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No. 08-

In the
Supreme Court of the United States

DANIEL RAYMOND STEPHENSON, ET AL.,

Petitioners,

v.

DOW CHEMICAL COMPANY, MONSANTO COMPANY, ET AL.,

Respondents.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Second Circuit

PETITION FOR A WRIT OF CERTIORARI

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QUESTION PRESENTED

Whether the federal government contractor defense is available to manufacturers whose defective products injured U.S. servicemen and women when: 1) the claimed defect resulted solely from manufacturing processes of the contractors' own choosing and exclusive control; 2) neither the defect nor the health consequences of the defect were disclosed to the government; and 3) the contractors could have complied with both their federal contracts and their state-law duties to the plaintiffs.

PARTIES TO THE PROCEEDING

Petitioners: (Court of Appeals docket cites)

J. Michael Twinam (05-CV-1509)

Robert S. Bauer (05-CV-1693)

Sandra J. Bauer (05-CV-1693)

Sheryl A. Walker (05-CV-1694)

Eric C. Walker (05-CV-1694)

Stephen J. Walker (05-CV-1694)

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Daniel Raymond Stephenson (05-CV-1760)

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Daniel Anthony Stephenson (05-CV-1760)

Emily Elizabeth Stephenson (05-CV-1760)

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Karen Holland (05-CV-1810)

Franklin Nelson Jr. (05-CV-1810)

Shalisa Nelson (05-CV-1810)

Henry C. Kidd (05-CV-1813)

Shirleane J. Kidd (05-CV-1813)

Willie Williams Jr. (05-CV-1817)

Rita Williams (05-CV-1817)

Joe Isaacson (05-CV-1820)

Phyllis Lisa Isaacson (05-CV-1820)

Vickey S. Garncarz (05-CV-2450)

Jack Richard Patton (05-CV-2451)

Respondents:

Dow Chemical Company

Monsanto Company

Hercules Incorporated

Occidental Chemical Corporation

Ultramar Diamond Shamrock Corporation

Chemical Land Holdings, Inc.

T-H Agricultre and Nutrition Company, Inc.

Thompson Hayward Chemical Company

Harcros Chemicals, Inc.

Uniroyal, Inc.

C.D.U. Holdings, Inc.

Uniroyal Chemical Company

TABLE OF CONTENTS

TABLE OF AUTHORITIES

CASES

STATUTES AND RULES

MISCELLANEOUS

INTRODUCTION

Certiorari should be granted because the Second Circuit's decision not only conflicts with this Court's decision in *Boyle v. United Technologies Corp.*, 487 U.S. 500 (1988), but because it also highlights and amplifies numerous conflicts that have developed within the circuits in the interpretation and application of *Boyle* over the past twenty years. The Second Circuit's decision conflicts with decisions of most other circuits that have applied Boyle's first prong–requiring that a contract contain "reasonably precise specifications"–to mean what it says: that specifications be found in the contract or during the process of contract development. It also conflicts with a legion of cases holding that *Boyle*'s third prong – an informed government – requires that safety and health information known to the contractor be disclosed to the government.

The Second Circuit's decision involves questions of exceptional importance, because it immunizes government contractors against suits for defects resulting from their own proprietary manufacturing processes, even when the government exercised no control over those processes and the contractors actually concealed the defect from the government. Instead of rewarding contractors for hiding information from the government, federal policy should be to maximize the information available to contracting officers so that they can best consider the safety and health of those using products purchased by the government. The Second Circuit has afforded such overbroad immunity to contractors that, if there is any doubt regarding the ramifications of its decision, this Court should seek guidance from the Solicitor General.

OPINIONS BELOW

The opinion of the Court of Appeals, App. 1a-63a, is reported at 517 F.3d 76 (2d Cir. 2008). The opinion and order of the district court granting Respondent's motion for summary judgment, App. 64a-154a, is reported at 304 F. Supp. 2d 404 (E.D.N.Y. 2004). A second ruling dismissing the action, App. 155a-160a, is reported at 344 F.Supp.2d 873 (E.D.N.Y. 2004).

JURISDICTION

The judgment of the court of appeals was entered on February 22, 2008. Petitioners filed a timely petition for rehearing with a request for rehearing *en banc*, which the court of appeals denied on May 8, 2008. On July 28, 2008, Justice Ginsburg extended the time for filing a petition for a writ of *certiorari* until October 6, 2008. This Court has jurisdiction pursuant to 28 U.S.C. § 1254(1).

STATEMENT OF THE CASE

Petitioner Daniel Stephenson[1] served as a helicopter pilot in Vietnam, where he was exposed to dioxin-contaminated herbicides manufactured by Respondents. In 1998, he was diagnosed with multiple myeloma, a disease linked to dioxin exposure. Shortly thereafter he filed a *pro se* complaint against the Dow Chemical Company ("Dow") and Monsanto Company ("Monsanto") related to their manufacture of herbicides used in Vietnam. AA13374-A13381.[2] The

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[1] Despite the lack of coordinated procedings below, the court of appeals issued one opinion regarding summary judgment which was directed to all the cases that were before it, though only the *Stephenson* Petitioners were discussed directly. The other cases that were also subject to the Second Circuit's decision were: *Twinam v. Dow* (05-CV-1509), *Bauer v. Dow* (05-CV-1693), *Walker v. Dow* (05-CV-1694), *Stearns v. Dow* (05-CV-1695), *Plowden v. Dow* (05-CV-1696), *Anderson v. Dow* (05-CV-1698), *Breaux v. Dow* (05-CV-1700), *Gallagher v. Dow* (05-CV-1737), *Samprey v. Dow* (05-CV-1771), *Nelson v. Dow* (05-CV-1810), *Kidd v. Dow* (05-CV-1813), *Williams v. Dow* (05-CV-1817), *Isaacson v. Dow* (05-CV-1820), *Garncarz v. Dow* (05-CV-2450), and *Patton v. Dow* (05-CV-2451) These other Petitioners or spouses or parents of Petitioners listed herein likewise served in Vietnam, were exposed to Agent Orange, and were diagnosed with cancer and/or other illnesses caused by exposure to dioxin on or after 1995. The military service, dioxin exposure, and health conditions of these Petitioners were not discussed in the decisions below upon which this Petition is based, so they are not discussed here. However, this Petition is jointly brought on behalf of all Petitioners referenced by case number in the Second Circuit's decision.

[2] References made herein to the record before the Second Circuit are as follows: the related *Bauer* (05-CV-1693) opening

case then was transferred by the Multi-District Litigation Panel to the Eastern District of New York pursuant to MDL 381.

In October 1999, Respondents moved to dismiss Stephenson's claims, asserting that the claims were barred by a 1984 class action settlement that purported to resolve all present and future claims of Vietnam veterans stemming from their exposure to herbicides in Vietnam. In December 1999, the district court granted Respondents' motion, finding that Stephenson's claims were an impermissible collateral attack on the 1984 settlement. *See Stephenson v. Dow Chem. Co.* 273 F.3d 249, 256, (2d Cir. 2001). Stephenson, uninjured in 1984 and never eligible for compensation from the paid-out settlement fund, appealed to the Second Circuit, which unanimously reversed the dismissal. This Court affirmed the Second Circuit by an equally divided court, allowing Stephenson's claims (and those of other similarly situated plaintiffs who are also petitioners here) to proceed. *Dow Chem. Co. v. Stephenson*, 539 U.S. 111 (2003).

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and reply briefs are designated "AB" and "RB" respectively; the related *Isaacson* (05-CV-1820) opening and reply briefs are designated "AI" and "RI;" the *Stephenson* (05-CV-1760) opening and reply briefs are designated "AS" and "RS;" Appellants' Appendix in the Second Circuit is designated "AA." Petitioners' Appendix herein is designated "App."

A. The Underlying Case Against Respondents

Stephenson's case arises out of the government's purchase of various herbicides for use in Vietnam -- primarily "Agent Purple," an equal blend of 2,4-Dichlorophenoxyacetic acid ("2,4-D") and various esters of 2,4,5-Tricholorophenoxyacetic acid ("2,4,5-T"), and "Agent Orange," an equal blend of 2,4-D and one 2,4,5-T ester (hereinafter collectively referred to as "Agent Orange"). The 2,4,5-T in each of these "Agents" was contaminated by an extremely toxic unwanted byproduct, dioxin (2,3,7,8-Tetrachlorodibenzo-para-dioxin or TCDD).

Certain relevant facts regarding Stephenson's claim are uncontested: 1) during the manufacture of 2,4,5-T, increasing amounts of dioxin were produced in direct relationship to the amount of heat used during the manufacturing process, App. 12a, AB55, AS22, 25; 2) the Respondents knew at the time they were manufacturing 2,4,5-T that dioxin was a byproduct of its manufacture and that it could cause harm to humans exposed to it, App. 12a; 3) the Respondents had unfettered control over their often proprietary manufacturing processes, AB47-56, App. 12a;[3] 4) no

[3] *See also Hercules Inc. v. United States*, 24 F.3d 188, 197 (Fed. Cir. 1994) ("Put another way, nothing the government did or failed to do had any impact upon Hercules' and Thompson's production of Agent Orange."); *Maxus Energy Corp. v. United States*, 898 F. Supp. 399, 402 (N.D. Tex. 1995), *aff'd* 95 F 3d. 1148 (5th Cir. 1996) ("[D]iamond was responsible for controlling product

contract specified or even mentioned the existence of dioxin in the product being delivered to the U.S. government, AS40, AB33-34; 5) unlike Respondents, the United States government officials involved in the procurement process were not aware of the existence of dioxin in the final product they had contracted for, AS40, AB34, AB36, RS13-14; and 6) unlike Respondents, the United States government did not possess the equipment necessary to test for dioxin contamination of 2,4,5-T. RS28, AA6454-4.[4] Finally, it is this dioxin that Petitioners claim caused the injuries of which they now complain.

Numerous internal documents note the Respondents' extreme concern about the dioxin contaminant:

- "the most toxic chemical they have ever experienced," AA3643;
- "The extraordinary danger of the [TCDD] is not generally known," AA3628; and
- "It is one of the most toxic materials known causing not only skin lesions, but also liver damage," AA5906.

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quality").

[4] By contrast, Respondents regularly tested their products for dioxin contamination. *See*, *e.g.*, RB37-38, AA6837-38. The government itself did not know that such a test could be performed until 1970. AB37-38, A6449-5, AA6454-4.

