miller: 5924, 5985, 6087, 6178 and 6636.

The United States has previously responded to this request. On February 9, 1983, the Army forwarded all five reprint articles from Dr. McNamara's files to our office. See, Declaration of Major Wittmayer at 6. This material was included in the



microfilm batch entitled "Follow-Up Production: Sim, Miller, Cox, Callahan depositions and CSL New Find." Notice To All Counsel dated February 23, 1983 at 7. Mathias and Carr has this material available for purchase by the parties. This request is therefore repetitive and unnecessary.

22. All copies of test results for any dioxin, 2,4,5-T or trichlorophenol compound which are located in the former files of the Toxicity Screening Branch, including all 8 1/2" by 10" data sheets that were prepared for those compounds.

The United States has previously responded to this request. On March 2, 1983, the Army sent all responsive documents to our office. See, Declaration of Major Wittmayer at 6. We produced this material as Batch No. 1979, entitled "Miller Deposition Follow-Up: Consolidated Production on Four Compounds of Interest and Additional Agent Status Report Rejects." Notice To All Counsel dated March 7, 1983. Mathias and Carr has this material available for purchase by the parties. This request is therefore repetitive and unnecessary.

23. The group of documents entitled "Follow-Up Production: Sim, Miller, Cox, Callahan depositions and CSL New Find," designated by the government as Batch No. 1968.

On February 9, 1983 the Army sent this material to our office. See, Declaration of Major Wittmayer at 6. The Justice Department sent this material for microfilming on February 23, 1983. Notice To All Counsel dated February 23, 1983 at 7. Mathias and Carr has this batch of document production available for purchase by the parties.

24. Trip Reports of visits by Sigmund Eckhaus, Robert E. Cox, John Gerety and others from the Weapons Development and Engineering Laboratory at Edgewood Arsenal to commercial 2,4,4-T and trichlorophenol plans in connection with the project to create a government facility for the production of Agent Orange.

The United States has previously responded to this request to the extent that it has previously been made. The letter referenced as the source of defendants' request only seeks production of trip reports relating to Mr. Eckhaus. Letter from E. Matthews to A. Maskin dated October 28, 1982. Therefore, to the extent it seeks the trip reports of Messrs. Gerety and Cox, this request is new. See, Declaration of Major Wittmayer at 7. Defendants' initiation of this aspect of this request at this late date imposes a significant burden upon the United States and will detract from our ability to complete outstanding discovery. In any event, as a request to which the United States has not had any opportunity to respond, this request is inappropriately included in defendants' proposed order to compel production.

The United States has fully responded to defendants' request pertaining to Mr. Eckhaus. The Army transmitted all responsive documents to our office on December 14, 1982. See, Declaration of Major Wittmayer at 7. We sent that material for microfilming on December 16, 1982. Notice To All Counsel dated December 16, 1982 at 2. Mathias & Carr currently has this material available for purchase by the parties. Much of the request is therefore repetitive and unnecessary. Since an additional search would be unlikely to yield any additional relevant information, requiring

any additional search would therefore be unduly burdensome and repetitive.

25. The "Weekly Significant Action Reports", "minutes of all meetings", and "special reports", which the Commodity Manager for the Weldon Springs project was required to prepare and distribute under the terms of his Charter.

This constitutes a request which defendants have not previously made in any form. See, supra at 8. Inauguration of new areas of discovery at a time when discovery is drawing to a close seems both inadvisable and inappropriate. Defendants' initiation of this request at this late date imposes a significant burden on the United States and will detract from our ability to complete outstanding discovery. Inasmuch as defendants cite an October 26, 1982 deposition as the source of the documents' identification, defendants cannot seriously contend that they were not aware of this subject matter until recently. Therefore, their delay in initiating this request should constitute a waiver of this discovery. In addition, as a new request to which the United States has not yet had an opportunity to respond, this request is inappropriate to an order compelling production.

26. All documents relating to any incidents involving skin disorders, including chloracne, among producers of Anti-Riot Agent "CS" at Edgewood Arsenal, including all "after-action" reports which were filed or prepared as a result of any such incidents.

Because no evidence exists that exposure to CS causes chloracne, the United States considers this material entirely irrelevant to this litigation. See, Declaration of Major Wittmayer at 7-8; supra at 11. Defendants have been fully aware of the United States' position in this regard since December 16, 1982.

See, Notice To All Counsel dated December 16, 1982 at 2. Defendants have not formally challenged the United States' stance prior to the date of their motion. If the Special Master perchance finds this material relevant, their delay in making this challenge until the closing days of discovery should, in any event, constitute a waiver of this discovery.

In addition, this request is overly broad and therefore unduly burdensome. Defendants place no temporal limitations upon their request. More importantly, defendants fail to provide sufficient specificity concerning the documents they seek. As phrased, the request would force the United States to comb a wide variety of files to locate virtually any piece of paper mentioning the subjects defendants cite, even though the mention is only in passing. Requiring such effort by the United States at a point when defendants should be focusing on narrowing their final discovery is burdensome to the point of oppressiveness.

27. All documents relating to health effects among producers and/or users of "CS", including all medical records or other documents concerning treatment of any Edgewood Arsenal employees or others afflicted with chloracne or skin disorders.

Because no evidence exists that exposure to CS causes chloracne, the United States considers this material irrelevant to this litigation. See, Declaration of Major Wittmayer at 7-8; supra at 11. Defendants have been fully aware of the United States' position in this regard since December 16, 1982. See, Notice To All Counsel dated December 16, 1982 at 2. Defendants have not formally challenged the United States' stance prior to the date of their motion. If the Special Master perchance finds this

material relevant, their delay in making this challenge until the closing days of discovery should, in any event, constitute a waiver of this discovery.

In addition, this request is overly broad and therefore unduly burdensome. Defendants place no temporal limitations upon their request. More importantly, defendants fail to provide sufficient specificity concerning the documents they seek. As phrased, the request would force the United States to comb a wide variety of files to locate virtually any piece of paper mentioning the subjects defendants cite, even though the mention is only in passing. Requiring such effort by the United States at a point when defendants should be focusing on narrowing their final discovery is burdensome to the point of oppressive.

28. All copies of records pertaining to "CS" which have been transferred to civilian manufacturers of "CS", including the Fisher Chemical Company, Brunswick and Thyocol Chemical Companies and Federal Laboratories.

Because no evidence exists that exposure to CS causes chloracne, the United States considers this material irrelevant to this litigation. See, Declaration of Major Wittmayer at 7-8; supra at 11. Defendants have been fully aware of the United States' position in this regard since December 16, 1982. See, Notice To All Counsel dated December 16, 1982 at 2. Defendants have not formally challenged the United States' stance prior to the date of their motion. If the Special Master perchance finds this material relevant, delay in making this challenge until the closing days of discovery should, in any event, constitute a waiver of this discovery.

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29. All documents which refer to research activities to determine the cause or causes of health effects among producers or users of "CS".

Because no evidence exists that exposure to CS causes chloracne, the United States considers this material irrelevant to this litigation. See, Declaration of Major Wittmayer at 7-8; supra at 11. Defendants have been fully aware of the United States' position in this regard since December 16, 1982. See, Notice To All Counsel dated December 16, 1982 at 2. Defendants have not formally challenged the United States' stance prior to the date of their motion. If the Special Master perchance finds this material relevant, their delay in making this challenge until the closing days of discovery should, in any event, constitute a waiver of this discovery.

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wide variety of files to locate virtually any piece of paper mentioning the subjects defendants cite, even though the mention is only in passing. Requiring such effort by the United States at a point when defendants should be focusing on narrowing their final discovery is burdensome to the point of oppressiveness.

30. All documents relating to the synthesis or production of "CS" and any precursors, intermediates and raw materials used in its production.

Because no evidence exists that exposure to CS causes chloracne, the United States considers this material irrelevant to this litigation. See, Declaration of Major Wittmayer at 7-8; supra at 11. Defendants have been fully aware of the United States' position in this regard since December 16, 1982. See, Notice To All Counsel dated December 16, 1982 at 2. Defendants have not formally challenged the United States' stance prior to the date of their motion. If the Special Master perchance finds this material relevant, their delay in making this challenge until the closing days of discovery should, in any event, constitute a waiver of this discovery.

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is only in passing. Requiring such effort by the United States at a point when defendants should be focusing on narrowing their final discovery is burdensome to the point of oppressiveness.

31. Minutes of meetings of the Chemical Corps Board relating to dioxin, 2,4,5-T, Agent Purple, Agent Orange or the Hoffman Trip Report for the period 1955-1970.

Defendants claim to have first learned about the Chemical Corps Board (CCB) at General Delmore's deposition on February 2, 1983. Defs. Mem. at 7. However, the United States first identified General Delmore as a potential witness on February 13, 1981. See, United States' Response to Defendants' Phase I, First Wave Interrogatories at 3. Defendant have thus had the opportunity to depose General Delmore for over two years. Although they failed to make use of that opportunity, they did contact General Delmore at least once on an informal basis before his deposition. See, Tr. Delmore Deposition at 126. It is simply not credible that defendants did not learn of the CCB at that time.

Although defendants' request should be stricken as inexcusably delayed and therefore waived, the Army has processed this request. Since the CCB was stationed at Edgewood, our agency liaison referred the request to the Edgewood Area of Aberdeen Proving Ground, Maryland. Edgewood conducted a thorough search of all files likely to contain responsive information, including the CSL Technical Laboratory. That search proved unfruitful. Ultimately, following additional research, the Army sought the assistance of the Administrative Management Directorate ("AMD"). On April 20, 1983, AMD located the CCB records at the GSA National Personnel



Records Center, St. Louis, Missouri. See, Declaration of Major Wittmayer at 9. We will endeavor to make prompt production of any relevant material.

32. All documents of the Chemical Corps Board relating to dioxin, 2,4,5-T, Agent Purple, Agent Orange or the Hoffman Trip Report for the period 1955-1970.

Defendants claim to have first learned about the Chemical Corps Board (CCB) at General Delmore's deposition on February 2, 1983. Defs. Mem. at 7. However, the United States first identified General Delmore as a potential witness on February 13, 1981. See, United States' Response to Defendants' Phase I, First Wave Interrogatories at 3. Defendant have thus had the opportunity to depose General Delmore for over two years. Although they failed to make use of that opportunity, for whatever reason they did contact him on an informal basis. See, Tr. Delmore Deposition at 126. It is simply not credible that defendants did not learn of the CCB at that time.

Although defendants' request should be stricken as inexcusably delayed and therefore waived, the Army has processed this request. See, Declaration of Major Wittmayer at 9. We will endeavor to make prompt production of any relevant material.

33. Written notes and reports prepared by Dr. F. Morthland in connection with the meeting held to discuss and evaluate the toxicity of 2,4-D and 2,4,5-T compounds at Edgewood Arsenal on April 26, 1963, and the meeting of the President's Science Advisory Committee on May 9, 1963.

Defendants have made this request despite Dr. Morthland's testimony that in the normal course these documents would have been destroyed. See, Tr. Morthland deposition at 65; Declaration

of Major Wittmayer at 9-10. The Army has nevertheless processed this request and has undertaken a search for these documents. If they discover any relevant documents, we will make prompt production.

34. All documents relating to dioxin, 2,4,5-T, Agent Purple, Agent Orange or the Hoffmann Trip Report (including the Report itself) in the files of the Army Research Office, and any predecessor or successor office, prepared prior to 1970.

Defendants have made this request despite Dr. Morthland's testimony that in the normal course these documents would have been destroyed. See, Tr. Morthland deposition at 65; Declaration of Major Wittmayer at 9-10. The Army has nevertheless processed this request and has undertaken a search for these documents. If they discover any relevant documents, we will make prompt production.

- E. Due to the Oppressive Effect of the Defendants' Requests, the United States Requests that the Special Master Issue A Protective Order Regarding Discovery from the Department of Defense.

Rule 37(a)(2) of the Federal Rules of Civil Procedure provides that:

If the court denies the motion [to compel production] in whole or in part, it may make such protective order as it would have been empowered to make on a motion made pursuant to Rule 26(c).

Fed.R.Civ.P. 37(a)(2). Rule 26(c) allows a court to fashion whatever order justice might require to protect "a party or person from annoyance, embarrassment, oppression, or undue burden or expense." Fed.R.Civ.P. 26(c).

The United States, of course, recognizes the defendants' need to pursue reasonable discovery. However, the dilemma with which the Court is now faced, and which applies to all government agencies which are the subject of motions to compel discovery, is that defendants erroneously equate the lack of defensive utility of the government documents produced with an "inadequate" search by the Government. Defendants continually renew document requests, as to which answers have already been provided, apparently in the hope that they will get a different response the fourth and fifth time around. Indeed, in defendants' view, it is axiomatic that where a government agency is unable to locate "relevant" documents, the search is "inadequate" per se. Although the United States has done its utmost to keep apace with defendants' insatiable discovery demands, the United States respectfully submits that these successive waves of document requests must end somewhere.

For that reason, if the Special Master denies the defendants' pending motion, as we strongly urge, the United States requests that the Special Master issue the attached Protective Order regarding DOD document production.<sup>\*/</sup> See, Proposed Protective Order, attached as Exhibit C. This Protective Order is necessary to prevent the defendants from renewing the pending requests via the established informal procedures following the denial of their

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<sup>\*/</sup> In addition, if the Special Master grants the motion in part or in whole, we request that he put some formal limits on any additional requests by defendants regarding DOD documents.

motion or from doing so indirectly through requests resulting from new depositions. Defendants have clearly indicated their intent to do both. Such actions on defendants' behalf, would be unreasonable and oppressive.

III. Conclusion

For the reasons cited above, the United States requests that the Special Master deny Defendants' Motion to Compel Production of Department of Defense Documents and issue the attached Department of Defense Protective Order.

Respectfully submitted

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Attorneys for the UNITED STATES  
OF AMERICA.

Dated: April 27, 1983

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the United States' Motion for a Protective Order Concerning Requests for Production From The Department of Defense and accompanying filings were Express Mailed this 27~~th~~<sup>th</sup> day of April, 1983 to the following:

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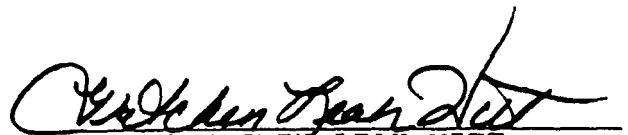
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GRETCHEN LEAH WITT

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

IN RE "AGENT ORANGE" )  
PRODUCT LIABILITY LITIGATION ) MDL No. 381  
 )  
\_\_\_\_\_ )

DECLARATION

In accordance with 28 U.S.C. section 1746, the following declaration is made pertaining to the above captioned case.

I, MAJOR CHRIS G. WITTMAYER, state:

A. I am an attorney in the Office of The Judge Advocate General, Headquarters, Department of the Army, Washington, D.C. I have been the Army's principal staff attorney in this litigation since July 2, 1982. My statements in this declaration are based on my personal knowledge and information provided to me by numerous persons involved in the Army discovery efforts in this case.

B. The Army's efforts in this case began in 1979. Since that time the Army has received a plethora of requests for depositions and documents, both in the litigation discovery process and, for documents, under the Freedom of Information Act (FOIA). Voluntary production of Army documents to the Department

of Justice (DOJ) for microfilming began in May 1980. By message dated August 14, 1980 the Department of the Army, Washington, D.C., instructed its subordinate organizations worldwide to locate, freeze, search, and index all documents relevant to this litigation (see message at enclosure 1). To insure a full response this message was retransmitted on December 12, 1980 and a negative report required (see enclosure 2). Since 1979 the Army has produced tens of thousands of pages of documents at a cost of tens of thousands of dollars. Thousands of pages of documents have been produced from the Army's Chemical Systems Laboratory (CSL), Edgewood Area, Aberdeen Proving Ground, Maryland; the Army laboratory which did the toxicology work of the Army on these herbicides. Approximately 300,000 pages from the Military Assistance Command, Vietnam Collection have been reviewed by defendants. Records researchers have been sent from Washington to as far away as Hawaii in response to demands for records. Depositions have been taken of over 40 Army officers or employees, or former employees. Numerous deposition and other follow-up requests have been responded to, including those discussed below.

C. The following paragraph numbers correspond to defendants' paragraphs listing various document requests in their "Motion to Compel Production of Department of Defense Documents" dated April 8, 1983.



1. The Army has never received any request by defendants pertaining to contract number VA-49-007-MD-411 or this subject. The letter cited by defendants makes no reference to this contract.

2. The letter referenced by defendants makes no request for Surgeon General or Army Environmental Hygiene Agency documents. A later request of defendants arising from the deposition of Dr. Avellino, however, produced documents on this subject. The Army sent these documents to DOJ for production by letter dated March 16, 1983.

3. Defendants' request of March 28, 1983 was received in my office on March 31, 1983. Coordination was made with the Office of the Surgeon General (OSG), Washington, D.C., which revealed that this same request had previously been made under FOIA by the law firm of Carr, Jordon, Coyne and Savits (CJC&S) (see enclosure 3, dated November 10, 1982). It is my understanding that CJC&S represents an insurance underwriter for one or more defendants. In response to this FOIA request the OSG searched its records without success. OSG in turn forwarded the request for consideration by the Army Environmental Hygiene Agency, Aberdeen Proving Ground, Maryland (EHA). Files of EHA were searched, but responsive records could not be found. OSG's final response to the FOIA request is at enclosure 4. This result is consistent

with federal records management policy under the applicable statutory disposal authority. Army records are routinely destroyed over a period of years. After ten years many records of an Army organization would properly have been destroyed. A duplicative search based on the recent request of March 28, 1983 would merely divert Army resources from potentially more productive discovery efforts.

4. Defendants' motion does not refer to any document request concerning proposed military specification MIL-H-51310 on herbicides and I am aware of none.

5 through 9 are not addressed to the Army.

10. All relevant documents concerning compound 125413 have been produced by the Army by letter to DOJ dated March 2, 1983, or in earlier production. I understand DOJ has recently received permission from the company of interest to identify it as the source of the compound.

11. The document identifying the source of compound CS66422 was provided to DOJ by letter dated April 19, 1983.

12. At General Delmore's deposition he stated that he presented a classified paper at the April 26, 1963 meeting "based

on the report which is Exhibit [3]" previously produced by the Army and used by defendants at the deposition (see Tr. at 92-94, enclosure 5). Repeated searches by the Army have not located a report by General Delmore which shows a connection with the April 26, 1963 meeting. The full minutes and appendices of this meeting have been produced several times. General Delmore's comprehensive seminal report on his 1961-1962 mission in Vietnam previously produced fully documents the available information developed by General Delmore.

13. Defendants' referenced letter dated February 1, 1983 directed this inquiry to the United States Department of Agriculture (USDA). This letter was thus not received by the Army. Any toxicological studies of Dr. McNamara relating to relevant chemicals, however, have previously been produced from repetitive searches of all likely files concerning Dr. McNamara, including CSL Toxicology Branch files, former files of Dr. McNamara, and the CSL Technical Library. The minutes of the April 26, 1963 meeting on the toxicity of 2, 4-D and 2, 4, 5-T and appendices, from the time frame of interest stated in defendants' February 1, 1983 letter, include Dr. McNamara's presentation on the toxicity of these herbicides.

14 through 18. These document requests are all from defendants' letter of December 6, 1982. All relevant materials

recovered from Mr. Vocci's personal files were forwarded to DOJ by letter dated March 16, 1983. The same letter forwarded the film "The CRDL Story" and another film. Items 16 through 18 were considered by the Legal Office, Edgewood Area, Aberdeen Proving Ground, Maryland and by CSL. A thorough search was made including likely files of CSL, its Toxicology Branch, and Technical Library. All relevant records have previously been produced, principally in response to defendants' subpoena of May 17, 1982, or in prior voluntary production.

19 and 20. Defendant's request dated April 5, 1983 has not been received by the Army except when received as an exhibit to defendants' motion to compel dated April 8, 1983.

21 and 22. These requests both arise from a second December 6, 1982 letter of defendants. All five reprint articles from Dr. McNamara's files were sent to DOJ for production by letter dated February 9, 1983. All documents responsive to item 22 were produced to DOJ by letter dated March 2, 1983, or were previously produced.

23. These materials were sent by the Army to DOJ by letter dated February 9, 1983.

24. Here defendants reference their letter dated October 28, 1982. Documents responsive to this letter were forwarded by the Army to DOJ by letter dated December 14, 1982. They have been produced by DOJ on microfilm batches 1946 and 1947 which have the titles "Eckhaus Deposition Materials Responsive to Matthews Request (10/28/82)" and "Sigmund Eckhaus - personal files," respectively. I note that defendants' referenced request of October 28, 1982 makes no request concerning Mr. Cox or Mr. Gerety. In response to a subsequent request of defendants concerning Mr. Cox and the proposed facilities at Weldon Springs, additional materials were sent to DOJ by letter dated February 9, 1983.

25. The Army has not received any request concerning General Stone's deposition, and defendants do not reference any.

26 through 30. Defendants' here reference two letters dated October 1, 1982 and October 28, 1982 requesting a broad range of materials on Riot Control Agent CS (commonly called "tear gas"). The United States responded to these requests in its "Notice to All Counsel" dated December 16, 1982 (in defendants' motion, exhibit 1) stating that "`CS' is irrelevant to the `Agent Orange' litigation." Defendants were thus put on notice of this position of the United States and given the opportunity to demonstrate any possible relevance. This "Notice to All Counsel" stated that by

letter dated December 10, 1982, the Army responded to a FOIA request of September 29, 1982 from Rivkin, Leff, Sherman & Radler on CS and chloracne. These letters and the materials released under FOIA are attached at enclosure 6. As the Army's letter of December 10, 1982 notes, none of these materials concern CS causing chloracne. They relate to other dermatological reactions experienced with CS.

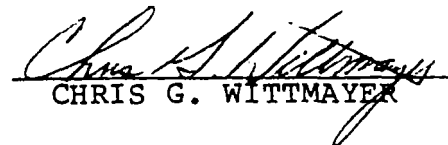
At the time of these requests I investigated the possible relevance of CS to this litigation. From discussions with two Army chemists I drew the tentative conclusion that CS simply did not cause chloracne. CS is widely used by the Army and by many police agencies in civil disturbance and riot control training and missions. In learning to use a protective mask ("gas mask") soldiers are routinely exposed to CS, both with their mask on and with it off, to teach confidence in the mask's effectiveness. This wide experience has apparently produced no literature linking CS and chloracne. Ultimately my inquiry lead to Dr. Renate D. Kimbrough, Medical Officer, Centers for Disease Control, as an expert in this field. At enclosure 7 is her letter to me of December 15, 1982 in which she concludes flatly that "CS is not a compound which can cause chloracne." I note Dr. Kimbrough has been listed for deposition. I attribute the confusion on this issue to imprecise use of the term "chloracne" by nonexperts.

31 and 32. Here defendants reference the letter dated February 16, 1983, previously referenced in item 12 above. This request concerning the Chemical Corps Board (CCB) apparently arises from the deposition of General Delmore of February 2, 1983. Defendants' document request was received by the Army, through DOJ, on February 28, 1983. That same day it was referred for action to the Legal Office, Edgewood Area, Aberdeen Proving Ground, Maryland. Edgewood had been the location of the CCB prior to the Board's disestablishment in 1962. A thorough search was conducted of likely files at Edgewood, including the CSL Technical Library, but Edgewood reported on March 29, 1983 that no responsive records could be located. After additional research was done to get more information on the CCB and possible sources of records, the assistance of the Administrative Management Directorate (AMD), Adjutant General Center, Alexandria, Virginia, was requested on April 7, 1983. On April 20, 1983 the efforts of AMD located files of the CCB at the General Services Administration's National Personnel Records Center, St. Louis, Missouri. AMD has sent two researchers to St. Louis and they are now researching these files for responsive records. Any relevant materials which are discovered will quickly be produced.

33 and 34. Defendants' here reference their letter of March 14, 1983 concerning Dr. Morthland and the Army Research Office (ARO). I received this request through DOJ on March 30, 1983,

after first reading about it in the motion of some defendants<sup>1</sup> dated March 16, 1983, for an adjournment of the date for trial of<sup>te</sup> the government contract defense. To assist in identifying and<sup>ed</sup> locating responsive records I requested and received, through DOJ<sup>of</sup> from defendants, pages from Dr. Morthland's deposition. I note<sup>v</sup> that Dr. Morthland stated in his deposition that any written notes<sup>it</sup> or reports he prepared would likely have been destroyed after two years, or earlier under federal records disposal procedures (see<sup>ic</sup> enclosure 8, Tr. 65-66). Dr. Morthland confirmed this to me in a<sup>t</sup> telephone conversation on April 8, 1983. Notwithstanding this<sup>7c</sup> information, on April 11, 1983, I again requested the assistance of AMD to search for any responsive records from ARO files. This work is now being done and any relevant materials which are<sup>11</sup> discovered will quickly be produced. <sup>t</sup>

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief. Executed<sup>3e</sup> on the 26<sup>th</sup> day of April, 1983, in the United States of America.

  
CHRIS G. WITTMAYER



PENTAGON TELECOMMUNICATIONS CENTER

RTTUZYUW RUEADWD5719 2272020--RUEADWD.

ROUTINE

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FM TAG WASHDC //DAAG-AMR-S//

TO AIG 7405

AIG 7406

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ARSTAF

BT

UNCLAS

SUBJECT: AGENT ORANGE AND HERBICIDE RELATED RECORDS

1. THE QUESTION OF POSSIBLE LONG TERM EFFECTS OF EXPOSURE OF U.S. FORCES TO HERBICIDES USED FOR DEFOLIATION IN VIETNAM IS UNDER INVESTIGATION BY THE VETERANS ADMINISTRATION. CONCURRENTLY, THERE IS ONGOING LITIGATION IN WHICH THE ARMY HAS AN INTEREST.

2. THE PURPOSE OF THIS MESSAGE IS TO PLACE A CONTINGENCY FREEZE ON ALL HERBICIDE RELATED RECORDS AND TO REQUIRE SEARCHES FOR SUCH RECORDS AND INDEXING OF THEM. HERBICIDE RELATED RECORDS ARE THOSE WHICH REFERENCE OR PERTAIN TO HERBICIDES (AGENTS) ORANGE, WHITE, BLUE, AND PURPLE AND THOSE WHICH REFERENCE OR PERTAIN TO PHENOXY HERBICIDES, DIOXIN, 2-4-5 T, 2-4 D, OR 2-3-7-8 (TCDF).

3. RECORDS AFFECTED BY THIS MESSAGE ARE THOSE WHICH RELATE TO HERBICIDE DEVELOPMENT, TESTING, USE, PURCHASE, STORAGE, AND TRANSPORTATION. PERSONNEL AND MEDICAL RECORDS ARE NOT AFFECTED BY THIS MESSAGE. INFORMATION RETAINED IN OR ON ANY MEDIUM (E.G., HARD COPY, MACHINE READABLE, GRAPHIC DISPLAY, VIDEO TAPE, AND FILM OF ANY TYPE INCLUDING COMPUTER OUTPUT MICROFILM, AND TAPE RECORDINGS, IN FINAL OR DRAFT FORM) WILL BE CONSIDERED A RECORD FOR PURPOSES OF THIS MESSAGE. THIS MESSAGE AFFECTS HERBICIDE RELATED RECORDS WHEREVER STORED. PRIMARY RECORDS LOCATIONS ARE CURRENT FILES AREAS, RECORDS HOLDING OR STORAGE AREAS, TECHNICAL AND SCHOOL LIBRARIES, ARMY GENERAL REFERENCE AREAS, AND ANY OTHER LOCATIONS REGARDLESS WHERE KEPT (E.G., DESK DRAWER WORKING COPIES), WHETHER OR NOT SUCH RECORDS ARE MAINTAINED UNDER THE ARMY FUNCTIONAL FILES SYSTEM (AFFS).

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5. ADDRESSEES WILL INITIATE A SEARCH OF ALL FILES AREAS FOR HERBICIDE RELATED RECORDS. FOR RECORDS CONTAINED IN RECORDS HOLDING AREAS OR WHICH HAVE BEEN RETIRED TO FEDERAL RECORDS CENTERS, SF 135'S WILL BE REVIEWED TO DETERMINE WHETHER ANY RECORDS CONTAINED IN THOSE LOCATIONS MAY PERTAIN TO HERBICIDES. RECORDS OF PREDECESSOR ORGANIZATIONS OR ACTIVITIES IN THE CARE OF ADDRESSEES WILL ALSO BE REVIEWED. ADDRESSEES ARE REQUESTED TO CONSULT SOURCES OF INSTITUTIONAL MEMORY FOR POSSIBLE LEADS IN ISOLATING HERBICIDE RECORDS IN RETIRED FILES. UPON COMPLETION OF THESE SEARCHES, EUSTODIANS WILL COMPOSE INDICES ON SF 135'S, OR COMPUTER OR MANUAL LISTINGS SHOWING THE TYPE OF RECORDS, LOCATIONS, AND VOLUME. THESE INDICES WILL INCLUDE EXTRACTS OF SF 135'S PERTAINING TO RECORDS IN RECORDS HOLDING AREAS OR FEDERAL RECORDS CENTERS WHICH ARE BELIEVED TO PERTAIN TO HERBICIDES.

6. INVENTORIES AND INDICES OF DOCUMENTS WILL BE FORWARDED TO HQDA (DAAG-AMR-S), ROOM GA-090, FORRESTAL BLDG, WASH DC 20314, NLT 1 OCT 80.