In spite of their internal concerns, the manufacturers misinformed the Government about "the domestic safety record of ...these two chemicals, including the manufacturers alleged reports...regarding the **absence of ill effects on their workers**," leading the government to approve Agent Orange as "safe". App. 45a (emphasis added). Although scores of Respondents' workers had for years suffered systemic injuries as a result of their exposure to the dioxin contaminant while manufacturing 2,4,5-T in Respondents' plants, App. 43a-44a, AS29-33, AB 52, this was never reported to government officers involved in 2,4,5-T procurement. App. 44a-45a, AS29-40, AB52-54

Respondents' concern reached its peak in 1965 when Dow held a secret meeting of Respondents to discuss the dangers of the dioxin contamination. No government representatives were invited. Respondent Hercules wrote the following in summarizing the secret meeting with Dow:

> They are aware that their competitors are marketing 2,4,5-T acid which contains alarming amounts of acnegen [dioxin] **and if the government learns of this the whole industry will suffer. They are particularly fearful of a congressional investigation and excessive restrictive legislation**...

AS32, AA5681 (emphasis added) Dow itself wrote:

> As you well know, we had a serious situation in our operating plants because of contamination of 2,4,5-T with impurities, the most active of which is 2,3,7,8-TCDD [dioxin]. This material is exceptionally toxic, it has tremendous potential for producing chloracne and systemic injury. If it is present in the trichlorophenol, it will be carried through to the T Acid and into the esters and hence...public... [I]f this should occur, the whole 2, 4, 5-T industry would be hard hit and I would expect restrictive legislation either barring the material or putting very rigid controls upon it.

AA5679-A5680

B. Summary Judgment in the District Court

Notwithstanding these facts, Respondents filed a motion for summary judgment on November 11, 2003. "Defendants' Statement of Material Facts As To Which There Is No Genuine Issue To Be Tried," AA131-A136, listed four undisputed facts: 1) "Defendants supplied Agent Orange to the United States pursuant to contract"; 2) "The United States approved reasonably precise specifications for Agent Orange" (based upon "prong 1" of this court's decision in *Boyle v. United Technologies Corp.*, 487 U.S. 500, 512 (1988)); 3) "The Agent Orange manufactured by

Defendants conformed to those specifications" (based upon "prong 2" of *Boyle* at 512); and 4) "The supplier warned the United States about the dangers in the use of Agent Orange that were known to the suppliers but not to the United States" (based upon prong 3 of *Boyle* at 512).

On February 9, 2004, the district court agreed that there was no material question as to each of the above asserted "undisputed facts" and on that basis granted summary judgment in favor of Respondents. App. 150a-153a. However, recognizing that Stephenson and other plaintiffs had never been given an opportunity to conduct discovery against Respondents and that all documentation from the *In re Agent Orange Product Liability* proceedings had been transferred to the National Archives and was substantially inaccessible, the district court gave plaintiffs until August 10, 2004, (subsequently extended) to conduct discovery and file a Motion for Reconsideration. App. 17a.

Neither Respondents' summary judgment motion nor the district court's decision addressed any of the cases brought by Petitioners other than the *Isaacson* and *Stephenson* plaintiffs. Nor were any of the cases of these Petitioners consolidated by the District court. Respondents, in fact, did not file summary judgment motions against any of these Petitioners until November 2004.

After Stephenson filed his Motion for

Reconsideration, the district court reaffirmed its summary judgment order, App. 155a-160a, albeit before: 1) Defendants had an opportunity to respond to the motion for reconsideration; 2) any oral argument had taken place; or 3) any Petitioner other than the Stephensons or the Isaacsons had a chance to file an opposition to Respondents' summary judgment motion. On December 2, 2004, the district court abated its decision affirming the summary judgment. AA7004-A7010 On March 2, 2005, the district court dismissed all cases brought by Vietnam veterans that were before it without further analysis. App. 162a-163a.

C. The Second Circuit's *De Novo* Analysis

On February 22, 2008, the Second Circuit affirmed the District Court's decision that summary judgment was warranted. App. 1a-63a. However, in doing so, the court held that two of the four facts that the Respondents claimed and the district court had held were not in dispute did, in fact, present triable issues of fact and were not subject to summary adjudication. Rather than finding that "the United States approved reasonably precise specifications for Agent Orange," the Second Circuit held:

> The defendants do not contest that the government's contractual specifications for Agent Orange **are silent regarding the method of manufacturing** or that

> the government harbored no preference, expressed or otherwise, regarding how the herbicides were to be produced. **Indeed, they admit that they were under no federal contractual duty to produce Agent Orange using any particular manufacturing process or with any particular reference to the toxicity levels.**
> ...
> **[There is a] triable issue of fact** as to whether the defendants could have complied with their contractual obligations to the government while using what the plaintiffs contend was a process that would have resulted in a defoliating agent substantially less dangerous to military personnel.

App. 31a, 33a (emphasis added).

And rather than finding that "the suppliers warned the United States about the dangers in the use of Agent Orange that were known to the suppliers but not to the United States," *Boyle* 487 U.S. at 512, the Second Circuit found that:

> **We doubt that the defendants can establish** as a matter of law on the present record ...**that they shared the knowledge of the dangers of which they were aware** with the government

> and that the government had far more knowledge about the dangers of Agent Orange in its planned use. Each is intensely factual and hotly disputed.
> ...
> **We acknowledge that there may well have been some aspects of the dangers of Agent Orange resulting from the trace presence of dioxin that personnel of one or more of the defendants were aware of that members of the military may not have known**...

App. 41a, 48a (emphasis added); *compare* these to App. 142a. Yet, despite finding disputes of fact on these two critical issues, the court affirmed the district court's grant of summary judgment.

In disagreeing with the key findings of the district court, the panel acknowledged that this was **the very first** time that any court had been provided with extensive contrary evidence or any related expert reports[5] on the government contractor issue by any plaintiff exposed to Agent Orange in Vietnam:

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[5] Petitioners produced two uncontested affidavits by Ralph C. Nash, Jr., the nation's foremost expert on government contract law, who testified that the herbicide contracts could not be described as precise or design contracts but rather were standard performance contracts. AA6989-7000; AA10347-10355.

> The Fifth Circuit, relying in large part on our *Agent Orange I* determination, concluded the same. See *Miller v. Diamond Shamrock Co.,*275 F.3d 414, 421 (5th Cir. 2001).[6] But we are required to review the factual record anew as it is presented to us, not as it was presented to a different panel twenty years ago. **And we note**, as we did in *Agent Orange I,* **that we were in 1987 without the benefit of briefing by the parties on this subject**. *Agent Orange I Opt-Out Op*., 818 F.2d [187, 190 (2d Cir. 1987)]."

App. 60a-61a (Emphasis added*)*.

The Second Circuit further found that Respondents had not told the government that:

- "[they] were concerned about the health effects of dioxin, specifically chloracne

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[6] At the time that *Miller v. Diamond Shamrock Co.*, 275 F.3d 414 (5th Cir. 2001), and *Winters v. Diamond Shamrock Co.*, 149 F.3d 387 (5th Cir. 1998), were heard by the Fifth Circuit, all documents and depositions from MDL381 were being stored at the National Archives and were relatively inaccessible. As a result of this or other reasons, Plaintiffs' counsel in *Winters* submitted no evidence in response to defendants' submissions and in *Miller* the only responsive "evidence" submitted was a single affidavit from Admiral Elmo Russell Zumwalt, Jr.

and liver damage, of their workers." A-44a;

- they were aware of "temporary nerve damage (Monsanto) and unspecified 'systemic injury' (Dow)," *id.* at n.21; and

- they knew that dioxin "[v]ery conceivably [could] be a potent carcinogen." *Id.* at n. 22.

In affirming the decision of the district court, the Second Circuit never addressed whether there was "a conflicting, express contractual duty" which made it impossible to both comply with the government contracts and accommodate state law safety concerns. (contrast with *Boyle* at 507, 509).

Furthermore, despite finding that the errant manufacturing processes that used too much heat and produced substantial amounts of dioxin were entirely within the control of Respondents and not specified by any contract, App. 12a, the Second Circuit still held that summary judgment could be granted even though the contractual specifications did not conflict with the state law duty of care. Rather, it held that once the government does any type of safety analysis on a product it receives, no matter how imprecise the specifications are or how ignorant the government is about the nature of the product's defects or potential to cause harm, the subsequent analysis, by itself, "plays the identical role in the defense as listing

specific ingredients, processes, or the like" at the time the contract was being entered into. App. 37a-38a; *see also* App. 35a-36a.

Finally, in contrast to this Court's holding in *Boyle* at 512, the Second Circuit also found that it was not essential that the government be informed of the safety and health dangers of a product which are known by a product's manufacturers. Going back to what it described without citation as its pre-*Boyle* precedent,[7] the panel held as a matter of law that summary judgment was warranted because in its determination the known but undisclosed health risks were not "substantial enough to influence the military decision" to purchase Agent Orange. App. 41a. Thus, instead of applying this Court's objective test -- whether information on hazards and safety known to the manufacturers was disclosed to the government -- the panel substituted its own subjective *ex post facto* test, requiring a reviewing court to determine as a matter of law what the government might have done if the hidden hazards had been disclosed to its procurement officers. App. 41a-43a.

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[7] Applying the same pre-*Boyle* precedent cited by the panel, Judge Pratt had 25 years earlier **denied summary judgment**, on the very basis the panel granted it: "One question of fact is whether this knowledge, if disclosed to the government, might have made a difference in the government's decision-making process." *In re "Agent Orange" Prod. Liab. Litig.*, 565 F.Supp.1263, 1270 (E.D.N.Y. 1983).

REASONS FOR GRANTING THE PETITION

I. OVER THE PAST TWENTY YEARS SIGNIFICANT CONFLICTS HAVE DEVELOPED AMONG THE CIRCUITS OVER THE APPLICATION OF THE GOVERNMENT CONTRACTOR DEFENSE; THESE HAVE BEEN SUBSTANTIALLY EXACERBATED BY THE DECISION BELOW.

In *Boyle* at 512, this Court set forth a three-pronged test that a government contractor must satisfy to be immune from liability for the design of defective products. To obtain summary judgment under this test, a contracting defendant must show, as a matter of law, that: 1) the United States approved reasonably precise specifications; 2) the product conformed to those specifications; and 3) the supplier warned the United States about the dangers in the use of the equipment that were known to the supplier but not to the United States. This Court grounded the defense on the "discretionary function exception" to the Federal Tort Claims Act, which immunizes the government for its discretionary decisions about military procurement. 28 USC § 2680(a). At the same time, this Court expressly refused to grant categorical immunity to government contractors, even in wartime. *Boyle* at 510. The limited defense was only intended to insulate government manufacturers for the design of their products, *id*. at 512, when the products could not simultaneously comply with the government's

contracting needs and state health and safety concerns, *i.e.* when a state's duty-of-care standard is "precisely contrary to the duty" required of the contractor pursuant to a government contract. *Id.* at 509.