7. POINT OF CONTACT IS MR. J. E. LANAGHAN, AUTOVON 223-0970, AND ALTERNATE, MR. R. S. CHRISTIAN, AUTOVON 223-1847.

RJ

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DEPARTMENT  
OF THE ARMY  
J.A.G.O.

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SUBJ: AGENT ORANGE AND HERBICIDE RELATED RECORDS

1. MSG DTG 141611Z AUG 80, SAB.

1. TO INSURE THAT EXISTING ARMY RECORDS RELATED TO HERBICIDES ARE FROZEN AND IDENTIFIED, REF A IS RETRANSMITTED. ADDRESSEES WHO RESPONDED TO REF A ON 1ST TRANSMISSION WILL NOT RESPOND TO THIS MSG. ADDRESSEES WHO DIDN'T RESPOND TO REF A WILL PROVIDE INFO REQUESTED BY THIS MSG OR SUBMIT NEGATIVE RESPONSE. NEGATIVE RESPONSE REQUIRED.

2. THE QUESTION OF POSSIBLE LONG TERM EFFECTS OF EXPOSURE OF U.S. FORCES TO HERBICIDES USED FOR DEFOLIATION IN VIETNAM IS UNDER INVESTIGATION BY THE VETERANS ADMINISTRATION. CONCURRENTLY, THERE IS ONGOING LITIGATION IN WHICH THE ARMY HAS AN INTEREST.

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TDR=80347/21112

TAC=80347/25032

CDSN=PK5741

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STORED. PRIMARY RECORDS LOCATIONS ARE CURRENT FILES AREAS, RECORDS HOLDING OR STORAGE AREAS, TECHNICAL AND SCHOOL LIBRARIES, ARMY GENERAL REFERENCE AREAS, AND ANY OTHER LOCATIONS REGARDLESS WHERE KEPT (E.G., DESK DRAWER WORKING COPIES), WHETHER OR NOT SUCH RECORDS ARE MAINTAINED UNDER THE ARMY FUNCTIONAL FILES SYSTEM (TAFFS).

5. HERBICIDE RELATED RECORDS WILL NOT BE DESTROYED UNTIL THIS MONITORING IS TERMINATED BY THIS HEADQUARTERS. THIS CONTINGENCY FREEZE EXTENDS TO ALL HERBICIDE RELATED RECORDS WHETHER ACTIVE OR RETIRED. GENERAL SERVICES ADMINISTRATION FORMS 3170 (NOTICE OF INTENT TO DESTROY RECORDS) RECEIVED FROM THE NATIONAL ARCHIVES AND RECORDS SERVICE AND THE APPLICABLE STANDARD FORMS (SF) 135'S (RECORDS TRANSMITTAL) WILL BE REVIEWED TO ASSURE THAT HERBICIDE RELATED RECORDS ARE NOT INADVERTENTLY INCLUDED IN DESTROY REQUESTS.

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7. INVENTORIES AND INDICES OF DOCUMENTS WILL BE FORWARDED TO HQDA (DAAG-AMR-S) ROOM GA-080, FORRESTAL BLDG, WASH DC 20310, NLT 9 JAN 81.

8. POINT OF CONTACT IS MR. D. L. CLARK, AUTOVON 22-30970, AND ALTERNATE, MR. R. S. CHRISTIAN, AUTOVON 22-20973.

BT

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PAGE 02 OF 02  
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11082

900 SEVENTEENTH STREET, N. W.

WASHINGTON, D. C. 20006

(202) 659-4660

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JOHN T. COYNE  
JOEL M. SAVITS  
EDWARD J. LOPATA  
PAUL D. KRAUSE  
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(301) 424-4181

VIRGINIA OFFICE  
4160 CHAIN BRIDGE ROAD  
FAIRFAX, VIRGINIA 22030  
(703) 891-8533

D.C. MD. IVA.

November 10, 1982

Freedom of Information Act Officer  
Office of the Surgeon General  
Department of the Army  
Washington, D.C. 20310

RE: Freedom of Information Act Request

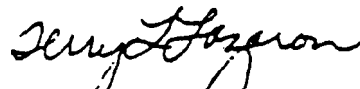
Dear Sir/Madam:

Pursuant to the Freedom of Information Act, I am requesting copies of the following documents:

1. The response(s) by or for COL John Redmond to the enclosed request of Edward J. Burger, Jr., dated November 20, 1969;
2. The letter from the Chief, Preventive Medicine Division, to the National Academy of Sciences dated July 22, 1966 which requested toxicity information on several herbicides
3. All other correspondence or memoranda which refer or relate to the subject matter of the letters described in (1) and (2) above.

I will gladly pay for the reasonable costs of research and reproduction resulting from this request.

Very truly yours,



Terry L. Lazon  
Legal Assistant

TLL/cyc

Enclosure: (1) and (2) above.

11083

FREEDOM OF INFORMATION ACT REQUEST

Rec'd OTSG  
1100 hrs 16 Nov  
EJL  
FOI of

1100 3

26 JAN 1983

DASG-AOR

Mr. Terry L. Lazonon  
CARR, JORDAN, COYNE & SAVITS  
900 Seventeenth Street, N.W.  
Washington, DC 20006

Dear Mr. Lazonon:

This is in response to your letter of 10 November 1982 requesting, under the Freedom of Information Act, copies of documents originated in 1966 and 1969. Specifically, your request was for (1) copy of response by Colonel John Redmond or his representative to a letter initiated by Edward J. Burger, Jr., dated 20 November 1969, (2) copy of a letter initiated by the Chief, Preventative Medicine Division to the National Academy of Sciences, dated 22 July 1966, requesting toxicity information on several herbicides, and (3) all other correspondence or memoranda which refer or relate to the subject matter described in (1) and (2) above.

Please be advised that a search for requested information, within the files of this agency, has failed to produce subject documents. Our search included the withdrawing of records from the record archives for review. Further action was taken to ascertain if subject documents may have been sent to the US Army Environmental Health Agency. Response from that agency reveals that subject documents are not available.

We regret the amount of time it has taken to respond to your request. However, this lapse of time was necessary in order to accomplish a diligent search.

Sincerely,

  
ROBERT L. CHALKY  
Chief, Administrative Office

11084

encl 4

1 last three words of that?

2 (The record is read back as requested.)

3 Q. Had to know him?

4 A. Had to know Hoffmann, I don't believe anyone  
5 around there didn't know Hoffmann.

6 Q. Why do you say that?

7 A. Well, he was an eminent scientist and I'm sure  
8 they met socially and also officially.

9 MR. KROHLEY: I'd like to mark as Exhibit  
10 11 a document entitled Minutes Of A Meeting Held To  
11 Discuss And Evaluate The Toxicity Of 2,4-D and  
12 2,4,5-T Compounds, dated 26 April, 1963.

13 (Delmore-11 marked for identification.)

14 Q. General Delmore, do you recall attending  
15 a meeting on or about April 26, 1963, at Edgewood  
16 Arsenal to discuss and evaluate the toxicity of  
17 2,4,5 -- 2,4-D and 2,4,5-T compounds?

18 A. Yes, I remember making the introduction and  
19 outlining some of the experiences in South Vietnam  
20 and possible requirements, improved requirements and  
21 stayed very briefly to the meeting -- at the meeting  
22 since these were mostly scientists, both industry  
23 and military.

24 Q. Do you recall presenting a classified  
25 paper on the use of herbicides in military

waga and spinelli

certified shorthand reporters

11085-1-5

1 operations at the meeting?

2 A. At what?

3 Q. At the meeting. Let me ask the question  
4 again. Do you recall presenting a classified paper --

5 A. Do I remember my --

6 Q. Yes -- on the use of herbicides in  
7 military operations at the meeting?

8 A. Yes, yes, yes.

9 Q. Do you recall who prepared that  
10 classified paper?

11 A. I remember I did, based on the report which is  
12 Exhibit -- I don't know what you -- made by my team  
13 in South Vietnam.

14 Q. You were referring back, I believe, to  
15 Exhibit 3 --

16 A. That's the one.

17 Q. All right.

18 A. Classified because that report was classified.

19 Q. To the best of your recollection, General  
20 Delmore, what did you tell the people in attendance  
21 at the meeting at that time, what was the substance  
22 of your remarks?

23 A. Exactly as reported -- as given in that report  
24 as to the results, effectiveness of the Research and  
25 Development phases and our trials, Ca Mau Peninsula



1 and crops enumerated in other reports.

2 Q. And by that -- by your reference to that  
3 report, you're referring to that same Exhibit 3  
4 we've been talking about?

5 A. Right.

6 Q. Do you recall stating at the meeting,  
7 General Delmore, that your recommendation for the  
8 use of Agent Purple in Vietnam entailed the  
9 application of three gallons of that material per  
10 acre?

11 MR. TAYLOR: Objection to form.

12 A. Yes, no question, three gallons per acre.  
13 That's what we decided on and this is what I'm sure  
14 I told them.

15 Q. Did you say at the meeting, General  
16 Delmore, that ground troops serving in Vietnam would  
17 be directly exposed to the herbicide spray?

18 A. No, sir.

19 MR. TAYLOR: Objection to form.

20 A. I don't recall.

21 MR. KAVENAGH: Objection.

22 Q. Do you recall saying at the meeting that  
23 ground troops serving in Vietnam would not be  
24 exposed to the spray?

25 MR. KAVENAGH: Object.

RIVKIN, LEFF, SHERMAN & RADLER

100 GARDEN CITY PLAZA  
GARDEN CITY, NEW YORK 11530

TELEPHONE (316) 746-7500    TELEX 646-074    CABLE ADDRESS AT LAW GRCY    TELECOPIER (316) 747-2843    SUITE 3900-30 NORTH LA SALLE STREET CHICAGO, ILLINOIS 60602- (312) 782-5680

September 29, 1982

Department of the Army  
U.S. Armament Research and  
Development Command  
Edgewood Area  
Aberdeen Proving Ground, Maryland 21010

Re: FOIA Request

Dear Sir/Madam:

In accordance with the Freedom of Information Act, I am requesting all documentation on file including, but not limited to, correspondence, memoranda, health claims, reports, or resulting studies, that pertain to an outbreak of chloracne at Edgewood Arsenal associated with the manufacture of the anti-riot agent CS (chemically known as O-Chlorobenzalmalononitrile or O-Chlorobenzylidene malononitrile) (we believe this incident took place in 1962 or earlier).

Any charge in connection with this request should be directed to the undersigned.

Very truly yours,

RIVKIN, LEFF, SHERMAN & RAD

*Lise Andre'*

By: Lise' Andre'  
Legal Assistant

LA:mk

11086



OFFICE OF THE ADJUTANT GENERAL  
ALEXANDRIA, VA 22331

REPLY TO  
ATTENTION OF

December 10, 1982

DAAG-ANR-R (FOIA 82-A045)

Ms. Lise Andre'  
% Rivkin, Leff, Sherman & Radler  
100 Garden City Plaza  
Garden City, New York 11530

Dear Ms. Andre':

This is in further response to your Freedom of Information Act (FOIA) request, dated September 29, 1982, addressed to Aberdeen Proving Ground, Maryland.

We are enclosing the following documents that were forwarded to this office by Aberdeen:

- (a) EATR 4309, "Toxicology of Riot Control Chemicals, CS, CN and DM" (Incl 1, 3 pgs).
- (b) CWL Technical Memorandum 24-50, "Interim Report of CS Exposures in Plant Workers" (Incl 2, 17 pgs).
- (c) Reprint from Military Medicine, Volume 144, #6, June 1969, "Cutaneous Reaction to Riot Control Agents CS" (Incl 3, 4 pgs).
- (d) Interim Report of CS Exposure in Plant Workers (Incl 4, 15 pgs).

We were advised by the office of The Judge Advocate General that the records search conducted at Edgewood, in response to your FOIA request, did not produce any materials concerning an outbreak of Chloracne, at Edgewood Arsenal, associated with the manufacture of CS. The enclosed materials, however, were discovered and discuss other dermatological reactions experienced with CS.

We are further advised that the health effects described in the enclosed "Interim Report of CS Exposures in Plant Workers", are the effects referred to by Mr. Sigmund Eckhaus in his deposition taken in the "Agent Orange" Products Liability Litigation.

We have also been advised that a search has been conducted, at Edgewood, for the unpublished report of Dr. Van Sim, referred to in the "Interim Report" (Incl 3). It, however, was not found.

- We hope we have been of assistance to you.

Sincerely,

RICHARD S. CHRISTIAN, C.R.M.  
Chief, Army Agent Orange Task  
Force

Enclosures

*Went*

11080

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AD 100-1014

**EDGEWOOD ARSENAL  
TECHNICAL REPORT**

**EATR 4309**

**TOXICOLOGY OF RIOT CONTROL CHEMICALS -  
CS, CN, AND DM**

by

B. P. McNamara, Ph D  
E. J. Owens  
J. T. Weimer  
T. A. Ballard  
F. J. Vocci

November 1969



**DEPARTMENT OF THE ARMY  
EDGEWOOD ARSENAL  
Research Laboratories  
Medical Research Laboratory  
Edgewood Arsenal, Maryland 21010**

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Chief, Technical Reference Br.

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This protective marking is canceled

on 17 Aug 1971

B. P. McNAMARA, Ph.D.

Chief, Toxicology Dept, Med Resch Lab

Research Laboratories

Edgewood Arsenal, MD 21010

110000

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numerous other irritants. Alarie and Tibbits<sup>10</sup> demonstrated that capsaicin given to mice as an aerosol or by subcutaneous injection inhibited the respiratory responses to a variety of chemical irritants. CS was less effective than capsaicin in inhibiting the respiratory response to irritant aerosols.

### 3. The Influence of Variables on the Time to Incapacitation.<sup>2</sup>

No significant difference from the data contained in the figure for time to incapacitation could be shown:

- a. For men exposed to CS dispersed from a miniature M18 grenade
- b. For men exposed at 0°F
- c. For men over 50 years of age or for those having medical histories of allergies, hypertension, jaundice, or hepatitis

The time to incapacitation was the same as or shorter than shown in figure 1 when the whole body exposures were performed at 95°F, 35 percent relative humidity and at 95°F, 97 percent relative humidity.

### 4. The Effect of CS on Skin.

The application of CS, in powdered form or in solution, to the skin of sensitive men may cause erythema and vesiculation.<sup>11,12</sup> Aerosols of CS in concentrations of 300 mg/cu m, at 95°F and 95 percent relative humidity, blowing on the bare arms of men for 45 minutes, produced erythema and vesiculation in some.<sup>13</sup> Similar exposures for 30 minutes did not cause skin lesions.

A number of workers in a CS manufacturing and processing plant developed a rash, pruritus, vesicles, and wheals. In some cases, this seemed to represent sensitization with generalized adverse reaction on re-exposure.<sup>12</sup> Bowers concluded that CS is a primary irritant; excessive perspiration at areas of clothing contact contribute to development of lesions. Some individuals develop a hypersensitivity after an initial localized dermatitis and tend to react more rapidly and over a wider area on subsequent exposures.

Other substances known to cause dermatitis among chemical agent workers<sup>12,14</sup> are brombenzyl cyanide, chloroacetone, chloropicrin, trichloromethane, adamsite, chlorine, phosgene, and mustard gas.

Rothberg<sup>15</sup> administered irritants to guinea pigs by the intradermal and topical routes, over a period of several weeks. Following an incubation period of 2 to 3 weeks, the animals were challenged with suberythematous doses. The appearances of erythema, edema, and necrosis during a 72-hour observation period were noted as signs of sensitization. Both CN and CS produced skin sensitization in guinea pigs when administered intradermally or topically. Neither CA (brombenzyl cyanide) or DM produced sensitization when given intradermally.

### 5. Lethality of CS in Man.

CS is not known to have caused any deaths in man.

11091

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## LITERATURE CITED

1. Letter, Research Laboratories Human Estimate Committee to Director, Research Laboratories, 19 September 1967. Subject: Research Laboratories Human Estimates. Attachment. Nausea and Vomiting Produced by Inhalation of DM in Man. Owens, E.J., Goldman, P.J., Merkey, R.P., and Langan, M.A. October 1966-April 1967.
2. CRDL Special Summary Report by Directorate of Medical Research. The Pharmacology of CN, CS, and DM. Chemical Research and Development Laboratory. September 1965. UNCLASSIFIED Report.
3. Letter, Research Laboratories Human Estimates Committee to Director, Research Laboratories. 25 August 1966. Subject: RL Human Estimates; LCt50's on DM, CS, and CS-DM Combinations and Relationship of CS-DM Concentrations with Percentage of Population Incapacitated and Time to Incapacitation.
4. Letter, Research Laboratories Human Estimates Committee to Director, Research Laboratories. 28 July 1966. Subject: Human Estimates for DM.
5. Minutes of meeting. Human Estimates for CS. CRDL Human Estimate Committee. 26 August 1959.
6. Punte, C.L., and Owens, E.J. CRDL 24-41. Note on the Ability of Men to Develop a Tolerance to CS. July 1960. UNCLASSIFIED Report.
7. Punte, C.L., Owens, E.J., and Gutentag, P.J. Exposures to Ortho-chlorobenzylidene Malononitrile - Controlled Human Exposures. Arch. Environ. Health 6, 366 (1963).
8. Jancso, N. Role of the Nerve Terminals in the Mechanism of Inflammatory Reactions. Bull. Millard Filmore Hosp, 7, 53-77 (1960).
9. Porszasz, J., and Jancso, N. Studies on the Action Potentials of Sensory Nerves in Animals Desensitized with Capraicin. Acta Physiol. (Hung). 16, 300-306 (1959).
10. Alarie, Y., and Tibbets, C. Hazelton Laboratories. Special Report. Contract A-18-035-AM6-950(A). Desensitization to Unusual Irritants. August 1967. CONFIDENTIAL Report.
11. Gutentag, P.J., Owens, E.J., and Punte, C.L. CWLR 2365. The Evaluation of Aerosols as Riot Control Agent in Man. April 1960. UNCLASSIFIED Report.
12. Bowers, M.B., Owens, E.J., and Punte, C.L. CWL Tech Memo 24-50. Interim Report of CS Exposures in Plant Workers. January 1960. UNCLASSIFIED Report.
13. Hellreich, A., Goldman, R.H., Bottiglieri, N.G., and Weimer, J.T. EATR 4075. Effects of Thermally Generated CS Aerosols on Human Skin. January 1967. UNCLASSIFIED Report.

11092

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INTERIM REPORT OF CS EXPOSURES IN PLANT WORKERS

by

Malcolm B. Bowers, Capt, MC  
Edmund J. Owens  
Charles L. Punte

June 1960

"The information in this memorandum is issued for temporary or limited use only, and it may be superseded".

Directorate of Medical Research  
U. S. Army Chemical Warfare Laboratories  
Army Chemical Center, Maryland

APPROVED:

Approved for public release; distribution unlimited

*David B. Dill for*  
DOUGLAS LINDSEY, Lt Col, MC  
Director of Medical Research

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JUL 1960

## INTERIM REPORT OF CS EXPOSURES IN PLANT WORKERS

### INTRODUCTION

The Toxicology Division has been asked to investigate reported dermatological complications suffered by workers manufacturing and processing CS. The following remarks concern the results of this investigation.

### METHODS AND SOURCES OF INFORMATION

Three sources of information were available to those who looked into this problem.

(1) Fourteen (14) forms, DA-1051 (Employees Notice of Injury or Occupational Disease) were filed by workers handling CS in Buildings 503, 605, and 58 at Edgewood Arsenal from April 1959 through February 1960. Each of these workers was interviewed by a medical officer and detailed notes were taken regarding number of reactions to CS, type and severity of reactions, time from actual exposure to onset of reactions, protective devices used\*, specific type of employment engaged in when the reaction was noted, therapy given, and past history of dermatologic and/or allergic disease.

(2) A tour of the three buildings was made by the Authors. The various processes in use in manufacturing and preparing CS munitions were seen first hand. Changes that had been made to protect the workers since the onset of dermatologic reactions were pointed out by the foreman of the buildings.

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\* A list of the official names of the clothing items worn by workers is included in the Appendix.

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(3) A report<sup>1</sup> previously submitted by Dr. Van Sim concerning reactions to CS suffered by workers in Chemical Warfare Laboratories and at Edgewood Arsenal was reviewed and the findings of this investigation were discussed with Dr. Sim.

The findings from the above three sources will be discussed in order.

A. Interview with Workers Submitting Forms DA-1051

1. C.H. is a 45-year old negro male. He submitted three accident claims while working with CS. In April of 1959 he was employed mixing CS and pyrotechnic ingredients. The process involved unavoidable exposure to CS dust. Clothing consisted only of fatigue clothes, protective mask, boots, and cotton gloves. He noted a pruritic papular rash about the wrists and neck after about two weeks of working in this capacity. He was treated at the Station Dispensary with antihistaminic cream and experienced minimal further discomfort.

In May of 1959 the worker returned to the above task. After 2 days he noted a papular rash as before. This rapidly progressed to become a process of extensive vesiculation over the wrists, neck, face, arms, and anterior thorax and abdomen. He spent three weeks in the U. S. Public Health Service Hospital recovering from this episode.

In October 1959, this man was again exposed to CS while loading bursting grenades. After one day in this capacity he developed a papular vesicular eruption about the wrists and neck. He was treated at the Post Dispensary as previously and convalescence was approximately one week.

In February, 1960, he was employed sifting dry CS in an air-supplied suit. He encountered no difficulty until he returned to shut

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down some machinery in street clothes. This one-half hour exposure resulted in blisters about the face and neck with swelling of the eye-lids. This man had no past allergic history and had no dermatologic complications in previous work with mustard.

NOTE: This case represents progressive sensitization to a primary skin irritant. His tasks necessitated unavoidable exposure to powdered agent. He was well protected from the agent when the air-supplied suit was used, but the severe degree of prior sensitization resulted in blisters after one-half hour exposure to an atmosphere contaminated with dry agent when he was unprotected.

2. P.S. is a 49 year-old white man. In April, 1959, while working in the manufacturing plant at the centrifuge and drying ovens, he noted a vesicular eruption about the face, neck, wrists, and thorax after three weeks exposure to the agent. The lesions were intensely pruritic. His job at the drying ovens caused constant exposure to dry, powdered CS. He was treated at the Station Dispensary with ointment. The lesions healed after forming large eschars.

In September, 1959, while working at the hydraulic press packing burning-type grenades, he developed a generalized papular rash after two day's exposure. The rash persisted despite local treatment and was intensely pruritic. He later developed vesicles and several wheals. He was treated with oral antihistamines and local care to the blisters. He may have had a low grade fever. Protective clothing used was only as mentioned above. Since this time he has not worked in a CS environment. He filed a single accident report..

NOTE: This case also represents a case of sensitization to a primary irritant. The second episode seems to have had some characteristic of a serum sickness-type reaction. The jobs mentioned provided unavoidable contact with powdered CS when minimal protective clothing was worn.

3. W.B. is a 45-year old white male who was first exposed to CS in April, 1959. He was grinding and blending the agent at this time. After two weeks at this task he developed a vesicular dermatitis of the wrists. Protective clothing used was identical to that mentioned in the previous cases. He was treated with ointment, and the blisters healed in about one week.

In September, 1959, while employed in the same processes, the man developed huge blebs over the wrists and anterior thorax and thighs after two days exposure to the agent. Convalescence was three weeks. There was no allergic history.

NOTE: This case seems to represent the same process of initial exposure; sensitization, and a generalized, severe reaction on re-exposure. The huge blebs that were produced are remarkable. The worker again was involved in a task in which protection was ill-afforded by the clothing worn. Two accident reports were filed by this man.

4. R.S. is a 42-year old white male who noted his first reaction to CS two days after beginning work on the hydraulic press. He felt that increased sweating at this task was contributory to the development of his dermatitis which manifested itself initially as an erythema with vesicles about the wrists. Three months later, having been removed from the CS buildings in the interim, he developed a pruritic rash on his hands while taping and cleaning grenades. This reaction began after one day at the new

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job. Again two months later, while working with the micro-pulverized CS, this man developed a bilateral erythematous vesicular eruption of the wrists. Since this time even brief exposure to CS dust causes an exacerbation of a chronic dermatitis of the neck and wrists. He has filed a total of three injury reports.

NOTE: This worker is exquisitely sensitive to CS at present. However, he has never developed a generalized-type reaction manifested by others who are hypersensitive to CS.

5. C.L. is a 55-year old white male who bagged micro-pulverized CS for one month before developing a typical rash with blisters over the face, anterior thorax, and neck. He felt increased sweating pre-disposed to the development of his initial lesion. He wore the usual work uniform including rubber gloves. The critical lesions were treated with an antihistaminic cream and cleared up in one week. After a respite from CS for four months, he was put to work filling bursting grenades. He promptly developed an eruption of the face and neck on the second day. He filed two accident reports.

NOTE: This case again illustrates the process of hypersensitization after an initial contact dermatitis. The tasks in which this worker was engaged were those in which the atmosphere was constantly filled with CS dust.

6. H. F. is a 45-year old white man who developed the usual erythematous vesicular dermatitis after one month's work at the hydraulic press. He also noted that the rash was worse when he perspired. He received the usual treatment, and his lesions resolved uneventfully. Recently he has returned to work with CS in the drying ovens and has had no recurrences of his dermatitis.

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NOTE: This man's history illustrates the case of the worker who receives an initial contact burn but who, on re-exposure, doesn't develop a hypersensitive response. This can be explained by a job change with less CS contamination of the atmosphere, improved clothing, individual variation, or a combination of all three.

7. L. N. is a 64-year old white male who developed a local dermatitis of the wrists after two month's work loading CS capsules. He was unable to wear gloves at this job. Since this time he has worked almost constantly with CS in various tasks and has had no recurrences. He has never had to handle dry agent with his bare hands again, however.

NOTE: This man is another example of an individual who has suffered an initial dermatitis from a contact irritant but who has had no recurrences even after extensive re-exposure.

8. J. C. is a 38-year old white man who first developed extensive CS burns after two days of blending the agent while wearing the heretofore usual clothing. These burns were localized to the face, neck, and wrists. Treatment and recovery were as mentioned previously. Four months later this worker again developed localized burns while working at the hydraulic press. He felt that increased perspiration was again contributory to his second episode of dermatitis. The latent period in the second episode was two days. Recently this man has worked for eight weeks manufacturing CS. He handles primarily the reacting precursors and has had no further dermatitis.

NOTE: This man's state of sensitivity is debatable. At least he is very prone to develop the primary localized dermatitis. However, he has been able to continue working in the manufacturing plant due to minimal exposure to dry CS. This man has worked extensively with H and feels that

precautions in working with CS must be at least as rigid if protection is to be assured.

9. and 10. C. B. and O. M. are two further examples of individuals who have a history of one fairly severe localized dermatitis due to CS.—Repeated re-exposures have caused no exacerbations. C. B. reports the only episode in all individuals questioned which could be construed as a generalized reaction of a non-hypersensitivity type. He had headaches and dyspnea for 24 hours after working with very finely ground CS (5  $\mu$  range). This reaction was quite distressing. Though a single case is difficult to evaluate, the possibility remains that very finely divided agent might pass swiftly through alveolar membranes and lead to the development of a certain blood level of CS and generalized toxic symptoms. Certainly all possible precautions should be taken in working with the finely divided agent.

11. B. O. is the single active case of CS burns seen and treated by one of the authors. A photograph was obtained of his lesions. They were confined to the dorsum of his hands and wrists and to the lateral margins of his nose and adjacent cheek. These seemed to represent areas of contact of rubber gloves and the nose-piece of the gas mask. The eruption was an indurated weeping erythema with several areas of denudation and secondary infection. Pruritus was marked. Treatment was with Burrow's Soaks, antihistamine cream, steroid cream (after closing of the denuded areas), and oral antihistamines. It is too early to evaluate the results of this therapy. The case represents a typical initial contact dermatitis involving a primary irritant

#### B. Previous Report of CS Burns

Talking with Dr. Sim, considering his report<sup>1</sup>, lead the above case histories to the conclusions that:

- (1) CS is a severe primary irritant
- (2) excessive perspiration at areas of clothing contact predispose areas as sites for the contact lesions
- (3) some individuals develop a hypersensitivity after an initial localized dermatitis and tend to react more rapidly and over a wider area on subsequent exposures.

#### DISCUSSION OF MEDICAL ASPECTS

In the extensive study by Gutentag, et al.,<sup>2</sup> it was adequately shown in volunteers that a single application of CS in powdered form or solution to normal skin caused erythema and vesiculation. It was further shown that any type of covering over the area of application made the resultant lesion worse, an air-tight compress being worse than a gauze bandage. Thus, CS is a primary irritant chemical. This is not surprising since many of the toxic gases are primary irritants as mentioned by Schwartz, et al.<sup>3</sup> In discussion contact dermatitis Andrews<sup>4</sup> notes that rarely can circulating antibodies be demonstrated. The process is akin to allergic eczema immunologically and to be differentiated from such processes as asthma, hay-fever, and other wheal-reacting allergies. In susceptible people eruptions may become manifest after periods of protracted exposure. One attack seems to predispose the involved areas so that subsequent outbreaks may be the result of extremely slight exposures. The sensitized area may be localized or generalized, according to Andrews<sup>4</sup>. Some substances known to cause dermatitis among war gas workers are brombenzylcyanide, chloroacetophenone, chlorpicrin, trichloromethane (lacrimators); adamsite (sternutator); chlorine, phosgene (lung irritants); and mustard, lewisite, ethyldichlorarsine (vesicants).