Over the past twenty years, the lower courts have struggled with how correctly to interpret this Court's decision in *Boyle*.[8] Conflicts have arisen over: 1) the extent to which the defense may be applied to "manufacturing defects" as opposed to "design" defects, and how those terms are defined; 2) what constitutes "reasonably precise specifications;" and now, with this decision, 3) the type of safety and health information, otherwise unknown to the government, which should be disclosed to the government's contracting officers. Given the burgeoning nature of government and particularly military procurement, there is no better time for this Court to resolve these conflicts. Indeed, the Second Circuit's decision presents an ideal vehicle for doing so, because it

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[8] See Watts, S., *The Government Contractor Defense: an Analysis Based on the Current Circuit Split Regarding the Scope of the Defense,* 40 Wm. & Mary L. Rev. 687 (1999) (Describing a circuit split between "courts that have interpreted *Boyle* narrowly, limited it to the facts presented, and issued opinions that conflict with Boyle's rationale" and "courts that have expanded Boyle, [who] have had to defend the merits of their decisions about a federal interest that has not been enacted or codified". *Id*. at 716. This commentator concluded that this split has been "especially pronounced given that, as federal common law, the decision is the only articulation of the federal government contractor defense." *Id*. at 712.)

conflicts markedly with the decisions and analysis of other circuits as to when and on what basis a contractor should be entitled to summary adjudication.

A. There Is a Conflict Over the Application of the Defense to Defects Arising Out of the "Manufacturing" Process Rather Than From a Product's Contractually Specified "Design."

In *Boyle, supra.*, this court looked at "when a contractor providing military equipment to the Federal Government can be held liable under state tort law for injury caused by a design defect." *Boyle* at 502. This Court concluded that the product "design ultimately selected may well reflect a significant policy judgment by government officials." *Boyle* at 513. On this basis, this Court held that under certain specific circumstances it was unreasonable for government contractors to be held responsible under state law for government-caused design problems in their products. However, this Court never addressed defects which occur as a result of manufacturing processes.

Petitioners' main contention in these lawsuits is that there were defects in Respondents' manufacturing processes, and that defective manufacturing caused the creation of extremely large amounts of the unwanted, dangerous dioxin contaminant. Supported by the uncontested affidavit of Dr. Harry Ensley, AA3953-A3966, who had written the chapter on 2,4,5-T production in the EPA's Book, Dioxins. Vol. III.

Assessment of Dioxin-Forming Chemical Processes, Petitioners argued that Respondents had the ability to control the temperature at which they cooked their 2,4,5-T. If they had used lower temperatures, they would have produced 2,4,5-T without any detectable dioxin. A-12a ("The amount of dioxin contained in a particular batch of Agent Orange varied depending on the production method used by its manufacturer.")[9] The government procurement officers, unaware of even the existence of dioxin, never involved themselves in the proprietary production processes in any way. Petitioners contend that the defect was a manufacturing one, because Respondents were not constrained by any design restrictions for manufacturing their 2,4,5-T and they could have manufactured it according to government specifications while controlling their cooking temperatures. App. 12a.

Since this Court in Boyle only described "design" defects as being within the scope of the government contractor defense, the courts of appeals have struggled with when (if ever) a "manufacturing" defect may be considered a "design" defect. App. 58a n.15. Here, the Second Circuit determined that the production of the dioxin contaminant during the manufacturing process was a "design defect" by relying

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[9] The lower the temperature used, the less dioxin contaminant created with no detectable contaminant below 155 degrees. However, when higher production temperatures were used, 2,4,5-T would be more quickly produced and manufacturing profits would increase. Since different production runs even by the same manufacturer might occur at different temperatures, the dioxin produced by each manufacturer would vary between runs.

on language from the Eleventh Circuit's decision in *Harduvel v. Gen. Dynamics Corp.*, 878 F. 2d 1311, 1317 (11th Cir 1989). *Harduvel* treats any defect occurring throughout an entire line of products as a "design defect" and limits the definition of "manufacturing defect " to "aberrational defects" that occur solely when the process used is "somehow erroneously applied." *Id*.

Other Circuits have taken issue with this distinction. In *Mitchell v. Lone Star Ammunition Inc.*, 913 F2d 242, 248 n. 10 (5th Cir. 1990), the Fifth Circuit stated:

> This Court, however, believes the Eleventh Circuit's reasoning that manufacturing defects consist only of aberrational defects is unfortunate. One can certainly conceive of situations in which a manufacturer's shoddy workmanship -- neither approved nor authorized by the Government -- produces a defect that occurs throughout an entire line of products. Indeed, the defect in the present case appeared throughout the same Lot of mortar shells as the shell that killed Marines Salazar and Hunt. Defects of this nature are clearly a result of the manufacturing process, not the design process. **In such situations, no federal interest would support the extension of the government contractor defense. In this Court's opinion, the relevant**

> **inquiry is the degree of the manufacturer's responsibility for the defect in question.**

Id. at 248 n.10 (emphasis added).[10]

While the Fifth Circuit later returned to a discussion of *Harduvel*, *supra.* in deciding *Bailey v. McDonnell Douglas Corp.,* 989 F.2d 794 (5th Cir. 1993), there is a definite lack of clarity as to when problems created during the "manufacturing" process may be described as defects in the "design" which would qualify for the government contractor defense. The result is that some circuits in addition to the Eleventh have held that the defense can be applied to manufacturing defects in certain situations. *See, e.g.*, *Snell v. Bell Helicopter Textron, Inc*., 107 F.3d 744, 749 (9th Cir. 1997). However, circuits other than the Second Circuit that have considered the question have also found that the government must have a detailed understanding of the nature of the defect.[11]

The Third Circuit has raised the more fundamental question of whether the government

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[10] Although the Fifth Circuit later granted summary judgment for these same Respondents in an Agent Orange-related case, it did so without the benefit of the full record provided here. *See supra.* at n. 6.

[11] *See* Levin, A. *The Safety Act of 2003: Implications for the Government Contractor Defense*, 34 Pub. Cont. L.J. 175 (2004) (recognizing and discussing this split in the circuits).

contractor defense should ever be applied to a manufacturing defect at all. Thus, in *Carley v. Wheeled Coach*, 991 F.2d 1117 (3d Cir. 1993) the Third Circuit stated that "the government contractor defense, by definition, applies only to design defects, and not to manufacturing defects," because "[t]he primary purpose behind the formulation of the [defense] was to 'prevent the contractor from being held liable when the government is actually at fault' ... [T]he protective shield in favor of the contractor collapses when the actions of the government contractor... produce the damaging defect." *Id*. at 1132 (emphasis added).

Here, the Second Circuit has stated the opposite, eviscerating any reasonable distinction between "design" and "manufacturing" defects. Conflicting with every other circuit's interpretation, the Second Circuit broadened the government contractor defense to include manufacturing defects even where the "government's contractual specifications" "are silent regarding the method of manufacturing," "the government harbored no preference" regarding the method of production, App. 31a, and government procurement agents were at all times unaware of the defect, the creation of dioxin, which resulted from Respondents' chosen method of manufacture.

B. The Circuit Courts Are In Conflict Over the Meaning and Intent of this Court's Requirement That a Contract Have "Reasonably Precise Specifications."

In *Boyle* at 512, this Court explained why the government contractor defense requires the approval of "reasonably precise specifications":

> The first two of these conditions assure that the suit is within the area where the policy of the "discretionary function" would be frustrated – *i.e.*, they assure that the design feature in question was considered by a Government officer, and not merely by the contractor itself.

In *Snell*, *supra*, the Ninth Circuit decided whether summary judgment was properly granted where the defect in question was the design and placement of a helicopter drive shaft. Although the specifications for the helicopter itself were, as a whole, extremely detailed, the specifications for the drive shaft were general and left great discretion to the contractor. The Ninth Circuit reversed the granting of summary judgment, stating that "when only minimal or very general requirements are set for the contractor by the United States [the military contractor defense] is inapplicable," *Id.* at 748, quoting *McKay v. Rockwell International Corporation*, 704 F.2d 444 at 450 (9th Cir. 1983).

Snell articulated one of two general principles that have been followed by every circuit court other than the Second Circuit in deciding whether "the design feature in question was considered by a Government officer, and not merely by the contractor itself." *Boyle* at 512. These courts have required that there be either exhaustively detailed specifications or a "continuous back and forth" between the contractor and the government to demonstrate that the government exercised discretion over the specifications that led to the injury. For instance, in *Kleemann v. McDonnell Douglas Corp*. 890 F.2d 698 (4th Cir. 1989)**,** the court only granted summary judgment because there was a "continuous exchange" between the government and the contractor and the government allowed no deviation without express military approval. Similarly, in *Trevino v. General Dynamics Corp*., 865 F.2d 1474 (5th Cir.), *cert.* denied, 493 U.S. 935 (1989), summary judgment was denied because there was no evidence to indicate that the government did anything other than passively accept the contractor's independently developed design choices. *See* 865 F.2d at 1480 ("When the government merely accepts, without any substantive review or evaluation, decisions made by a government contractor, then the contractor, not the government, is exercising discretion").[12]

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[12] The Fifth Circuit granted summary judgment in *In re Air Disaster v. Lockheed Corp.,* 81 F.3d 570, 575 (5th Cir. 1996)*,* but only because "the Government did not leave "the critical design decisions to the private contractor," but worked closely with the defendants every step of the way." Similarly, the Sixth Circuit granted summary judgment in *Tate v. Boeing Helicopters,* 55 F.3d

The Second Circuit's rule is in conflict with each of these decisions. According to the Second Circuit, neither exhaustively detailed specifications nor a "continuous back and forth" is necessary. Summary judgment may be granted despite the finding that the design feature in question-- the creation during the manufacturing process of high levels of toxic dioxin-- is never considered by any contracting government officer. Instead, the Second Circuit has held that when the government reorders a product after any testing has demonstrated "no health hazard," App. 36a, that retroactively constitutes approval of every possible "design feature in question." App. 34a. This subsequent testing obviates the need to determine whether "the design feature in question was considered by a Government officer, and not merely by the contractor itself" or whether the government "made a discretionary determination about the material it obtained that relates to the defective design feature at issue." App. 25a. According to the Second Circuit, this is true even when at the time of the testing in question, the existence, creation and mechanism of creation of the defect all still remained unknown to any government officers involved in that testing or the product's procurement.

1150, 1154-1156 (6th Cir. 1995), holding that the Army closely reviewed the design feature in question before approving it. *See* also *Maguire v. Hughes Aircraft Corp.*, 912 F.2d 67 (3rd Cir. 1990), affirming summary judgment where the military submitted detailed design and performance specifications and military personnel reviewed and approved every element of the proposed design and every proposed design change.

Thus, unlike *Snell,* where the Ninth Circuit required that the specifications at the time of the contract must be precise rather than "minimal or very general,"or the decisions in the other circuits that require either that the government specifically review and approve sufficiently detailed contract specifications that contain the design defect in question or that there be a continuous "back and forth" regarding the design specifics which have led to the defect in question, the Second Circuit has held that "listing specific ingredients, processes, or the like" in contracts is entirely unnecessary. App. 38a.