Thus this term "sensitized" is used a bit loosely in discussing these patients. Obviously the shortened latent period prior to developing lesions after each re-exposure is the basis of such a term. However, some individuals seem to continue to manifest only the local response whereas others demonstrate a generalized reaction. Presumably some additional mechanism is at work in the latter case. Examples of both types of reactions plus instances of a single contact episode are illustrated by the case histories.

Heat and humidity at the surfaces of contact are known to increase the likelihood of a contact eruption. Susceptibility of skin to mustard is known to increase under these conditions. This factor was suspected by nearly all workers interviewed.

Negroes are reportedly less susceptible to the dermatotoxic effects of war gases than whites. There was only one negro among our cases whereas there are more negro workers than white at the plant.

Thus, it seems that several factors are involved in any one man's getting a CS dermatitis and in attempting to predict just who will develop a reaction.

The most important factor, as obvious as it seems, is exposure to CS. This means that nearly anyone exposed long enough to this irritant will get a rash. Thus, protective clothing must be optimal especially in areas where the fine dust is a constant threat. CS should not be handled with the bare hands. Supplied <sup>air</sup> suits are being employed satisfactorily at present. A process in the working and packaging of CS which can be enclosed would be much less hazardous. An adequate hand cream should be employed. Any process in which a worker has developed an eruption of the hands and neck while wearing



fatigue clothing should be attended by personnel in Supplied Air suits.

Exposure to CS, humidity, and friction seem to aid in development of a dermatitis. Clothing should fit loosely (including gloves and shirt collar). Unless a filtered air, constant temperature-humidity environment can be obtained, supplied-air suits seem to be the next logical step. However, if such suits are ineffective in an operation where there is no temperature and humidity control, it would seem wise to inclose the equipment. In other words, if the agent contaminates the skin trouble will result under certain circumstances. If these circumstances cannot be eliminated, it would seem wise to take further steps to lessen contamination.

Some individuals develop a single local reaction and seem to have no recurrence under conditions of reduced exposure. Others seem to develop repeated local responses with increasingly shorter latent periods between exposure and eruption. A third group seems to develop a more generalized-type eruption, again with progressively shortened latent periods. A priori, it is impossible to detect the two latter groups. Therefore, any persons who have had two local reactions should work at tasks where re-exposure is minimal and protective devices optimal. Indeed, it is recommended that anyone who has had a generalized reaction (classically as in Cases 1 and 3, above) not be allowed to return to work in CS contaminated atmospheres.

Treatment of these lesions is not specific. Astringent, drying soaks should be used during the acute weeping phase. Bacitracin ointment can be used if there is secondary infection. Antihistamine cream can be used, in the acute phases, in between soaks. Oral antihistamine therapy can be added if pruritus is a problem. When vesicles occur, local treatment should be

protective and aseptic. When vesicles dry and induration occurs, hydrocortisone ointment is effective. In the generalized reaction, hospitalization may be necessary to treat adequately all involved areas and properly guard against secondary infection.

#### TOUR OF THE CS PLANTS

The tour of Buildings 503, 605, and 58 was enlightening in that it was possible to see first hand which processes made the workers more liable to excessive exposure to CS. These processes will be described briefly.

In Building 58, the reactants are mixed and the wet cakes of CS placed into trays to dry. The only liability in this plant is at the drying ovens. Rubber suits with constant air circulation have been provided those men working at the ovens and loading dried CS into drums. At Building 503, CS is sifted and blended with potassium chlorate, thiourea, and magnesium carbonate. In the past, the blending and sifting procedures were particularly hazardous because of the constant contamination of the atmosphere with CS dust. However, air suits have been introduced for these steps and the hazard considerably reduced. In Building 605, several processes are carried out. By far, the most hazardous is the pressing of powdered CS mixture into burning type grenades. The impact of the hydraulic hammer unavoidably dispersed a constant cloud of CS. Supplied air suits have been furnished the four men who work in rotation at this task, with considerable lessening of the hazard. However, Case 11 developed burns while wearing such a suit. He attributed his burns to excessive sweating in the suit when the alternate worker rests for thirty minutes during a shift. Thus, it seems that this operation continues to produce a CS atmosphere which is threatening to workers even

in supplied air suits. At the hoods where starter mix is added to the filled grenades, there have been no problems, evidently because there is no exposure to fine powdered agent. Similarly double-seaming the lids and wiping, taping, and plugging the grenades have caused little trouble except for those who are hypersensitive as described above. The micro-pulverizer is not in use at present but presents a potentially severe hazard for the future. Certainly, supplied air suits should be used in this operation. Finally, the filling of the M-25-A2 bursting grenades has presented little problem. It should be mentioned that in addition to supplied air suits, two other innovations have lessened the possibility of excessive contamination since the majority of the above described cases were reported. First, more adequate hoods with higher air flows have been provided at sites such as in the hydraulic press room and at the starter mixture hood. Also, a double locker room system has been devised at all three buildings. The worker showers in his air suit (if used) and removes the suit in one area. Next, he showers himself after removing contaminated fatigues and underclothes. He then enters a locker room, which is essentially clear of CS, to dress. He wears a clean set of underclothes and a clean fatigue uniform each day.

Some of the workers use West Protective Cream No. 211 (see Appendix) which is antiseptic containing hexachlorophene cream. The workers feel that it washes off easily with minimal perspiration. A tenacious silicone cream has been recommended by Schwartz, et al.<sup>3</sup>

Building 605 - Cake Pressing - This operation seems to produce more agent dusting than any other production step. The agent blend must be measured and pressed into grenade size cakes, a procedure which requires measuring out quantities of the light powder and hydraulically pressing out

a cake. Although the entire operation is carried out in a fume hood, a considerable amount of material escapes into the room. It is recommended that the present hoods be replaced with a dry-box type hood provided with air-lock feed and exit doors. The operators would work through glove ports to eliminate any personal contact with the agent (and prevent the escape of particles) during the measuring and pressing operations. Production set-ups of this type have proven very successful in the pharmaceutical industry and are designed to permit the operation of heavy machinery through the gloves.

If the operations carried out in Buildings 58, 503, and 605 were consolidated under one roof (Building 503 has an adequate design and sufficient floor space) it is very likely that the CS contamination could be sufficiently limited by employing closed conveyer lines and dry-box work hoods. This would reduce the hazard of agent contact considerably.

Since this report has been written, it has come to our attention that similar dermatological cases have been reported by British workers manufacturing and processing CS.

The exact cause of this dermatitis is to be investigated by both the UK and US on a cooperative basis.

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3. Schwartz, Louis, et al., Occupational Diseases of Skin, W.B. Saunders, Publishers, Philadelphia and London, 1954.
4. Andrews, G.C., Diseases of the Skin, Lea and Febiger, Publisher Philadelphia, Pa., 3rd Edition, 1957.

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APPENDIX

STANDARD ITEMS OF CLOTHING

FATIGUE UNIFORM (Treated for flame proofing)

Jacket - mens, cotton, herring bone twill, olive green, shade 7,  
MIL Spec J-3001A

Cap - field, cotton, olive green MIL Spec C-300A

Trousers - mens, cotton, sateen, 6.5 ounce, olive green, Shade 107,  
MIL Spec T-838B

Socks - mens, wool, olive drab, Shade No. 9, with cushion sole,  
MIL Spec S-48C

Shoes - safety, low quarter, non-conductor, composition rubber,  
sweat resistant insole, bonded lining treated against athletes foot, full  
grain leather under safety toe cap, dacron laces and stitched, plastic heel  
cups.

GLOVES - rubber, lightweight, industrial, Goodrich 52C

GLOVES - cloth, work type, mens, cotton, natural MIL Spec G-1057A

UNDERSHIRT - Cotton, full length sleeves, white, special MIL Spec 252E

SUIT - protective, with air supply connected and built in air circulation  
system, one piece, detachable gloves, boots and hood permanently sealed, 0.02  
vinyl filament. Air supply 5/16 inch diameter plastic tubing, directed to  
feet, hands, hood; air outlets at legs, chest, back. Corresponds to protecti  
suit No. 2-P, manufactured by Snyder Manufacturing Co., Inc. 1458 5th St., Ne  
York, Philadelphia, Ohio.

CREAM - antiseptic by West Chemical Products Inc., US Patent 2535077, West  
Protective Cream No. 211; contains butylene glycol, zinc stearate, methyl  
cellulose, hexachlorophene.

MASK - Protective, M9A1.

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# Cutaneous Reaction to the Riot Control Agent CS

MAJ Dennis. A. Welgand, MC, USA

**O**-CHLOROBENZYLIDENE malononitrile (CS) is a nonlethal, solid, particulate irritant agent which, in very low concentrations, produces immediate and marked irritation of the conjunctivae and the mucous membranes of the upper respiratory tract. Because of the rapidity of onset of this irritation, exposed persons are ordinarily forced to flee the contaminated environment before mucous membrane damage can occur. Cutaneous reaction to CS exposure is not immediate, probably because of the barrier function of the stratum corneum. The stinging that develops within a few minutes is ordinarily much less severe than that of the eyes and nose. Consequently, a masked individual may allow considerable cutaneous exposure to CS and be relatively unconcerned until erythema and edema, and possibly bullae develop. Fortunately, severe cutaneous reactions, e.g., with bullae, are uncommon, occurring mostly in quite specific and unusual situations. Specific figures are known only for controlled experimental exposures.

The purpose of this paper is to describe the conditions under which such reactions have occurred, and to present observations on the limited amount of controlled experimental exposure and decontamination that have been carried out.

## Situations in Which Adverse Skin Reactions Have Resulted

### A. Military

Sources of specific information on the incidence of significant CS dermatitis in Southeast Asia were limited. However, two observers recently in Vietnam investigating problems related to the use of riot control agents in military operations, neither saw nor heard of any specific instances of severe reactions.<sup>2</sup> From our observations of the environmental and local cutaneous influences on reaction to CS, deductions can be made regarding probable predisposing situations.

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Most exposures to CS among American troops in Vietnam are accidental, i.e., troops enter an area of contaminated terrain without advance awareness of the situation, and possibly without protective masks. The presence of CS becomes obvious immediately from irritation of the eyes and nose, and in most cases cutaneous problems can be avoided. Troops with protective masks in contaminated terrain are most likely to remain in the area long enough to receive a skin-damaging exposure because they are not forced to leave the area by nasal and conjunctival irritation.<sup>4</sup>

Major factors associated with CS dermatitis are high heat and humidity. The apparent determining factor here is permeability of the stratum corneum, which is significantly increased by both heat and prolonged hydration.<sup>11,12,15,17</sup> The prevailing climatic conditions in Southeast Asia clearly contribute to cutaneous vulnerability. The additional factors of occlusion and friction are probably operative, as the fine CS particles sift in and are held in areas of hat bands, collars, and in the intertriginous areas.<sup>4</sup>

Another obvious predisposing situation is that of the so-called "tunnel-rat," who must enter extensive tunnel systems where many CS grenades have been detonated, and concentrations of the agent are very high. Soldiers engaged in such activities feel they would benefit from some additional protection.<sup>4</sup>

### B. Civil

CS is commonly used in the quelling of riots and other civil disturbances. The usual situation is that several CS grenades are detonated in front of a large crowd, which ordinarily breaks and scatters promptly, to escape from the nasal and conjunctival irritation. After detonation, a CS grenade burns for about 3 seconds, releasing a cloud of thermally generated 2µ aerosol particles. On a calm day, a cloud 20-30 feet in diameter forms and lingers 10-15 minutes. A concentration of 2000-5000 mg of CS per cubic meter is produced at the

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point of burst, and a concentration of 1000 mg per cubic meter can occur 50 yards downwind in a five-mph wind.<sup>1</sup> Relatively brief exposure to CS at these concentrations may produce second degree burns, as will be explained later. *It should be pointed out that exposures of this magnitude seldom occur.* Most people are at some distance from the point of burst, and the concentration of CS is accordingly lower. Only if a person were immobilized would he be exposed long enough to cause burns.

Another variable that has been observed in cutaneous reaction to CS is that of race; i.e., Negroes experience chemical burns less often than do Caucasians. It has been generally observed that Negro skin is more resistant to some irritants than is Caucasian skin.<sup>8,16</sup> Kligman states that proof of relative resistance to chemical attack in Negro skin is incomplete. However, he has demonstrated a decreased reactivity of Negro skin to weak allergens, and states that the probable explanation is a reduced response to exogenous insults, hence, inflammation.<sup>10</sup> Whether this difference is melanin-related is not known. That Negro and Caucasian strata cornea are of equal thickness has been shown by Thomson<sup>15</sup> and later by Kligman. The latter has also shown that the principal difference between the horny layers of the two races is in the transmission of ultra-violet light, which is specifically a function of melanin content.<sup>9</sup>

A CS exposure hazard perhaps more common in civil than in military situations is that of contaminated buildings. In a recent series of civil disorders,<sup>6</sup> firemen, upon entering burning and burned-out buildings, developed erythema and edema of periorbital skin and other exposed areas of the face and neck. The CS previously disseminated in the buildings to drive out or deny access to rioters was re-aerosolized by the movement of the men and the spraying of water. This experience attests to the persistence of CS.

### C. Industrial

The major contribution of industrial exposures to our knowledge of the cutaneous effects of CS is the production of allergic con-

tact dermatitis in agent-processing workers.<sup>3</sup> The main factor in the occurrence of this reaction is apparently the opportunity for repeated exposures. In most cases, adherence to standard precautions and the use of protective equipment prevents this problem. However, a single exposure resulting in significant inflammation is sufficient to sensitize in some cases, and very slight exposures thereafter can elicit the eczematous reaction. Negroes have also been relatively resistant to allergic contact dermatitis, commensurate with their apparent resistance to the primary irritant reaction. Apparently the most hazardous agent processing activities are powder-pressing for grenades, micro-pulverization, and operation of drying ovens.

### D. Experimental

Experimental studies have confirmed previous observations on the variables of cutaneous reaction to CS, such as climatic conditions and race. Also, they have revealed considerable individual and cutaneous regional variations. In general, regional variations in reaction to CS correlate fairly well with regional variations in percutaneous absorption, i.e., reaction tends to be most prominent where absorption is the greatest. Under simulated tropical climatic conditions, Caucasians experienced stinging and erythema on the flexor surface of the forearm during and for 10-30 minutes after experimental exposure to about 300 mg CS/cubic meter for 15 or 30 minutes (Ct\* of 4,500 or 9,000). Ct's of 14,000 or more produced more prolonged erythema, and bullae.<sup>7</sup> By comparison, under similar conditions Caucasians developed stinging and erythema on the necks, ears, and forehead after exposure to Ct's under 1000, and bullae on the neck with Ct's of 1000-3000.<sup>5</sup> Therefore, an exposure sufficient to produce bullae could be sustained by exposure to a CS grenade at the point of burst (conc. 5000 mg/cu m) for 12 seconds ( $\frac{1}{5}$  minute). As stated previously, concentrations of this magnitude seldom occur in practice.