Indeed, under the Second Circuit's formulation, the contractor can benefit from the defense even when it denies the government the opportunity to evaluate the costs and benefits of a product up-front. The mere fact of subsequent government testing in some general relationship to the "defect"[13] and repurchase of the product is, according to the Second Circuit, sufficient to retroactively satisfy *Boyle's* precise specification requirement – even if that repurchase decision is only made because the government has already committed itself to a certain system and purchased and deployed

[13] The Second Circuit never explained what "defect" the government supposedly found and approved. App. 29a. The testing they referred to neither found dioxin nor looked for the specific endpoints feared as a result of dioxin exposure. Essentially, the panel stated that the government approved the product precisely because **it did not find a defect**. App. 35a-36a. Even under the Second Circuit's view of the government contractor summary judgment requirements, the government should not be held to ratify a defect which it **failed** to discover.

millions of dollars worth of the product.

This reliance on subsequent testing not only conflicts implicitly with the cases cited above, but also *explicitly* with the Fifth Circuit's decision in *Mitchell*, *supra.* In *Mitchell*, the Government approved an "assembly and inspection process [that] could not prevent the distribution of faulty mortar shells and the Government would not permit [the contractors] to institute a more effective procedure." 913 F.2d at 246. But rather than use the government inspection to excuse the contractor's failure to provide an appropriately safe product in the first place, the Fifth Circuit stated that "[t]he very fact that the Government approved an inspection procedure, however ineffective, evidences the Government's intolerance for these types of faulty conditions." *Mitchell*, supra, at 248.(emphasis added).

The Second Circuit below drew the opposite inference, and does so as a matter of law. The toxicity testing done by the government was designed to determine the amount or dose of 2,4,5-T required to kill 50% of animals tested (LD50). App. 35a-36a; AA4626; AA4772-73. The government did not know of dioxin's presence, and did not even possess the technology to test for the existence of dioxin. AB37-38; AA6454-2. Indeed, the government never tested the herbicide for any of the long term systemic effects known by Defendants to be caused by dioxin, such as neurological problems, liver disease and other systemic effects, because it was unaware of those potential

adverse health endpoints. Nevertheless, the Second Circuit determined that *any* safety and health testing, no matter how imprecise or ineffective, is sufficient to satisfy the requirement of reasonably precise specifications, even for an otherwise totally imprecise contract.

C. The Conflict Regarding the Extent to Which it is Necessary to Inform the Government of Known Risks is Significant.

In *Boyle* at 512, this Court required that: "the supplier warn[] the United States about the dangers in the use of the equipment that were known to the supplier but not to the United States." As this Court has stated, this third prong of Boyle was written to insure that the manufacturer would not "withhold knowledge of risks." *Id.* at 512. "[I]n its absence the displacement of state tort law would create some incentive for the manufacturer to withhold knowledge of risks, since conveying that knowledge might disrupt the contract but withholding it would produce no liability." *Id*. at 512.

In *Carley*, *supra*, the district court had found that the government approved reasonably precise specifications for a vehicle which had a center of gravity 43 inches above the ground. This was the "design feature in question" which was claimed to be defective. The contractor claimed that the government was aware of the rollover potential of vehicles with a

high center of gravity based on numerous crash-worthiness tests that the government had conducted. Nevertheless, the Third Circuit reversed the grant of summary judgment, stating it had "consistently refused to hold that the government contractor defense is established as a matter of law absent a substantial showing that the manufacturer informed the government of known risks in the use of the product." *Id*. at 1127. The court continued:

> The record in this case is devoid of communications between Wheeled Coach and the GSA pertaining to the risks of high centers of gravity, nor is there any other competent evidence indicating that the government knew that the height of the ambulance's center of gravity might give the vehicle a dangerous propensity to roll over. The government ordered an ambulance with a center of gravity up to 43 inches above the ground and inspected the finished vehicle. **These facts alone do not establish, as a matter of law, that the government knew as much as Wheeled Coach about the risks associated with the ambulance's center of gravity.**

Id. (Emphasis added)

As did the Third Circuit, the court below also found that it could not determine as a matter of law

"that the government knew as much as" Respondents about the "risks" of Respondents' product:

> **We doubt that the defendants can establish** as a matter of law on the present record ...**that they shared the knowledge of the dangers of which they were aware** with the government and that the government had far more knowledge about the dangers of Agent Orange in its planned use. Each is intensely factual and hotly disputed.

App. 41a (emphasis added).

Yet, unlike the Third Circuit, the Second Circuit held that this finding was just the beginning of the requisite enquiry. App. 41a-43a. In contrast with the Third Circuit, the Second Circuit added a second requirement that a reviewing court must determine, as a matter of law, whether the withheld information was "substantial enough to influence the military decision." Admitting that health and safety information was withheld, including information about liver damage to workers, systemic injury, and conceivable carcinogenicity, *supra.* at 16, the Second Circuit still held that as a matter of law – and without citation to any supporting testimony – knowledge of these hazards would not have affected the government's

purchasing decision.[14]

The Second Circuit's two-pronged failure to disclose analysis has never been employed by any other circuit court that has considered the question. *See e.g. Ramey v. Martin-Baker Aircraft Co. Ltd.,* 874 F.2d 946, 951 (4th Cir.1989) (granting summary judgment on the government contractor defense only because the Navy had "full knowledge of the danger"); *Stout v. Borg-Warner Corp.,* 933 F.2d 331 (5th Cir. 1991) *(*granting summary judgment only because "the danger posed ... was actually known to the government"); *Harduvel v. General Dynamics Corp.* 878 F. 2d 1311 (11th Cir. 1989) *(*granting summary judgment because Defendant produced uncontested evidence that its engineers withheld no information on chafing or other problems from the Air Force).

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[14] The Second Circuit rested its decision on matters neither alleged in the summary judgment motion to the district court nor briefed to the district or circuit court. Even though the Respondents never made this argument in the lower court, and the lower court made no findings about it, there is ample evidence that this lack of disclosure would have been highly material to the government's decision-making process. When first informed of dioxin *in 1970*, Dr. Robert Darrow, one of those responsible for recommending 2,4,5-T stated that "the feeling was there that it should have been disclosed before." AA6064-606; AB17-18; *see also* RS84, AA654-2.

II. THE SECOND CIRCUIT'S RADICAL EXPANSION OF THE GOVERNMENT CONTRACTOR DEFENSE CAN ONLY ENDANGER THE MEN AND WOMEN WHO RELY ON THE WORK OF GOVERNMENT CONTRACTORS.

A. The Second Circuit's Decision Creates a Dangerous Incentive For Manufacturers to Provide Only Vague Specifications During the Procurement Process, Thereby Immunizing Contractors Without Any Concomitant Protection of Federal Interests.

The Second Circuit's decision is not simply incorrect. It will induce government contractors to hide critical safety and health information from the government during the specification process.

By ignoring this Court's finding that precise specifications in the original contract are necessary to demonstrate that a government officer has assessed all aspects of a product at the beginning of the process, the Second Circuit applies an after-the-fact test to an already contracted-for product. This ignores the fact that the government's burden is much greater if it has to recall a product already in use than if it must cancel a product in the initial procurement phase. This effectively allows the contractor to "bait" the government with vague specifications that are

"switched" to precise specifications for purposes of the government contractor defense simply because the government, having already deployed the equipment, is forced to make the type of after the fact cost-benefit analysis it would not have had to make in the design phase.

Additionally, because the military tests virtually every product it specially orders from the private sector, *see e.g.* F.A.R.§9.3 (First Article Testing and Approval), contractors, aware of the Second Circuit's formulation, will be encouraged to sit back and wait to see what happens during that testing process. Meanwhile, absent precise specifications in the first instance, the government is placed in the untenable position of guessing what to test for. Then, when the government fails to detect a risk that it has not been informed of and is not aware exists, the Second Circuit will still grant contractors blanket immunity simply because the government's ill-informed testing regime mistakenly accepted the product as safe.

To place such an onus on the government is not in keeping with the underlying purpose for which this court developed the government contractor defense. The defense depends upon forthrightness of contractors in the first instance. Invariably, contractors will have greater technical expertise than government procurement officers – often the primary reason contracts are awarded in the first place. Unless the government is made aware of design decisions in the first instance, it is not in position to prevent death or

injury.[15] Retroactive immunity as a result of subsequent testing defeats the salutary intent behind this Court's first *Boyle* prong.

B. By Initiating a Subjective Test That Permits Contractors to Knowingly Hide Health and Safety Risks, the Second Circuit Creates a Dangerous Incentive For Manufacturers to Hide Known Risks In Order to Achieve Sales At the Cost of Health and Safety While Increasing the Government's Costs.

The Second Circuit's decision not only encourages contractors to write vague, imprecise contracts, but it also encourages them to hide relevant health and safety data from the government. There is no beneficial purpose that could conceivably be served by permitting government contractors to hide relevant safety data from the government until years later in the hope that a court may, as a matter of law,

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[15] *See* Stewart, E., *The Government Made Me Do It!: Boyle v. United Technologies Extended the Government Contractor Defense Too Far?* 57 J. Air L. & Com. 981 (1992); *see also* Severson, M., *Defense Industry-1, Injured Parties-0,* 21 Pub. Cont. L.J. 572 (1992); Eades, R., *Attempts to Federalize and Codify Tort Law*, 36 Tort & Ins. L.J. 1 (2000) ("No one would say with a straight face that military contractors like McDonnell Douglas, Boeing, and General Dynamics have knowledge and expertise inferior to that of the government procurement and design officials with whom they contract.").

determine retrospectively that the data would have made no difference to government officers engaging in the procurement decision. This dangerous precedent takes safety decisions away from contracting officials and places immunity from liability ahead of accident and injury prevention. By the time a court evaluates whether or not the government would have found the hidden safety and health information determinative of its purchasing decision, injuries will necessarily already have occurred. [16]

The absence of full disclosure can also prove costly to the government. The district court, App. 42a-43a, and the Second Circuit, App. 142a-143a, concern themselves with the added costs of government procurement if the *Boyle* guidelines are strictly followed. However, the "Agent Orange" saga clearly demonstrates the cost to the government when contracting officers are kept in the dark by manufacturers. Over two million gallons of Agent Orange, purchased from the Defendants at a cost to taxpayers of at least eight million dollars in the currency of that era, were not used to protect soldiers, but rather were taken out to sea and incinerated because of high dioxin content. AA7558-7559. The subsequent costs of disposal added eight million dollars to the government's tab. Of course, this is dwarfed by the hundreds of millions of dollars since spent by the

[16] To make matters worse, the Second Circuit did not base its ruling on even a single government official's testimony stating that the information hidden would not have mattered to the government. App. 47a-48a.

government to compensate Vietnam Veterans who have contracted a variety of deadly diseases related to their exposure. Even without including the human costs resulting from these diseases, the dollar costs to the taxpayer of giving Respondents and other contractors free rein over their production methods dwarfs any savings that might have been realized by immunizing them from liability. Imposing liability on these contractors for failing to exercise their discretion to accommodate safety will not cost the taxpayers – it will save them money, and, more importantly, in the future may save many lives as well.

For these very reasons, the United States government itself argued strenuously for complete disclosure requirements in its *amicus curiae* brief to this court in Boyle. Seeking to protect both the integrity of the military procurement process and the well-being of service members, the government wrote:

> While the government is a sophisticated and competent participant in the process of weapons design and manufacture, **it is not necessarily aware of every risk about which its contractors know.** The relationship between the military and its contractors is improved on the whole by **a requirement that ensures that the information flowing from contractors to the military is as full and frank as is reasonably possible and that all risks and dangers known**

> **to contractors have been disclosed.** The military's interest in protecting the well-being of service members is advanced by such a requirement.

Brief for the United States as Amicus Curiae Supporting Affirmance at 29-30, *Boyle v. United Technologies Corp.*, (No. 86-492) (U.S. filed 1987) (Emphasis added)

As the government's brief in *Boyle* shows, the Second Circuit's concerns about the costs to the government of an insufficiently broad government contractor defense are misplaced. App. 42a-43a. As the government argued in *Boyle*, the military's interest in protecting the well-being of our service members is advanced by a requirement that all risks and dangers known to a contractor are disclosed. This is not a minor quesiton. The 2007 defense budget allocated over $84 Billion for procurement.[17] It is for the government in the first instance, not subsequent courts, to determine to what extent full disclosure would affect its purchasing decisions. To hold otherwise, stands *Boyle's* goal of a free and full flow of information on its head and rewards contractors for withholding safety and health information from the government. If there

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[17] Office of the Under Secretary of Defense (Comptroller),"Procurement Programs (P-1)." Department of Defense Budget. Fiscal Year 2007, available at http://www.defenselink.mil/comptroller/defbudget/fy2007/fy2007_p1.pdf at Page 4.

is any doubt whatsoever about where the interest of the United States lie, this Court should request the views of the Solicitor General on this question.

C. The Second Circuit Ignores the Interests of the States in Protecting the Health and Safety of its Citizens When it Jettisons the Need to Even Review Whether a Conflict Exists Between Federal Common Law and State Law.

This Court in *Boyle* at 511-512 recognized that our federal system requires a careful balance between federal procurement and laws designed to protect the health and safety of the residents of the various states. On this basis, this Court required that summary judgment pursuant to the government contractor defense be based upon a "significant conflict" between contract specifications and state law duties. *Id*. at 508-509.

Yet, both the district court and the Second Circuit jettisoned any need for such an analysis. In their formulation of the government contractor defense, they gave primacy to military procurement divorced from any concern of whether the terms of the government contract actually conflicted with the states' needs to protect the health and safety of their

residents.[18] Indeed the district court "did not rely on a contractual duty to demonstrate the required conflict between federal interests and state law." App. 60a Neither did the Second Circuit. App. 38a. (*Boyle* "did not hold that a conflicting, express contractual duty was required for the contractor defense to preempt state law.") Instead, the Second Circuit removed state law interests from the equation:

> The government's 'uniquely federal interest,' ... in fully taking advantage of its ability to determine what level of risks and dangers must be tolerated in order to achieve a particular military goal need not be belabored. *See* Agent Orange I Opt-Out Op., 818 F.2d at 191 ("Civilian judges and juries are not competent to weigh the cost of injuries caused by a product against the cost of avoidance in lost military efficiency. Such judgments involve the nation's geopolitical goals and choices among particular tactics....")

App. 38a-39a.

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[18] One commentator has noted that there are plenty of incentives for companies to manufacture products for the government, even with potential liability: "To say that government contractors will be deterred from engaging in the government contract business and from participating in the design process fails to recognize the cash cow that is the United States Department of Defense." Davis, M., *The Supreme Court and Our Culture of Irresponsibility*, 31 Wake Forest L. Rev. 1075, 1096 (1996).

Essentially, the Second Circuit, in conflict with all of the other circuits, has found that the field should be preempted whenever a government contract involves military uses, which is precisely what *Boyle* sought to avoid. The presumption by the Second Circuit that this country's priority is to immunize government contractors even when there is no conflict between the performance of a government contract and state law duties is profoundly important to the hundreds of thousands of men and women who serve in the U.S. armed forces. It is too easy to forget the very real costs of dangerous products that our civil justice system is designed to remedy.[19]

In the case below, Respondents could have made their products much safer simply by cooking their products at a lower temperature. They chose not to do so. But no government contract prevented them from doing so. Moreover, there is absolutely no difference between the state lawsuits brought by veterans exposed in Vietnam and the numerous lawsuits brought against these same Respondents when they exposed Americans domestically to the exact same dioxin-contaminated 2,4,5-T. Shouldn't our veterans be able to rely on the safety of products supplied by

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[19] Beh, H., *The Government Contractor Defense: When Do Governmental Interests Justify Excusing a Manufacturer's Liability for Defective Products?* 28 Seton Hall L. Rev. 430, 446 (1997)("In short, tort law has always been imperfect in its allocations among tortfeasors; however, it remains superior to leaving the risk to the injured victim.").

government contractors just as much as those not serving our country?

With ever more sophisticated equipment needed by the government, the government must be able to rely on its contractors to disclose the risks of their products in order to avoid serious injury, illness, or even death to government personnel. Although the Second Circuit purported to base its dismissal of this case on national security concerns, App. 48a-49a, immunizing the Respondents for the spraying of toxic chemicals on thousands of servicemen that has resulted in cancer and other chronic illnesses among our Vietnam veterans does not further the national security of this country, nor does it strengthen our national defense. Instead, it does precisely what *Boyle* sought not to do: grant blanket immunity to contractors simply because they are providing materials to the Defense Department. If a manufacturer is not required to disclose that its product is contaminated with one of the most toxic materials known to man, what undisclosed risk would be sufficient to create a jury question? Vietnam veterans who suffer from crippling and lethal diseases as a result of their service to this nation deserve better from the constitutional system they fought to protect.

CONCLUSION

The petition for a writ of *certiorari* should be granted.

Respectfully submitted,

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Counsel for Petitioners

October 6, 2008

APPENDIX A

05-1760-cv
In re "Agent Orange" Prod. Liability Litig.

Also docket nos. 05-1509, 05-1693, 05-1694, 05-1695, 05-1696, 05-1698, 05-1700, 05-1737, 05-1771, 05-1810, 05-1813, 05-1817, 05-1820, 05-2450, 05-2451

UNITED STATES COURT OF APPEALS

FOR THE SECOND CIRCUIT

August Term, 2006

(Argued: June 18, 2007 Final Submission: August 3, 2007

Decided: February 22, 2008
Errata Filed: March 25, 2008)

In re "Agent Orange" Product Liability Litigation

J. MICHAEL TWINAM,

Plaintiff-Appellant,

-v- 05-1509-cv

DOW CHEMICAL COMPANY, et al.,

Defendants-Appellees.

ROBERT S. BAUER and SANDRA J. BAUER,

Plaintiffs-Appellants,

-v- 05-1693-cv

DOW CHEMICAL COMPANY, et al.,

Defendants-Appellees.

SHERYL A. WALKER, ERIC C. WALKER, A Minor, By his Mother and Next Friend on behalf of SHERYL A. WALKER, STEPHEN J. WALKER, WILLIAM HAMILTON and ESTHER M. HAMILTON, His Wife, Individually and on Behalf of All Others Similarly Situated,

Plaintiffs-Appellants,

-v- 05-1694-cv

DOW CHEMICAL COMPANY, et al.,

Defendants-Appellees.

DOES 1-100

SHERMAN CLINTON STEARNS and DORTHA MONYENE STEARNS,

Plaintiffs-Appellants,

-v- 05-1695-cv

DOW CHEMICAL COMPANY, et al.,

Defendants-Appellees.

WILMER PLOWDEN JR.,

Plaintiff-Appellant,

-v- 05-1696-cv

DOW CHEMICAL COMPANY, et al.,

Defendants-Appellees.

CHARLES T. ANDERSON,

Plaintiff-Appellant,

-v- 05-1698-cv

DOW CHEMICAL COMPANY, et al.,

Defendants-Appellees.

PFIZER, INC., et. al.,

Defendants.

LINDA FAYE CLOSTIO-BREAUX, RACHEAL M. BREAUX, JOEY M. BREAUX, APRIL R. BREAUX, STACY M. BREAUX, ERIC J. BREAUX, and SCOTT M. BREAUX,

Plaintiffs,

CHARLES J. BREAUX,

Plaintiff-Appellant,

-v- 05-1700-cv

DOW CHEMICAL COMPANY, et al.,

Defendants-Appellees.

THOMAS G. GALLAGHER,

Plaintiff-Appellant,

-v- 05-1737-cv

DOW CHEMICAL CO. and
OCCIDENTAL CHEMICAL CORP.

Defendants-Appellees.

DANIEL RAYMOND STEPHENSON, SUSAN STEPHENSON, DANIEL ANTHONY STEPHENSON and EMILY ELIZABETH STEPHENSON,

Plaintiff-Appellants,

-v- 05-1760-cv

DOW CHEMICAL CO., et al.,

Defendants-Appellees.

CASEY J. SAMPEY, JR.,

Plaintiff-Appellant,

-v- 05-1771-cv

DOW CHEMICAL CO., et al.,

Defendants-Appellees.

CHRISTINE NELSON, Individually and on behalf of her deceased husband, FRANKLIN NELSON, REGINALD WILLIAMS, KAREN HOLLAND, FRANKLIN NELSON, JR. and SHALISA NELSON,

Plaintiffs-Appellants,

-v- 05-1810-cv

DOW CHEMICAL CO., et al.,

Defendants-Appellees.

HENRY C. KIDD and SHIRLEANE J. KIDD,

Plaintiffs-Appellants,

-v- 05-1813-cv

DOW CHEMICAL CO., et al.,

Defendants-Appellees.

WILLIE WILLIAMS JR., and RITA WILLIAMS,

Plaintiffs-Appellants,

-v- 05-1817-cv

DOW CHEMICAL CO., et al.,

Defendants-Appellees.

JOE ISAACSON and PHYLLIS LISA ISAACSON,

Plaintiffs-Appellants,

-v- 05-1820-cv

DOW CHEMICAL CO., et al.,

Defendants-Appellees.

VICKEY S. GARNCARZ,

Plaintiff-Appellant,

-v- 05-2450-cv

DOW CHEMICAL CO., et al.,

Defendants-Appellees.

JACK RICHARD PATTON,

Plaintiff-Appellant,

-v- 05-2451-cv

DOW CHEMICAL CO., et al.,

Defendants-Appellees.

Before: MINER, SACK, and HALL, Circuit Judges.

Appeals from final judgments of the United States District Court for the Eastern District of New York (Jack B. Weinstein, Judge) granting summary judgment to the defendants, orders denying certain requests for discovery, and the order denying the Stephenson plaintiffs' motion to amend their complaint.