More recently, transient (30-60 minutes)

\* Ct = conc. in mg/cu m  $\times$  time in minutes.

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erythema of the neck and ears has been seen in Caucasians after exposure to CS in the range of 25-50, in tropical climatic conditions.<sup>10</sup>

#### Avoidance of Conditions in Which Cutaneous Reactions May Occur

Briefly stated, dry skin, dry clothing, and a temperate climate preclude significant cutaneous reaction from all but the most massive CS exposures. Where such ideal climatic conditions are not present and where the hazard of large exposures is great, additional defense is desirable. The requirements for an ideal cutaneous defense in combat situations are stringent, and such a material is still being sought. A basic principle to be remembered when considering cutaneous defense against CS is that the burden of discomfort and inconvenience of the defense should not exceed the burden of the cutaneous reaction to the agent. Furthermore, the areas most likely to be involved in CS reaction (neck and ears in a masked person, periorbital areas in an unmasked person) are topographically difficult to protect.

Given the conditions that cutaneous exposure has occurred, one must first assess the magnitude of exposure, the condition of the skin (warmth, moisture), and the climatic factors (temperature, humidity, wind). The influences of most of these factors have already been discussed. In addition, a strong wind can at least partially decontaminate dry surfaces. Heavily contaminated clothing, especially if wet, should be removed, if possible. Flushing of the skin with large amounts of water decontaminates fairly well, if done promptly after exposure.<sup>4</sup> A delay, however, permits more time for cutaneous penetration, and wetting the skin, through which penetration is already underway, may actually facilitate the process. This may partly account for the common observation of increased stinging when contaminated skin is moistened.<sup>7</sup>

Advantage has been taken of the fact that CS readily hydrolyzes to nonirritating products in an alkaline environment.<sup>9</sup> Solutions with a pH of 9 to 10 are sufficiently alkaline to promote hydrolysis, but are not harmful to

the skin. An aqueous solution of 6 per cent  $\text{NaHCO}_3$ , 3 per cent  $\text{Na}_2\text{CO}_3$ , and 1 per cent benzalkonium chloride has a pH of 9.4, and has been found to promptly relieve the stinging caused by CS exposure. In aerosol chamber exposure tests,<sup>12,13</sup> subjects decontaminated on one side of the neck with this solution regularly were relieved of stinging on that side, compared with the control side. Conversely, in most cases, stinging was enhanced by application of plain water. This decontaminating solution seems to be much less effective on the forehead and mustache area.

#### Treatment of Cutaneous Reactions to CS

A necessary prelude to treatment of CS reaction is decontamination, as discussed above. Whether the patient has a chemical irritant dermatitis or an allergic contact dermatitis, the management should be basically the same as for the same reactions due to other causes. For dermatitis, a topical corticosteroid cream or lotion is the principal therapeutic agent. The most potent preparations are triamcinolone acetonide (0.01 to 0.025 per cent), fluocinolone acetonide (0.01 to 0.025 per cent), flurandrenolone (0.025 to 0.05 per cent), and betamethasone-17-valerate (0.1 per cent). Oozing should be treated with wet dressings (30 minutes, three times daily) of 1:40 Burow's solution; or colloidal oatmeal. The topical steroid should follow the wet dressing immediately. Secondary infection should be treated with an appropriate antibiotic. If significant pruritis occurs, an oral antihistamine, such as diphenhydramine 25 mg or 50 mg, three or four times daily, trimiprazine 2.5 mg or five mg, three times daily, or cyproheptadine four mg, four times daily, should be used.

#### Future Investigation

Investigative work on cutaneous reaction to CS exposure has just begun. The effects of melanin on CS reactions are currently being investigated. Preliminary observations on the effects of CS on acne are being made. The potency of CS as a sensitizer and as a possible

photosensitizer needs clarification. Although cutaneous reactions are seldom severe, in certain situations, as indicated previously, additional defense would be desirable, and is presently being sought.

### Acknowledgments

The author is indebted to Dr. Millard M. Mershon of the Clinical Investigation Branch, who performed much of the experimental work cited, and who very generously contributed his time in the reviewing of this material. The author is also indebted to Mrs. Marion P. Royston of the Medical Reporting Office, Medical Research Laboratories, whose journalistic skill, technical understanding, and generous devotion of time helped immeasurably in the preparation of this report.

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# INTERIM REPORT OF CS EXPOSURES IN PLANT WORKERS

## INTRODUCTION

The Toxicology Division has been asked to investigate reported dermatological complications suffered by workers manufacturing and processing CS. The following remarks concern the results of this investigation.

## METHODS AND SOURCES OF INFORMATION

Three sources of information were available to those who looked into this problem. (1) Fourteen (14) forms, DA-1051 (Employees Notice of Injury or Occupational Disease) were filed by workers handling CS in Buildings 503, 605, and 58 at Edgewood Arsenal from April 1959 through February 1960. Each of these workers was interviewed by a medical officer and detailed notes were taken regarding number of reactions to CS, type and severity of reaction, time from actual exposure to onset of reactions, protective devices used\*, specific type of employment engaged in when the reaction was noted, therapy given, and past history of dermatologic and/or allergic disease. (2) A tour of the three buildings was taken by a medical officer and two chemists from the Aerosol Branch of the Toxicology Division. The various processes in use in manufacturing and preparing CS munitions were seen first hand. Changes that had been made to protect the workers since the onset of dermatologic reactions were pointed out by the foreman of the buildings. (3) A report previously submitted by Dr. Van Sma concerning similar reactions to CS

\* A list of the official names of the clothing items worn by workers is included in the Appendix.

Serial 5 ~~Serial 4~~

suffered by workers in Chemical Warfare Laboratories and at Edgewood Arsenal were reviewed, and the findings of this investigation were discussed with Dr. Sim.

The findings from the above three sources will be discussed in order.

A. Interview of workers submitting Form DA-1051

1. C.H. is a 45-year old negro male. He submitted three accident claims while working with CS. In April of 1959 he was employed mixing CS and other pyrotechnic ingredients. The process involved unavoidable exposure to CS dust. Clothing consisted only of fatigue clothes, protective mask, boots, and cotton gloves. He noted a pruritic papular rash about the wrists and neck after about 2 weeks of working in this capacity. He was treated at the Station Dispensary with antihistaminic cream and experienced minimal further discomfort.

In May of 1959 the worker returned to the above task. After 2 days he noted a papular rash as before. This rapidly progressed to become a process of extensive vesiculation over the wrists, neck, face, arms, and anterior thorax and abdomen. He spent three weeks in the U.S. Public Health Service Hospital recovering from this episode.

In October 1959, this man was again exposed to CS while loading bursting grenades. After one day in this capacity he developed a papular vesicular eruption about the wrists and neck. He was treated at the Post Dispensary as previously and convalescence was approximately one week.

In February, 1960, he was employed sifting dry CS in an air-supplied suit. He encountered no difficulty until he returned to shut down

some machinery in street clothes. This one-half hour exposure resulted in blisters about the face and neck with swelling of the eye-lids. This man had no past allergic history and had no dermatologic complications in previous work with mustard. NOTE: This case represents progressive sensitization to a primary skin irritant. His tasks necessitated unavoidable exposure to powdered agent. He was well protected from the agent when the air-supplied suit was used, but the severe degree of prior sensitization resulted in blisters after one-half hour exposure to an atmosphere contaminated with dry agent when he was unprotected.

2. P.S. is a 49 year-old white man. In April, 1959, while working in the manufacturing plant at the centrifuge and drying ovens, he noted a vesicular eruption about the face, neck, wrists, and thorax after 3 weeks exposure to the agent. The lesions were intensely pruritic. His job at the drying ovens caused constant exposure to dry, powdered CS and he work only the equipment mentioned in Case 1, above. He was treated at the station Dispensary with ointment. The lesions healed after forming large eschars.

In September, 1959, while working at the hydraulic press packing burning-type grenades, he developed a generalized papular rash after two day's exposure. The rash persisted despite local treatment and was intensely pruritic. He later developed vesicles and several wheals. He was treated with oral antihistamines and local care to the blisters. He may have had a low grade fever. Protective clothing used was only as mentioned above. Since this time he has not worked in a CS environment. He filed a single accident report. NOTE: This case also represents a case of sensitization to a primary irritant. The second episode seems to have had some characteristics of a serum sickness-type reaction. The jobs mentioned provided un-

avoidable contact with powdered CS when minimal protective clothing was worn.

3. W.B. is a 45-year old white male who was first exposed to CS in April, 1959. He was grinding and blending the agent at this time. After two weeks at this task he developed a vesicular dermatitis of the wrists. Protective clothing used was identical to that mentioned in the previous cases. He was treated with ointment, and the blisters healed in about one week.

In Sept, 1959, while employed in the same processes, this man developed huge blebs over the wrists and anterior thorax and thighs after two days exposure to the agent. Convalescence was three weeks. There was no allergic history. NOTE: This case seems to represent the same process of initial exposure; sensitization, and a generalized, severe reaction on re-exposure. The huge blebs that were produced are remarkable. The worker again was involved in a task in which protection was ill-afforded by the clothing worn. Two accident reports were filed by this man.

4. R.S. is a 42-year old white male who noted his first reaction to CS 2 days after beginning work on the hydraulic press. He felt that increased sweating at this task was contributory to the development of his dermatitis which manifested itself initially as an erythema with vesicles about the wrists. Three months later, having been removed from the CS building in the interim, he developed a pruritic rash on his hands while taping and cleaning grenades. This reaction began after one day at the new job. Again two months later, while working with the micro-pulverized CS, this man developed a bilateral erythematous vesicular eruption of the wrists. Since this time even brief exposure to CS dust causes an exacerbation of a chronic dermatitis of the neck and wrists. He has filed a total of three injury

reports. NOTE: This worker is exquisitely sensitive to CS at present. However, he has never developed a generalized-type reaction manifested by others who are hypersensitive to CS.

5. C.L. is a 53-year old white male who bagged micropulverized CS for one month before developing a typical rash with blisters over the face, anterior thorax, and neck. He felt increased sweating predisposed to the development of his initial lesion. He wore the usual work uniform including rubber gloves. The critical lesions were treated with an antihistaminic cream and cleared up in one week. After a respite from CS for 4 months, he was put to work filling bursting grenades. He promptly developed an eruption of the face and neck on the second day. He filed two accident reports. NOTE: This case again illustrates the process of hypersensitization after an initial contact dermatitis. The tasks in which this worker was engaged were those in which the atmosphere was constantly filled with CS dust.

6. H.F. is a 45-year old white man who developed the usual erythematous vesicular dermatitis after one month's work at the hydraulic press. He also noted that the rash was worse when he perspired. He received the usual treatment, and his lesions resolved uneventfully. Recently he has returned to work with CS in the drying ovens and has had no recurrences of his dermatitis. NOTE: This man's history illustrates the cause of the worker who receives an initial contact burn but who, on re-exposure, doesn't develop a hypersensitive response. This can be explained by a job change with less CS contamination of the atmosphere, improved clothing, individual variation, or a combination of all three.

7. L.H. is a 64-year old white male who developed a local dermatitis of the wrists after two month's work loading CS capsules. He was



unable to wear gloves at this job. Since this time he has worked almost constantly with CS in various tasks and has had no recurrences. He has had to handle dry agent with his bare hands again, however. NOTE: This is another example of an individual who has suffered an initial dermatitis to a contact irritant but who has had no recurrences even after extensive re-exposure.

8. J.C. is a 38-year old white man who first developed extensive CS burns after two days of blending the agent while wearing the heretofore usual clothing. These burns were localized to the face, neck, and wrists. Treatment and recovery were as mentioned previously. Four months later the worker again developed localized burns while working at the hydraulic press. He felt that increased perspiration was again contributory to his second episode of dermatitis. The latent period in the second episode was two days. Re-exposure to this man has worked for eight weeks manufacturing CS. He handles primarily reacting precursors and has had no further dermatitis. NOTE: This man's degree of sensitivity is debatable. At least he is very prone to develop the previously mentioned localized dermatitis. However, he has been able to continue working in the manufacturing plant due to minimal exposure to dry CS. This man has worked extensively with mustard and feels that precautions in working with CS must be at least as rigid if protection is to be assured.

9. and 10. C.B. and O.M. are two further examples of individuals who have a history of one fairly severe localized dermatitis due to CS. Repeated re-exposures have caused no exacerbations. C.B. reports the only episode in all individuals questioned which could be construed <sup>as</sup> ~~as~~ a general reaction of a non-hypersensitivity type. He had headaches and dyspnea for

24 hours after working with very finely ground CS (5 micron range). The reaction was quite distressing. Though a single case is difficult to evaluate, the possibility remains that very finely divided agent might pass swiftly through alveolar membranes and lead to the development of a certain blood level of CS and generalized toxic symptoms. Certainly all possible precautions should be taken in working with the finely divided agent.

11. B.O. is the single active case of CS burns seen and reported by ~~these~~ these Authors. A photograph was obtained of his lesions. These were confined to the dorsum of his hands and wrists and to the lateral aspect of his nose and adjacent cheek. These seemed to represent areas of contact with rubber gloves and the nose-piece of the gas mask. The eruption was a prolonged weeping erythema with several areas of denudation and secondary infection. Pruritus was marked. Treatment was with Burrow's Soaks, antihistamine cream, steroid cream (after closing of the denuded areas), and oral antihistamines. It is too early to evaluate the results of this therapy. The case represents a typical initial contact dermatitis involving a primary irritant.

#### B. Previous Report of CS Burns

Talking with Dr. Sim, considering his report, lead the above case histories to the conclusions that (1) CS is a severe primary irritant (2) excessive perspiration at areas of clothing contact predispose areas to sites for the contact lesions (3) some individuals develop a hypersensitivity after an initial localized dermatitis and tend to react more rapidly and over a wider area on subsequent exposures.

## DISCUSSION OF MEDICAL ASPECTS

In the extensive study by Gutentag, et al.,<sup>2</sup> it was adequately shown in volunteers that a single application of CS in powdered form or solution to normal skin caused erythema and vesiculation. It was further shown that any type of covering over the area of application made the resultant lesion worse, an air-tight compress being worse than a gauze bandage. Thus, CS is a primary irritant chemical. This is not surprising since many of the toxic gases are primary irritants as mentioned by Schwartz et al.,<sup>3</sup> in Occupational Diseases of the Skin. In discussing contact dermatitis Andrews<sup>4</sup> in Diseases of the Skin notes that rarely can circulating antibodies be demonstrated. The process is akin to allergic eczema immunologically and to be differentiated from such processes as asthma, hay-fever, and other wheal-reacting allergies. In susceptible people eruptions may become manifest after periods of protracted exposure. One attack seems to predispose the involved areas so that subsequent outbreaks may be the result of extremely slight exposures. The sensitized area may be localized or generalized, according to Andrews. Some substances known to cause dermatitis among war gas workers are brombenzoyl cyanide, chloroacetophenone, chlorpicrin, trichlormethane (lacrimators); adamsite (sternutator); chlorine phosgene (lung irritants); and mustard, lewisite, ethyldichlorarsine (vesicants).