Affirmed.

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SACK, Circuit Judge:

More than thirty-five years ago, the United States military stopped using Agent Orange and related chemicals as defoliants to prosecute the war in Vietnam. This appeal is but the latest chapter in a thirty-year struggle by the litigants, their counsel, and judges of the United States District Court for the Eastern District of New York and of this Court to bring to just legal closure to the alleged consequences of that use.

We explain below why these sixteen unconsolidated appeals are now before us and why, in our view, the government contractor defense applies to bar these claims. In the course of doing so, we consider the discovery limitations imposed by the district court and that court's denial of the Stephenson plaintiffs' motion to amend their complaint. By an opinion written by Judge Hall also filed today, we decide that those of the sixteen cases that were originally filed in state court were properly removed by the defendants to federal court. A third decision by the panel, written by Judge Miner, addresses the separate issues related to the use of Agent Orange raised on appeal in Vietnam Assoc. for Victims of Agent Orange/Dioxin v. Dow Chemical Co., No. 05-1953-cv.

The plaintiffs pursuing this appeal are United States military veterans or their relatives who allege that myriad injuries, mostly forms of cancer, were caused by the veterans' exposure to the chemical defoliant "Agent Orange" during service in Vietnam.[fn1] They assert that the district court erred in concluding that the government contractor defense — which protects government contractors from state tort liability under certain circumstances when they provide defective products to the government — applied to bar the plaintiffs' claims. The plaintiffs contend further that the district court abused its discretion by denying them discovery beyond what was available in files from prior Agent Orange litigation. We disagree with the plaintiffs on both counts.

We also conclude that it was error to deny the Stephensons' motion to amend their complaint. In light of our conclusion that the defendants are entitled to invoke the government contractor defense, however, we find the error to be harmless.

We therefore affirm the judgments of the district court in all respects.

BACKGROUND

The cases concerning the United States military's acquisition and use of Agent Orange during the Vietnam War, of which these are but a relative few, and their massive factual records, have been addressed in so many different judicial opinions over the years that we do not attempt even to list them here. See generally In re "Agent Orange" Prod.

Liab. Litig., 304 F. Supp. 2d 404, 410-14 (E.D.N.Y. 2004) ("Agent Orange III Gov. Contractor Def. Op."). Neither do we undertake a detailed retelling of the history of or facts underlying this litigation. See id. at 407-22 (describing the history of Agent Orange lawsuits brought by Vietnam veterans).[fn2] Instead, we set forth below only what we think necessary for an understanding of our resolution of these appeals.

Agent Orange was one of several chemically similar herbicides[fn3] used by the United States government during the Vietnam War in connection with "Operation Ranch Hand," the code name for the military's efforts to defoliate various areas in Vietnam. See In re Agent Orange Prod. Liab. Litig., 373 F. Supp. 2d 7, 19 (E.D.N.Y. 2005) ("Between 1961 and 1971, herbicide mixtures . . . were used by the United States and Republic of Vietnam . . . forces to defoliate forests and mangroves, to clear perimeters of military installations and to destroy `unfriendly' crops, as a tactic for decreasing enemy armed forces['] protective cover and food supplies."). The government purchased the defoliants from the defendants-appellees in the instant appeals pursuant to various government contracts.[fn4] As the defoliation campaign intensified, many of the contracts were subjected to various government directives entered pursuant to the Defense Production Act of 1950, see 50 U.S.C. app. § 2061 et seq., and regulations promulgated pursuant thereto. The government characterized delivery of Agent Orange as part of the prosecution of military action, which enabled the defendants to procure otherwise scarce materials and equipment necessary to produce it. Agent

Orange III Gov. Contractor Def. Op., 304 F. Supp. 2d at 424-25.

The Agent Orange delivered to the government was a mixture of two different herbicides: 2,4-D (2,4-Dichlorophenoxyacetic acid) and 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid). The contracts required that the chemicals be nearly 100% pure and that they be combined in roughly equal proportions.

The manufacture of 2,4,5-T produced, as a byproduct, trace elements of the toxic chemical dioxin (2,3,7,8-Tetrachlorodibenzo para dioxin (TCDD)). The plaintiffs allege that it is dioxin that caused the injuries of which they now complain.

The amount of dioxin contained in a particular batch of Agent Orange varied depending on the production method used by its manufacturer. See In re "Agent Orange" Prod. Liab. Litig., 818 F.2d 145, 150, 173 (2d Cir. 1987) ("Agent Orange I Settlement Op."), cert. denied, 484 U.S. 1004 (1988); In re "Agent Orange" Prod. Liab. Litig., 818 F.2d 187, 189 (2d Cir. 1987) ("Agent Orange I Opt-Out Op."), cert. denied, 487 U.S. 1234 (1988). The defendants knew at the time they were manufacturing Agent Orange that dioxin was a byproduct and that it could cause certain kinds of harm under certain conditions. Various government agencies and officers assessed the toxicity of the defoliating agents, including Agent Orange, being used in Vietnam. Precisely what knowledge the government and the defendants possessed and when they came to have it is in dispute.

I. Overview of Agent Orange Litigation

The plaintiffs now before us on appeal represent a small fraction of the many Americans who have pursued legal claims arising out of the government's use of Agent Orange to fight the Vietnam War. See generally Agent Orange III Gov. Contractor Def. Op., 304 F. Supp. 2d at 410-14 (listing more than one hundred Agent-Orange-related decisions); see also, e.g., id. at 407-23 (detailing the history of Agent Orange litigation involving Vietnam veterans). Their claims find their roots in the "Agent Orange I" litigation, the veterans' class action begun in the late 1970s and settled in 1984.

In those cases, the Judicial Panel on Multidistrict Litigation designated the United States District Court for the Eastern District of New York as the Multidistrict Litigation ("MDL") court for all federal Agent Orange-related cases brought by military veterans of various countries. Thereafter, first Judge Pratt and then Judge Weinstein presided over proceedings involving approximately 600 litigants, hundreds of thousands of putative class members, several years of motion practice (including motions for class certification), and one appeal to this Court. On the eve of trial of those cases, the defendants and class representatives reached what was then thought by the parties and the courts to be a final global settlement of Agent Orange-related cases in the amount of $180 million. Agent Orange I Settlement Op., 818 F.2d at 152-55.

Because of what we termed "formidable hurdles" to the plaintiffs' claims, id. at 174, we affirmed the district court's approval of the settlement at what — even at a total of $180 million — we termed "nuisance value," equivalent to "at best only a small multiple of, at worst less than, the fees the chemical companies would have had to pay to their lawyers had they continued the litigation." Id. at 171. The Plaintiffs in 287 cases opted out of the class and thereby the settlement.

Thereafter, the district court granted the defendants' motion for summary judgment in those opt-out actions "on the alternative dispositive grounds that no opt-out plaintiff could prove that a particular ailment was caused by Agent Orange, that no plaintiff could prove which defendant had manufactured the Agent Orange that allegedly caused his or her injury, and that all the claims were barred by the military contractor defense." Agent Orange I Opt-Out Op., 818 F.2d at 189 (internal citations omitted).

From 1987 through 1997, the settlement fund, which, with interest and other augmentations, eventually grew to about $330 million was distributed to, inter alios, some 291,000 class members who filed claims prior to the 1994 cutoff date. Agent Orange III Gov. Contractor Def. Op., 304 F. Supp. 2d at 421. Meanwhile, two sets of plaintiffs who had been members of the original plaintiff class and who were therefore entitled to receive settlement payments, but whose injuries had manifested after their opportunity to opt out of the class action had expired, filed class actions on behalf

of themselves and other similarly situated veterans. The district court decided that because the plaintiffs were class members, their claims were barred, and we affirmed. In re "Agent Orange" Prod. Liab. Litig., 996 F.2d 1425, 1439 (2d Cir. 1993) ("Agent Orange II"), overruled in part on other grounds by Syngenta Crop Protection, Inc. v. Henson, 537 U.S. 28, 34 (2002).

Shortly after the settlement fund distributions were completed, the third, and instant, series of lawsuits was initiated. These were brought by two of the sixteen plaintiffs now before us, the Isaacsons and Stephensons, who had not been members of the original plaintiff class. These veterans and their families alleged injuries that resulted from exposure to Agent Orange but did not manifest until after the 1994 cutoff date for filing settlement claims in the original actions. In a 2001 opinion, we held that the district court had erred in deciding that the plaintiffs' claims were barred by the Agent Orange I settlement. Stephenson v. Dow Chem. Co., 273 F.3d 249, 261 (2d Cir. 2001) ("Agent Orange III").[fn5] We concluded that a conflict existed between the plaintiffs and the class representatives because the representatives had permitted the settlement fund to terminate without a provision for post-1994 claimants such as these plaintiffs. Id. at 260-61 (relying on Ortiz v. Fibreboard Corp., 527 U.S. 815 (1999) and Amchem Prods., Inc. v. Windsor, 521 U.S. 591 (1997)). As a result, the plaintiffs were not adequately represented by the class, and Agent Orange I did not prevent them from pursuing their claims. Id. at 261.[fn6]

II. The Instant Appeals

On remand, the Stephensons and Isaacsons were eventually joined by fourteen other sets of plaintiffs alleging Agent Orange injuries first discovered after the 1994 cutoff date. The cases were not consolidated, but the district court conducted simultaneous proceedings and applied rulings in the Stephenson and Isaacson cases to each of the others. Together, the plaintiffs raised three tort claims under various state laws: design defect, failure to warn, and manufacturing defect.

Six days after our mandate issued in Agent Orange III, the defendants moved in the district court for summary judgment against the Stephensons and Isaacsons.[fn7] At about the same time, the Stephensons moved to amend their complaint.

On February 9, 2004, several days after receiving voluminous submissions from the plaintiffs and two weeks after oral argument, the district court issued four decisions, two of which — one granting the defendants' motion for summary judgment and the other denying the Stephensons' motion to amend — are now before us on appeal.[fn8] Even though only the motions for summary judgment in Stephenson and Isaacson were before it, the district court considered all the evidence put forth by the parties in Agent Orange I in ruling on defendants' summary judgment motion. Having done so, it concluded that the government contractor defense

barred both the design defect and failure-to-warn claims. Agent Orange III Gov't Contractor Def. Op., 304 F. Supp. 2d at 441-42. As to plaintiffs' manufacturing defect claims, the court concluded that they were barred because the defendants' products conformed to the government's specifications. Id. at 442.

In granting the motion for summary judgment, however, the district court noted that the plaintiffs had complained of "difficulties in obtaining evidence for their position," an "understandable" problem in light of the passage of time between exposure and injury. Id. "To ensure due process," id., therefore, Judge Weinstein charted a distinctly unusual course — he permitted discovery, never undertaken by Agent Orange III litigants in light of the timing of prior appeals and the defendants' motion, to continue through August 10, 2004, and he set a motion schedule for an anticipated motion for reconsideration based on the results of that discovery. Id.