Thus this term "sensitized" is used a bit loosely in discussing these patients. Obviously the shortened latent period prior to developing lesions after each re-exposure is the basis of such a term. However, some individuals seem to continue to manifest only the local response whereas others demonstrate a generalized reaction. Presumably some additional

mechanism is at work in the latter case. Examples of both types of reaction plus instances of a single contact episode are illustrated by the case histories.

Heat and humidity at the surfaces of contact are known to increase the likelihood of a contact eruption. Susceptibility of skin to mustard is known to increase under these conditions. This factor was suspected by nearly all workers interviewed.

Negroes are reportedly less susceptible to the dermatotoxic effects of war gasses than whites. There was only one negro among our cases while there are more negro workers than white at the plant.

Thus, it seems that several factors are involved in any one man getting a CS dermatitis and in attempting to predict just who will develop a reaction.

The most important factor, as obvious as it seems, is exposure to CS. This means that nearly anyone exposed long enough to this irritant will get a rash. Thus, protective clothing must be optimal especially in areas where the fine dust is a constant threat. CS should not be handled with the bare hands. Air suits are being employed satisfactorily at present. A process in the working and packaging of CS which can be closed in would be less hazardous. An adequate hand cream should be employed. Any process which a worker has developed an eruption of the hands and neck while wearing clothing fatigued should be attended by personnel in air-suits.

Exposure to CS, humidity, and friction seem to aid in development of a dermatitis. Clothing should fit loosely (including gloves and shirt collar). Unless a filtered air, constant temperature-humidity environment can be obtained, air suits seem to be the next logical step. However,

if air suits are ineffective in an operation where there is no temperature and humidity control, it would seem wise to inclose the equipment. In other words, if the agent contaminates the skin trouble will result under certain circumstances. If these circumstances cannot be eliminated, it would seem wise to take further steps to lessen contamination.

Some individuals develop a single local reaction and seem to have no recurrence under conditions of reduced exposure. Others seem to develop repeated local responses with increasingly shorter latent periods between exposure and eruption. A third group seems to develop a more generalized-type eruption, again with progressively shortened latent periods. A priori, it is impossible to detect the two latter groups. Therefore, any persons who have had two local reactions should work at tasks where re-exposure is minimal and protective devices optimal. Indeed, it is ~~the~~ recommended that anyone who has had a generalized reaction (classically as in cases 1 and 3 above) not be allowed to return to work in CS contaminated atmospheres.

Treatment of these lesions is not specific. Astringent, drying soaks should be used during the acute weeping phase. Bacitracin ointment can be used if there is secondary infection. Antihistamine cream can be used, in the acute phases, in between soaks. Oral antihistamine therapy can be added if pruritus is a problem. When vesicles occur, local treatment should be protective and aseptic. When vesicles dry and induration occurs, hydrocortisone ointment is effective. In the generalized reaction, hospitalization may be necessary to adequately treat all involved areas and properly guard against secondary infection.

### TOUR OF THE CS PLANTS

The tour of buildings 503, 605, and 58 was enlightening in that it was possible to see first hand which processes made the workers more liable to excessive exposure to CS. These processes will be described briefly.

In Building 58, the reactants are mixed and the wet cakes of CS placed into trays to dry. The only liability in this plant is at the drying ovens. Rubber suits with constant air circulation have been provided those men working at the ovens and loading dried CS into drums. At Building 503, CS is sifted and blended with potassium chlorate, thiourea, and magnesium carbonate. In the past, the blending and sifting procedures were particularly hazardous because of the constant contamination of the atmosphere with CS dust. However, air suits have been introduced for these steps and the hazard considerably reduced. In Building 605, several processes are carried out. By far, the most hazardous is the pressing of powdered CS mixture into burning type grenades. The impact of the hydraulic hammer unavoidably dispersed a constant cloud of CS. Air suits have been furnished the four men who work in rotation at this task with considerable lessening of the hazard. However Case 11 developed burns while wearing such a suit. He attributed his burns to excessive sweating in the suit when the alternate worker rests for thirty minutes during a shift. Thus it seems that this operation continues to produce a CS atmosphere which is threatening to workers even in air suits. At the hoods where starter mix is added to the filled grenades, there have been no problems, evidently because there is no exposure to fine, powdered agent. Similarly double seaming the lids and wiping, taping, and plugging the grenades have caused little trouble except for those who are hypersensitive as described.

above. The micropulverizer is not in use at present but presents a potential severe hazard for the future. Certainly air suits should be used in this operation. Finally, the filling of the M-25-A2 bursting grenades has presented little problem. It should be mentioned that in addition to air suits two other innovations have lessened the possibility of excessive contamination since the majority of the above described cases were reported. First more adequate hoods with increased hood pressures have been provided at sites such as in the hydraulic press room and at the starter mixture hood. Also, a decontamination locker room system has been devised at all three buildings. The worker showers in his air suit (if used) and removes the suit in one area. Next, he showers himself after removing contaminated fatigues and underclothes. He then enters a locker room, which is essentially clear of CS, to dress. He wears a clean set of underclothes and a clean fatigue uniform each day.

Some of the workers use 211 skin ointment which is antiseptic containing hexochlorophene cream. The workers feel that it washes off easily with minimal perspiration. A tenacious silicone cream has been recommended by Schwartz, et al.

Building 605 - Cake Pressing - This operation seems to produce more agent dusting than any other production step. The agent blend must be measured and pressed into grenade size cakes, a procedure which requires measuring out quantities of the light powder and hydraulically pressing out a cake. Although the entire operation is carried out in a fume hood, a considerable amount of material escapes into the room. It is recommended that the present hoods be replaced with a dry-box type hood provided with airlock feed and exit doors. The operators would work through glove ports to

eliminate any personal contact with the agent (and prevent the escape of particles) during the measuring and pressing operations. Production set-ups of this type have proven very successful in the pharmaceutical industry and are designed to permit the operation of heavy machinery through the gloves.

If the operations carried out in Buildings 58, 503, and 605 were consolidated under one room (As Building 503, which has an adequate design and sufficient floor space) it is very likely that the CS contamination could be sufficiently limited by employing closed conveyor lines and dry box work hoods. This would reduce the hazard of agent contact considerably.

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APPENDIX

STANDARD ITEMS OF CLOTHING

FATIGUE UNIFORM (Treated for flame proofing)

Jacket, mens, cotton, herring bone twill, olive green, shade 7.  
MIL Spec J-3001A

Cap, field, cotton, olive green MIL Spec C-300A

Trousers, mens, cotton, sateen, 8.5 ounce, olive green, Shade 107.  
MIL Spec T-58B

Socks, mens, wool, olive drab, Shade No. 9, with cushion sole, MIL  
Spec S-48C

Shoes, safety, low quarter, non-conductor, composition rubber, sweat  
resistant insole, bonded lining treated against athletes foot, full grain  
leather under safety toe cap, dacron laces and stitched, plastic heel cups.

GLOVES - rubber, lightweight, industrial, Goodrich 526

GLOVES - cloth, work type, mens, cotton, natural MIL Spec G-1057A

UNDERSHIRT - cotton, full length sleeves, white, special MIL Spec 2526

SUIT - protective, with air supply connected and built in air circulation  
system, one piece, detachable gloves, boots and hood permanently sealed, 0.02  
vinyl filament. Air supply 5/16 inch diameter plastic tubing, directed to feet,  
hands, hood; air outlets at legs, chest, back. Corresponds to protective suit  
No. 2-P, manufactured by Snyder Manufacturing Co., Inc. 1458 5th St., New  
Philadelphia, Ohio

CREAM - antiseptic by West Chemical Products Inc., US Patent 2535077, West  
Protective Cream No. 211; contains butylene glycol, zinc stearate, methyl-  
cellulose, hexachlorophene.

MASK - protective (

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**CWL SPECIAL PUBLICATION**

**Interim Report of CS Exposures in Plant  
Workers**

**Malcolm B. Bowers, Edmund J. Owens, and  
Charles L. Punte**

**SUBMITTED:**

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11120

December 15, 1982

Chris G. Witimayer, Major, JAGC  
Military Personnel Branch  
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Department of the Army  
Office of the Judge Advocate General  
Washington, D. C. 20310

Dear Major Witimayer:

In your letter of December 8th you asked whether the riot control agent CS (O or 2 - chlorobenzalmalononitrile, or O or 2 - chlorobenzylidene malononitrile) could cause chloracne in humans. This particular chemical, the riot control agent CS, does not cause chloracne. CS causes a contact dermatitis which consists of skin irritation, the formation of papules and blisters, as well as erythema. Repeated exposure to this compound may lead to sensitization which will then result in skin eruptions, even if exposure is mild and transient. In this respect these types of skin lesions resemble those that occur following exposure to poison ivy in sensitized persons.

The chloracne lesion, on the other hand, is an entirely different skin disease. Onset of this disease is usually delayed. The skin lesions consist of comedones and skin-colored cysts. There usually is no pronounced erythema nor do vesicles form. The chloracne lesion primarily involves the hair follicles which dilate and are filled with keratin. This lesion is quite persistent and does not heal within a few weeks after cessation of exposure, as does the skin lesion which is produced by CS.

Furthermore, I would like to point out that there is only one group of chemical compounds known to cause chloracne. These chemical compounds are some isomers of the chlorinated dibenzodioxins and chlorinated dibenzofurans. Chloracne has also been reported following exposure to chlorinated biphenyls and chlorinated naphthalenes. In addition, a number of herbicides made from 3,4 dichloroaniline (propanil, diuron, linuron, and neburon) may also cause chloracne, because they may be contaminated with tetrachloroazobenzene. In addition, cases of chloracne have been reported following the exposure to pentachlorophenol, particularly during its manufacture and to 2,4,5 trichlorophenol and all compounds made from 2,4,5 trichlorophenol. The reason for the chloracne in these instances is that the chlorinated phenols may also be contaminated with chlorinated dibenzodioxins and, in the case of pentachlorophenol, also with chlorinated dibenzofurans.

CS, on the other hand, could not possibly be contaminated with any of these compounds and neither would the material that it is made from. This is particularly true, since the CS only contains one chlorine and even if

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encl. 7

dibenzodioxin or dibenzofuran could be formed, 3 or 4 chlorines would have to be present before any of these compounds would cause chloracne. For all of these reasons, I would like to reiterate that CS is not a compound which can cause chloracne.

I hope this information will be of help to you.

Sincerely yours,

*Renate Kimbrough, M.D.*

Renate D. Kimbrough, M.D.  
Medical Officer  
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\* NOT ADMITTED IN NEW YORK

April 1, 1983

Gretchen Witt, Esq.  
Torts Branch, Civil Division  
United States Department of  
Justice  
Safeway Building  
521 12th Street, N.W.  
Washington, D.C. 20530

Re: Agent Orange Litigation

Dear Gretchen:

As per our telephone conversation, enclosed you will find copies of the transcript pages from the deposition of Dr. Francis Morthland which refer to the documents requested by defendants by letter dated March 14, 1983 to Arvin Maskin.

Very truly yours,



Patricia C. Tuohy

PCT:td  
Enclosures

11132

encl. 8

1 Committee in connection with a May 9 meeting?

2 A. No.

3 Q. Do you recall if any members or technical  
4 assistance of the President's Science Advisory  
5 Committee spoke at the meeting?

6 A. Not directly, no. I'm sure they all did.  
7 They're a very vocal group.

8 Q. Was the April 26th, 1963 meeting referred  
9 to at the May 9, 1963 meeting?

10 A. I do not remember directly.

11 Q. Did the May 9, 1963 meeting concern 2,4-D  
12 and/or 2,4,5-T?

13 A. Yes.

14 Q. Do you recall anything that was said  
15 about either one of those chemicals?

16 A. No.

17 Q. Do you recall anything that was said  
18 about the health effects of 2,4-D and/or 2,4,5-T?

19 A. No.

20 Q. Did you make notes of the meeting?

21 A. I'm sure I did. I always did.

22 Q. Did you make notes of the April 26th, '6  
23 meeting as well?

24 A. Yes.

25 Q. Did you prepare a written report of the

1 April 26th, 1963 meeting?

2 A. Yes.

3 Q. What did you do with that written report  
4 after it was prepared?

5 A. I gave it to my division chief for circulation  
6 as he saw fit. It would then go into the files and  
7 to my understanding such working files are now dead,  
8 been destroyed. Army standard is to retain until  
9 the ends of the year, keep in a closed file for two  
10 years and then destroy. I did not keep personal  
11 copies.

12 Q. Do you know to whom your written report  
13 of the April 26th, 1963 meeting was circulated?

14 A. No.

15 Q. Did you prepare a written report of the  
16 May 9, 1963 meeting?

17 A. I don't remember.

18 Q. I assume that the notes you took at the  
19 April 26th, 1963 meeting were handwritten notes.

20 A. Yes.

21 Q. What did you do with those notes?

22 A. They went into the burn bag as soon as they  
23 were transcribed in a report.

24 Q. What did you do with your notes of the  
25 May 9, 1963 meeting?



1 A. The same would happen, because classified  
2 material would have been discovered.

3 Q. Does that refresh your recollection as to  
4 whether or not you prepared a report of the May 9  
5 meeting?

6 A. No.

7 Q. Did you have discussions with anybody  
8 concerning 2,4,5-T or 2,4-D other than Colonel  
9 Hartgering, at the April 26th, 1963 meeting or the  
10 May 9, 1963 meeting?

11 MR. HAYES: Objection to form.

12 A. We would have been discussing around the table  
13 with all of the attendees.

14 Q. I'm talking about other than at those two  
15 meetings and the library research you did for  
16 Colonel Hartgering.

17 A. Oh, other than. I would have had discussions  
18 with Minarik on site visits to the laboratory.  
19 Casually at other meetings in Washington or wherever  
20 with members of our staff in the office.

21 Q. Do you recall having had discussions with  
22 anyone other than Dr. Minarik and members of your  
23 staff concerning 2,4-D or 2,4,5-T?

24 A. No.

25 Q. Do you recall the substance of these

11135



Washington, D.C. 20530

April 25, 1983

JA:GLWitt:bf  
157-0-107

Telephone:  
(202) 724-6725

NOTICE TO ALL COUNSEL

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

This Notice provides information concerning document production arising from several outstanding document requests.

1. March 21, 1983 Letter from B. Sheffler re Dr. Poland. Mr. Sheffler requested that Dr. Poland produce his subject matter files on chick edema, chloracne, porphyria, 2,4,5-T and dioxin as well as files on his dichlorophenol and trichlorophenol research. Dr. Poland has supplied this office with material relating to the latter request. We have sent this material for microfilming as Batch No. 2000, entitled "Documents from the Personal Files of Dr. Alan Poland."

Dr. Poland did not supply material relating to the former request. He stated to us that it would be very difficult for him to segregate this material. As he indicated in his testimony, Dr. Poland has continued his work in this field and has acquired a good deal of literature over the years. He has filed any material he obtained during his years at Public Health along with all other material acquired subsequently. Dr. Poland objects to sorting through his voluminous files to attempt to decide when he acquired particular reprints. If defense counsel continue to feel they need Dr. Poland's material, he is quite happy to let them look through his file cabinets. He, however, will not do so. With this response, the United States considers this document request closed.

2. Documents of Dr. K. Diane Courtney. While going through her files recently, Dr. Courtney discovered a handful of additional documents. Although for the most part the documents are from the mid-1970s, we have sent these documents for microfilming as Batch No. 2006, entitled "Additional Documents Discovered by Dr. Courtney." With this final production, the United States considers all discovery relating to Dr. Courtney closed.

3. Department of Defense Documents. The Air Force has forwarded to this office three small batches of miscellaneous documents. We have sent these documents for microfilming as Batch No. 2002, entitled "Additional Unclassified Wright-Patterson Documents," Batch No. 2003, entitled "Additional Declassified Ranch Hand Documents, and Batch No. 2005, entitled "Miscellaneous Air Force Documents."
4. February 25, 1983 Letter From L. Bennett re Dr. Klingman. Mr. Bennett requested, inter alia, production of communications between ARS and ARPA as well as ARPA Order Nos. 423 and 424. DOD has sent this office certain material regarding ARPA Order Nos. 423 and 424. We have sent this material for microfilming as Batch No. 2004, entitled "Material Referring To ARPA Orders 423 & 424."
5. March 11, 1983 Letter From B. Sheffler re Dr. DuBridge. Mr. Sheffler requested "[a] copy of Dr. DuBridge's list of the organizations and committees on which he has served." Dr. DuBridge has sent this office a copy of his resume, which includes this list. We have sent the material for microfilming as Batch No. 2001, entitled "Dr. DuBridge's Biographical Data."
6. February 7, 1983 Letter From A. White re Mr. Edwards. In this letter, Mr. White requested production of ARPA documents. On February 25, 1983 we announced production of the unclassified DARPA documents as Batch No. 1972 and Batch No. 1973. See, Notice To All Counsel, February 25, 1983. On April 19, 1983 we received 163 declassified DARPA documents from the Air Force. We have sent these documents for microfilming as Batch No. 2008, entitled "Declassified DARPA Documents."

In addition, on April 18, 1983 the Special Master reviewed the remaining classified ARPA documents for relevance. At the April 20, 1983 hearing, we gave all parties a Notice To All Counsel with the ARPA non-relevance affidavit and index attached. The Special Master determined that 17 of the documents are apparently relevant. These documents and 24 other apparently relevant ARPA documents are currently undergoing expeditious declassification review. Other than the completion of that review, the United States considers ARPA production complete.

7. October 4, 1982 Document Request re Chemical Corps Intelligence Agency (CCIA). On April 21, 1983 the Army forwarded to this office the document production regarding CCIA. The CCIA ceased to exist in 1962 and the agency's records were retired as part of a collection of records of the Chief Chemical Officer. The produced records include material from CCIA files as well as from the larger Chief Chemical Officer records. We have sent this material for microfilming as Batch No. 2014, entitled "CCIA, Chief Chemical Officer Records and Monsanto Correspondence." \*/ In addition, one CCIA document is still undergoing declassification review. As soon as the review is complete, we will make prompt production.
8. March 11, 1983 Letter From B. Cohen re Dr. Stokinger. This letter included a large number of document requests, including several requests covered by the recent motion to compel production of PHS documents. Among other things, Mr. Cohen requested the personal files of Dr. Stokinger on "toxicology, including but not limited to files on 2,4,5-T, Agent Orange, TCP, chloracne, or dioxin." NIOSH has searched these voluminous files and has forwarded to this office the files labelled "chloracne," "2,4,5-trichlorophenoxy acetic acid," and "2,3,7,8-tetrachlorodibenzo-p-dioxin." We have sent this material for microfilming as Batch No. 2013, entitled "Stokinger Files on Chloracne, 2,4,5-T and TCDD." Dr. Stokinger's remaining toxicology files occupy over six file cabinets. NIOSH is willing to allow party representatives to inspect these files upon request.

Mr. Cohen also requested production of materials relating to Dr. Groth's work on 2,4,5-T and chloracne. Dr. Groth has sent us his file on this work. Hard copies of this material were attached to the United States' Response to Defendants' Motion to Compel Production of PHS Documents. Despite the fact that defendants already have obtained this material through FOIA, we have sent this material for microfilming as Batch No. 2009, entitled "Files of Dr. Groth."

\*/ This batch also included the unredacted versions of the 1952 correspondence between the Chemical Corps and Monsanto. We had previously produced this material with names and identifying information redacted. Monsanto has consented to full release.

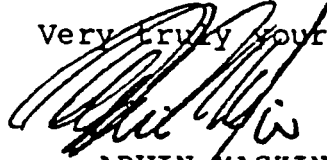
In addition, the letter sought production of a number of materials relating to the Threshold Limit Values Committee. NIOSH has searched its files pertaining to this committee. NIOSH does have copies of printed documents such as Documentation of Threshold Limit Values and the annual publications of the TLV committee of the American Conference of Governmental Industrial Hygienists (ACGIH). NIOSH has provided us with the pertinent pages from these documents. We have sent this material for microfilming as Batch No. 2011, entitled "Pertinent Pages from Documentation of Threshold Limit Values." The unproduced material, such as minutes of annual meetings and annual membership books, is voluminous. NIOSH decided that, instead of copying that material, it would make them available upon request. The parties may examine the materials at NIOSH or may purchase them from the ACGIH (Att: Mr. W. Kelley, 6500 Glenway Avenue, Building D-5, Cincinnati, Ohio 45211). If any party is interested in making this on site inspection, please contact us.

9. March 11, 1983 Letter From B. Cohen re Dr. Byers. Among other things, this letter requested production of "file card abstracts of world literature on industrial health and safety." These are called CIS abstract cards. The parties may have access to these cards at the NIOSH library at the Taft Center. If any party is interested in making this on-site inspection, please contact us.
10. Documents Cited in U.S. Response to Defendants' Motion to Compel Production of PHS Documents. NIOSH, in response to defendants' motion to compel, searched to locate the requested documents. NIOSH located a few documents in its current files or library collection. We have sent them for microfilming as Batch No. 2012, entitled "Poland Article from NIOSH Library," and Batch No. 2010, entitled "Published Articles from Current NIOSH Files."

In addition, NIOSH discovered that Drs. Key and Birmingham presented a paper entitled "Occupational Congress of Occupational Health in Vienna, Austria in 1966. NIOSH does not have a copy, but it is available at the University of Cincinnati's Kettering Laboratory, 3223 Eden Avenue, Cincinnati, Ohio.

As always, if you have any questions, do not hesitate to contact us.

Very truly yours,



ARVIN MASKIN  
Trial Attorney, Torts Branch  
Civil Division



GRETCHEN LEAH WITT  
Trial Attorney, Torts Branch  
Civil Division

IT IS HEREBY ORDERED

1. That defendants, counsel for defendants and those persons associated with defendants or counsel for defendants in the preparation of this litigation for trial shall not request the United States of America, DOD or any of its subdivisions or employees to produce the following documents or categories of documents:

- a. Documents in the possession of the Army Surgeon General, especially the Research and Development Division, pertaining to contract number VA-49-007-MD-411 with the Department of Dermatology of the University of Chicago.
- b. Documents in the possession of the Headquarters of the Army Surgeon General relating to the Army Environmental Hygiene Agency's work on the restriction of the use of herbicides around water supplies.
- c. Documents in the possession of the Preventative Medicine Division of the Army Surgeon General pertaining to its July 22, 1966 request to the National Academy of Sciences for toxicity information on 2,4,5-T and other herbicides. This request includes any information sent to the Preventative Medicine Division by the National Academy of Sciences and documents in the possession of the Army Surgeon General Headquarters relating to this request.
- d. Documents in the possession of the Army Environmental Hygiene Agency and/or the Army Surgeon General Headquarters pertaining to AEHA's recommendations on the proposed military specification MIL-H-51310, herbicides, N-butyl esters, concerning a precautionary label on the product. AEHA transmitted its recommendation on December 9, 1968.
- e. Documents in the possession of the Command Surgeon of the Air Force Logistics Command and the Headquarters of the Air Force Logistics Command pertaining to reports from Dr. Walter Melvin of his Agency concerning the results of evaluations of herbicides.

- f. Documents in the possession of the Surgeon General of the Air Force pertaining to work at Eglin Air Force Base on evaluations of herbicides.
- g. The "approximately 90 documents" described in the Government's Response to Defendants' Interrogatories and Notice to All Counsel dated April 15, 1981, which were generated by the Commerce Department in connection with its responsibilities under the Defense Production Act.
- h. Correspondence and documents relating to the production of 2,4,5-T and explosions in manufacturing plants in the United States, and more specifically, a May 1, 1967 letter in which BDSA advised DGSA that "the production of 2,4,5-T is more complex and more dangerous than the production of 2,4-D and in recent years several U.S. plants have exploded."
- i. Correspondence and documents in the files of the DGSA concerning the procurement of 2,4,5-T from "off-shore sources," including materials which indicate familiarity with incidents of chloracne or knowledge concerning the dioxin assays of foreign manufacturers.
- j. All documents referring or relating to compound 125413, including the name of the source of that compound.
- k. Documents showing the identity of the source who submitted CS 66422 to the Army Chemical and Medical Research Laboratories' Industrial Liaison Office.
- l. Classified paper on use of herbicides, presented by Gen. F. Delmore at April 26, 1963 meeting at Edgewood Arsenal.
- m. Copy of volume containing results of toxicological studies by Dr. B. McNamara, which was transmitted by him to various government officials in or about 1962 or 1963 (including the names of the officials).
- n. All relevant material responsive to defendants' First Wave Interrogatories dated January 25, 1981 and to the subpoena to the United States Army Chemical Systems Laboratory, dated May 17, 1982 from the personal files of F. Vocci, including but not limited to: (a) notes of F. Vocci pertaining to a meeting of the medical panel for



NATO held at WRAIR; (b) handouts and minutes distributed at an earlier meeting at WRAIR; and (c) list of names of those responsible for distributing minutes of NATO meeting.

- o. The film, "The CRDL Story," and other films relating to research done at Edgewood Arsenal, including rabbit ear tests and methods of introduction of toxic substances.
- p. Reports relating to herbicides, dioxins or furans sent to F. Vocci upon completion of "task force" projects.
- q. Data books of Dr. B. McNamara, C. Punte, F. Vocci or others relating to testing with respect to toxicity of herbicides, dioxins or furans.
- r. Tables of organization, or lists with specific names, of those assigned at Edgewood Arsenal to the position of Branch Chief and above during the 1960's.
- s. All relevant material responsive to defendants' First Wave Interrogatories dated January 25, 1981 and to the subpoena to the United States Army Chemical Systems Laboratory dated May 17, 1982, from the personal files of Dr. William A. Summerson.
- t. The Trip Report prepared by Dr. Summerson describing his trip to Vietnam in the mid-1960's.
- u. Complete copies of those articles from the reprint files of Dr. B. McNamara that contain any underlining or annotation and which were assigned the following identifying numbers by Lester Miller: 5924, 5985, 6087, 6178 and 6636.
- v. All copies of test results for any dioxin, 2,4,5-T or trichlorophenol compound which are located in the former files of the Toxicity Screening Branch, including all 8 1/2" by 10" data sheets that were prepared for those compounds.
- w. The group of documents entitled "Follow-up Production: Sim, Miller, Cox, Callahan depositions and CSL New Find," designated by the Government as Batch No. 1968.
- x. Trip Reports of visits by Sigmund Eckhaus, Robert E. Cox, John Gerety and others from the Weapons Development and Engineering Laboratory at Edgewood

Arsenal to commercial 2,4,5-T and trichlorophenol plants in connection with the project to create a government facility for the production of Agent Orange.

- y. The "Weekly Significant Action Reports", "minutes of all meetings", and "special reports", which the Commodity Manager for the Weldon Springs project was required to prepare and distribute under the terms of his Charter.
- z. All documents relating to any incidents involving skin disorders, including chloracne, among producers of the Anti-Riot Agent "CS" at Edgewood Arsenal, including all "after-action" reports which were filed or prepared as a result of any such incidents.
- aa. All documents relating to health effects among producers and/or users of "CS", including all medical records or other documents concerning treatment of any Edgewood Arsenal employees or others afflicted with chloracne or skin disorders.
- bb. All copies of records pertaining to "CS" which have been transferred to civilian manufacturers of "CS", including The Fisher Chemical Company, Brunswick and Thycol Chemical Companies and Federal Laboratories.
- cc. All documents which refer to research activities to determine the cause or causes of health effects among producers or users of "CS."
- dd. All documents relating to the synthesis of production of "CS" and any precursors, intermediates and raw materials used in its production.
- ee. Minutes of meetings of the Chemical Corps Board relating to dioxin, 2,4,5-T, Agent Purple, Agent Orange or the Hoffmann Trip Report for the period 1955-1970.
- ff. All documents of the Chemical Corps Board relating to dioxin, 2,4,5-T, Agent Purple, Agent Orange or the Hoffman Trip Report for the period 1955-1970.
- gg. Written notes and reports prepared by Dr. F. Morthland in connection with the meeting held to discuss and evaluate the toxicity of 2,4-D and 2,4,5-T compounds at Edgewood Arsenal on April 26, 1963, and the meeting of the President's Science Advisory Committee on May 9, 1963.

hh. All documents relating to dioxin, 2,4,5-T, Agent Purple, Agent Orange or the Hoffman Trip Report (including the Report itself) in the files of the Army Research Office, and any predecessor or successor office, prepared prior to 1970.

2. That defendants, counsel for defendants and those persons associated with defendants or counsel for defendants in the preparation of this litigation for trial shall not initiate any additional requests that the United States of America or its employees search for or produce any documents submitted to or generated from DOD that relate in any way to Agent Orange, 2,4,5-T, 2,4,5-TCP, any dioxin, chloracne, herbicides, any health hazards posed by exposure to chlorinated hydrocarbons or any other subject matter raised by defendants' Phase I, First Wave Interrogatories; and

3. That no modification of this Order shall be made except by Court order upon written application to the Court and after an opportunity for all parties to be heard.

4. That this order shall be binding upon all persons, including defendants, counsel for defendants, and all persons associated with defendants or counsel for defendants in preparation of this litigation for trial.

DATED: \_\_\_\_\_, 1983

ENTER:

\_\_\_\_\_  
SPECIAL MASTER