Thereafter, the district court ordered that all files relating to Agent Orange sent to the National Archives pursuant to court order following Agent Orange I be returned to the district court and made available to the plaintiffs for their review. The magistrate judge assigned to the case then denied all requests for additional non-MDL discovery, although the district court subsequently granted the plaintiffs access to "up to six complete deposition transcripts utilized in non-MDL 381 cases claimed by plaintiffs to shed light on relevant knowledge of defendants."

On November 3, 2004, the plaintiffs in Stephenson and Isaacson, as anticipated, filed a motion for reconsideration of the district court's order granting summary judgment. On November 16, 2004, the district court, without awaiting response from the defendants, denied the plaintiffs' motion. In re "Agent Orange" Prod. Liab. Litig., 344 F. Supp. 2d 873, 874-75 (E.D.N.Y. 2004). It further ordered the defendants to "submit a specific judgment in favor of each named defendant against each named plaintiff whose claims arise from service in the Armed Forces of the United States," thereby rendering the court's judgment in Stephenson and Isaacson applicable to each of the fourteen additional plaintiffs now before us on appeal. Id. at 875.

Following a motion by the Bauer plaintiffs, who argued that granting the motion for summary judgment was inappropriate because, inter alia, the procedural posture of their case had rendered them unable to respond to the defendants' motion, all plaintiffs were ultimately given until February 28, 2005, to submit additional papers supporting their position that summary judgment should not have been granted. Oral argument was held on February 28. On March 2, 2005, the district court summarily reaffirmed its November 16, 2004 Order. In re "Agent Orange" Prod. Liab. Litig., No. 79 MD 381, 2005 WL 483416, at *1 (E.D.N.Y. Mar. 2, 2005). Separate judgments of dismissal in each action were then filed.

More than a year before, in February 2004, the district court had denied the Stephensons' motion to amend their complaint to add additional defendants and several new causes of action. Stephenson v. Dow Chem. Co., 220 F.R.D. 22, 25-26 (E.D.N.Y. 2004). Although the defendants had never answered the Stephensons' original complaint, filed pro se in the Western District of Louisiana, the motion to amend was denied on a variety of grounds. Id.

The plaintiffs appeal. Before us are challenges to (1) the district court's grant of the motion for summary judgment as to their design claim only;[fn9] (2) the denial of their requests for additional discovery; and (3) the denial of the Stephensons' motion to amend.[fn10]

DISCUSSION

I. Summary Judgment

A. Standard of Review

We review the district court's grant of summary judgment de novo, "construing the evidence in the light most favorable to the non-moving party and drawing all reasonable inferences in its favor." Allianz Ins. Co. v. Lerner, 416 F.3d 109, 113 (2d Cir. 2005). "We will affirm the judgment only if there is no genuine issue as to any material fact, and if the moving party is entitled to a judgment as a matter of law." Id. (citing Fed.R.Civ.P. 56(c)).

B. The Government Contractor Defense

Almost twenty years ago, in Boyle v. United Technologies Corp., 487 U.S. 500 (1988), the Supreme Court recognized the government contractor defense,[fn11] a federal common law doctrine. The Court concluded that the "uniquely federal interest[]" of "getting the Government's work done" requires that, under some circumstances, independent contractors be protected from tort liability associated with their performance of government procurement contracts. Id. at 504-05.

The Court looked to the Federal Tort Claims Act, 28 U.S.C. § 2671 et seq. ("FTCA"), for guidance. Id. at 509-12. Under the FTCA, Congress waived sovereign immunity for the government insofar as Congress "authorized damages to be recovered against the United States for harm caused by the negligent or wrongful conduct of Government employees, to the extent that a private person would be liable under the law of the place where the conduct occurred." Id. at 511 (citing 28 U.S.C. § 1346(b)). The Act's discretionary function exception, however, carves out from that authorization "`[a]ny claim . . . based upon the exercise or performance or the failure to exercise or perform a discretionary function or duty on the part of a federal agency or an employee of the Government, whether or not the discretion involved be abused.'" Id. (quoting 28 U.S.C. § 2680(a)) (brackets in original).

The Boyle Court concluded that the protection for discretionary action taken by federal agencies and employees implies some measure of

similar protection for government contractors even though they are themselves non-governmental entities. The Court noted that the exercise of government discretion is inherent to military contracting:

> We think that the selection of the appropriate design for military equipment to be used by our Armed Forces is assuredly a discretionary function within the meaning of this provision. It often involves not merely engineering analysis but judgment as to the balancing of many technical, military, and even social considerations, including specifically the trade-off between greater safety and greater combat effectiveness.

Id. Accordingly, the Court said,

> permitting "second-guessing" of these judgments through state tort suits against contractors would produce the same effect sought to be avoided by the FTCA exemption. . . . To put the point differently: It makes little sense to insulate the Government against financial liability for the judgment that a particular feature of military equipment is necessary when the Government produces the equipment itself, but not when it contracts for the production.

Id. at 511-12 (citation omitted). The defense thus protects government contractors from the specter of

liability when the operation of state tort law would significantly conflict with the government's contracting interest. Id. at 507.

Adopting the reasoning employed in several previous court of appeals decisions, the Court limited "the scope of [state law] displacement" to instances in which "(1) the United States approved reasonably precise specifications [for the allegedly defectively designed equipment]; (2) the equipment conformed to those specifications; and (3) the [contractor who supplied the equipment] warned the United States about the dangers in the use of the equipment that were known to the supplier but not to the United States." Id. at 512. The first two requirements "assure that the suit [from which protection is sought] is within the area where the policy of the `discretionary function' would be frustrated — i.e., they assure that the design feature in question was considered by a Government officer, and not merely by the contractor itself." Id. The third requirement is imposed because "in its absence, the displacement of state tort law would create some incentive for the manufacturer to withhold knowledge of risks, since conveying that knowledge might disrupt the contract but withholding it would produce no liability." Id. The Court therefore "adopt[ed] this provision lest [its] effort to protect discretionary functions perversely impede them by cutting off information highly relevant to the discretionary decision." Id. at 512-13.

The plaintiffs here contend that the defendants cannot, at least as a matter of law at the

summary judgment stage, satisfy any one of the three requirements.

1. Reasonably Precise Specifications.

The plaintiffs argue that the defendants have not established the first Boyle requirement — that "the United States approve□ reasonably precise specifications," 487 U.S. at 512 — because: (1) Agent Orange procurement contracts contained no specifications regarding the defective feature, dioxin; (2) there is at least a genuine issue of material fact regarding whether Agent Orange was a commercially available product whose specifications were created by the defendants rather than the government, whose involvement was minimal; and (3) the alleged defect was unrelated to the contractual specifications for 2,4,5-T because it was the defendants' chosen manufacturing processes — with which the government was not involved and which were not integral to contract compliance — that caused dioxin to be present.[fn12]

The first argument concerns the proper conception of the complained-of defect and can readily be resolved. The second and third arguments are, in distinct ways, about how the government exercised its discretionary authority: The second argument asks whether the government was involved in the contractual process to the extent that Boyle requires; while the third asks us to determine in what context the government must exercise its discretion for the government contractor defense to apply. To conduct this third inquiry, we must determine the source of the "conflict" between the

government's interests and state tort law that is required for the defense to apply.

a. The complained-of defect

The plaintiffs assert that because the contracts at issue contain no specifications whatsoever with regard to the dioxin, the government exercised no discretionary authority over that which is the subject of their state tort litigations, as a successful defense based on Boyle requires. Their argument misconceives the nature of what the contracts in question were about and defines the alleged defective design too narrowly.

The contracts at issue provided for the defendants to supply Agent Orange. The Agent Orange was allegedly defective because it contained excessive trace amounts of dioxin, which were present as a result of the manufacture of a specified Agent Orange component, 2,4,5-T. The dioxin — while a defect of 2,4,5-T — was not itself defective, nor did it exist within Agent Orange apart from the 2,4,5-T therein.[fn13] It was therefore the 2,4,5-T that was alleged to be defective, not the dioxin.

b. The government approved specifications for a uniquely tailored product

The plaintiffs contend that the defendants cannot demonstrate that the government exercised its discretionary authority to create the

Agent Orange specifications that are contained in the contracts. The government contractor defense protects federal contractors solely as a means of protecting the government's discretionary authority over areas of significant federal interest such as military procurement. Defendants asserting the defense must demonstrate that the government made a discretionary determination about the material it obtained that relates to the defective design feature at issue. Where the government "merely rubber stamps a design, . . . or where the [g]overnment merely orders a product from stock without a significant interest in the alleged design defect," the government has not made a discretionary decision in need of protection, and the defense is therefore inapplicable. Lewis v. Babcock Indus., Inc., 985 F.2d 83, 87 (2d Cir.) (citing Trevino v. Gen. Dynamics Corp., 865 F.2d 1474, 1480, 1486 (5th Cir.), cert. denied, 493 U.S. 935 (1989), and Boyle, 487 U.S. at 509) (internal quotation marks omitted), cert. denied, 509 U.S. 924 (1993). If the government buys a product "off-the-shelf" — "as-is" — the seller of that product cannot be heard to assert that it is protected from the tort-law consequences of the product's defects. Where the government is merely an incidental purchaser, the seller was not following the government's discretionary procurement decisions.

Here, the plaintiffs contend that the government rubber-stamped its approval of the defendants' suggested specifications, which, in turn, were simply combinations of off-the-shelf, commercially available herbicides. They say that Dow Chemical owned the patents for certain aspects

of the herbicides' component parts and that many different defendants manufactured and sold 2,4,5-T and 2,4-D in various combinations as early as 1948, with some of the formulations including the same 50% mixture as Agent Orange. As a result, the plaintiffs assert, there are at least triable issues of fact as to whether (1) Agent Orange and related herbicides were "stock" products, rather than products tailored to the government's needs; and (2) even if the herbicides were not commercially available products, Agent Orange's components were devised by the defendants without the significant government input necessary to meet the first Boyle requirement.

As to the former, the plaintiffs do not dispute the defendants' assertions that 2,4,5-T and 2,4-D were not commercially available at the same high concentrations as that contained in Agent Orange. The Stephensons, for example, concede that 2,4,5-T was not commercially available in concentrations greater than 55%. See Final Reply Br. for Pl.-Appellants, 05-1760-cv, at 67-68. Agent Orange, by contrast, contained 2,4,5-T at greater than 90% purity levels. See, e.g., Aff. of William A. Krohley, counsel for defendant Hercules Inc., Oct. 27, 2004 ("Krohley Aff."), Exh. 11 (July 19, 1963 military specification).

Moreover, as the Fifth Circuit aptly noted in unrelated Agent Orange litigation, the fact that a product supplied to the government comprises commercially available component parts says nothing about whether the finished product resulted from the exercise of governmental

discretion as to its design. "[A]ll products can eventually be broken down into various off-the-shelf components." Miller v. Diamond Shamrock Co., 275 F.3d 414, 420 (5th Cir. 2001); see also In re Joint Eastern and Southern Dist. New York Asbestos Litig., 897 F.2d 626, 638 (2d Cir. 1990) ("Grispo") (Miner, J., concurring) ("[T]he [g]overnment prescription of how [stock] items should be combined and packaged [is] the key to the military contractor defense. . . .").

As to the latter argument — the plaintiffs' contention that there was no significant government input — the plaintiffs misperceive the nature of the government involvement necessary to invoke the contractor defense. That the component chemicals were not developed for military use in the first instance, that some aspects of their composition were patented, and that the defendants may have proposed certain specifications to the government, are not determinative. Boyle explicitly contemplated government reliance on manufacturers' expertise in making a fully informed decision as to what to order. See Boyle, 487 U.S. at 513. "[I]t is necessary only that the government approve, rather than create, the specifications. . . ." Carley v. Wheeled Coach, 991 F.2d 1117, 1125 (3d Cir.), cert. denied, 510 U.S. 868 (1993); see also Boyle, 487 U.S. at 513 ("The design ultimately selected may well reflect a significant policy judgment by [g]overnment officials whether or not the contractor rather than those officials developed the design.").

The extent of the defendants' involvement in suggesting specifications or the defendants' reliance on previously attained industry expertise in doing so is thus not conclusive. The government exercises adequate discretion over the contract specifications to invoke the defense if it independently and meaningfully reviews the specifications such that the government remains the "agent[] of decision." Grispo, 897 F.2d at 630; see also Stout v. Borg-Warner Corp., 933 F.2d 331, 336 (5th Cir.) (government issued reasonably precise specifications when it reviewed contractor's detailed drawings several times and evaluated test models), cert. denied, 502 U.S. 981 (1991); Harduvel v. Gen. Dynamics Corp., 878 F.2d 1311, 1320 (11th Cir. 1989) (government issued reasonably precise specifications for F-16 fighter aircraft having approved its design following "continuous back and forth" with contractor), cert. denied, 494 U.S. 1030 (1990).

With respect to Agent Orange, the record contains, for example, a memorandum dated February 22, 1963, regarding "Ester Specifications for U.S. Army Biological Laboratories," written by an employee of one of the defendants, that discussed a February 8, 1963, meeting called "to satisfy the U.S. Army about specifications and typical physical properties on the next type of blend they [sic] will be purchasing." Mem. from I.F. Hortman to, inter alios, S.D. Daniels and W.A. Kuhn (Feb. 22, 1963), at 1. It indicated that an effort to permit use of a different n-butyl ester from 2,4,5-T was "impossible at this time because the Army had studied only the normal esters," and that, therefore, the chemical company

would have to present the proposed change directly to "the commanding officer, U.S. Army Biological Laboratories and Dr. Charles Minarick, Chief of Crops Division" for approval. Id. And notes from a 1968 meeting between government officials and representatives of several of the defendants indicate that the government insisted on a test for chemical composition despite "much resistance to this added requirement on the part of the Industry [sic]" as well as on a 98% purity level for the 2,4,5-T ester. Memorandum of R.A. Guidi, Diamond Alkali Co. (Feb. 20, 1968), at 1-2.

We conclude, based on the evidence in the extensive record that has been brought to our attention,[fn14] that no reasonable jury could find that the government did not exercise sufficient discretion for it to have been said to have "approved" specifications for the herbicides. The government was plainly the "agent□ of decision," Grispo, 897 F.2d at 630, with respect to Agent Orange's contractually specified composition.

c. The government made a discretionary determination regarding Agent Orange's toxicity

The next question, and we think it to be a more difficult one, is whether the government made a discretionary determination that created the conflict between the federal government's interests and the defendant's state law duties that is necessary to invoke the government contractor defense. The plaintiffs argue that the defendants could have manufactured Agent Orange that

produced either dioxin-free or nearly dioxin-free 2,4,5-T by employing the lower-temperature manufacturing process developed and used by a German manufacturer, C.H. Boehringer Sohn. This process, the plaintiffs say, would have permitted the defendants to comply with their federal contractual duties and deliver a less toxic defoliating agent, albeit at a somewhat slower rate. As a result, the plaintiffs argue, the defendants could have met both their federal duties and their state tort-law duties; the direct conflict contemplated by Boyle is absent; and the first requirement for the contractor defense therefore cannot be established.[fn15]

(i) Analysis. In determining whether the government made a discretionary decision that would create the type of conflict between tort law and government interests contemplated by Boyle, we are not called upon to assess the merits of the alleged state tort law violation.[fn16] We are tasked only with determining whether the government's discretionary actions with respect to the allegedly defective design and the alleged state law tort duty conflict. If they do, the first Boyle requirement is met; if they do not, the government contractor defense does not apply, and we must return the case to the district court for trial on its merits. Cf. Grispo, 897 F.2d at 627 n. 1 (noting that appeal of summary judgments pertaining to applicability of the contractor defense did "not raise the question whether New York law imposes a duty to warn under the□ facts [of the case], or whether a failure to warn was the proximate cause of the [plaintiffs'] alleged injuries.").

The first Boyle requirement is designed to ensure that "a conflict with state law exists." Lewis, 985 F.2d at 86. We have observed that, therefore, "answering the question whether the [g]overnment approved reasonably precise specifications for the design feature in question necessarily answers the question whether the federal contract conflicts with state law." Id. at 87. If such specifications are present, the contractor's federal contractual duties will inevitably conflict with alleged state tort duties to the contrary because complying with the federal contract will prevent compliance with state tort law as the plaintiffs have alleged that it exists. See id. Alternatively, where a "contractor could comply with both its contractual obligations and the state-prescribed duty of care," displacement "generally" would not be warranted, and state law would apply. Boyle, 487 U.S. at 509.

The defendants do not contest that the government's contractual specifications for Agent Orange were silent regarding the method of manufacture or that the government harbored no preference, expressed or otherwise, regarding how the herbicides were to be produced. See, e.g., Appellees' Br. at 36-37. Indeed, they admit that they were under no federal contractual duty to produce Agent Orange using any particular manufacturing process or with any particular reference to the resulting toxicity levels. See id. at 96-97, 99 (characterizing lack of specifications regarding method of manufacture or toxicity levels as discretionary omission and conceding that "omitted specifications do not constitute contractual duties"). The defendants

argue instead that the government's Agent Orange procurement contracts nevertheless created a conflict with their alleged state tort duty to manufacture the herbicides differently. The defendants reason that the documentary evidence establishes as a matter of law that the manufacture of dioxin-free Agent Orange was impossible and that, in any event, they could not have complied with their procurement contracts with the government had they used the slower, less efficient, Boehringer method. They contend further that the government ordered the herbicides with full knowledge of the relevant dangers, which, they say, is equivalent to the government having approved a reasonably precise specification about that danger. Id. at 91-99, 102-04.

But the documents cited by the defendants as to the inevitability of dioxin content in Agent Orange — including declarations by the Environmental Protection Agency that dioxin in some very small amounts was "unavoidable" and that the "potential risks" of harm to humans outweighed any benefits of continued use of commercially available 2,4,5-T, see EPA Notice of the Denial of Applications for Federal Registration of Intrastate Pesticide Products Containing 2,4,5-T, 45 Fed. Reg. 2,898, 2,899 (Jan. 15, 1980); EPA Decision and Emergency Order Suspending Registrations for the Forest, Rights-of-Way, and Pasture Uses in 2,4,5-T, 44 Fed. Reg. 15,874, 15,874 n. 1 (Mar. 15, 1979) — do not refute what we understand to be the thrust of the plaintiffs' argument: that had the defendants used the Boehringer method, the Agent Orange they produced would have contained

no then-detectable amounts of dioxin. In that event, the plaintiffs allege, the lower levels of dioxin would have avoided much, if perhaps not all, of the harm allegedly suffered as a result of the presence of dioxin in Agent Orange.

The documents submitted to the district court also do not establish as a matter of law that there was an inherent conflict between use of the Boehringer process and compliance with defendants' contractual obligation to the government. Dow Chemical adopted and used the Boehringer method, or something like it, see Mem. from J.D. Doedens, Chemicals Dep't, Dow Chem. Co. (Mar. 1, 1965), at 2; Mem. from Alex Widiger, Midland Division Research & Dev., Dow Chem. Co. (Apr. 25, 1967), at 2, at the time the government was requesting Agent Orange in increasing quantities and sequestering the entire domestic market for 2,4,5-T. This change in manufacturing method and its timing at least raises a triable issue of fact as to whether the defendants could have complied with their contractual obligations to the government while using what the plaintiffs contend was a process that would have resulted in a defoliating agent substantially less dangerous to military personnel.

And so we must determine whether the government did in fact, as the defendants argue, approve of the toxicity levels present in Agent Orange in a manner that would create the necessary conflict with the alleged state law tort duty such that the latter must be displaced. We think that it did.

We have previously concluded that where the government contracts for the purchase of a product with knowledge that the product has an arguable defect, it is considered to have approved "reasonably precise specifications" for that product, with the known defect, for purposes of the first Boyle requirement. Lewis, 985 F.2d at 89. In Lewis, the government reordered a cable that connected a parachute to the crew module of an Air Force fighter jet with knowledge that the coating that protected the steel cable was prone to cuts, resulting in cable corrosion. Id. at 85. Although the government during its initial order had not made a discretionary decision about which materials should be used in constructing the cable, it subsequently ordered replacement cables even after an Air Force investigation into the corroded cables had revealed the problem with the protective coating, reasoning that changes to its maintenance manual would sufficiently alleviate the risk of harm. Id. In light of this considered attention by the government to the precise defect alleged, we concluded that the cable could not be characterized as a stock item and that the "contractor's decision regarding the materials to be used for the cable" could not be "second-guess[ed]." Id. at 89. We did not discuss whether or how the contractor had been alerted to the government's investigation or the reasons for its reordering, nor whether the contract for replacement cables also omitted reference to the material used to construct them, as had the original cable contract. "Based on the reorder" alone, we said, "the contractor c[ould] claim: `The [g]overnment made me do it.'" Id. (quoting Grispo, 897 F.2d at 632).

Here, similarly, the record discloses that the government explicitly evaluated the alleged design defect (toxic 2,4,5-T), and thereafter continued to order "replacement" herbicides. The government examined the toxicity of what the plaintiffs contend was the most toxic Agent Orange variant used in Vietnam — Agent Purple — and determined that it posed no unacceptable hazard. See Tr. of Oral Arg. at 24 (plaintiffs' attorney's comments regarding Agent Purple's toxicity). On April 26, 1963, the Army conducted a meeting at its Edgewood (Maryland) Arsenal "to evaluate the toxicity of a[n herbicide] mixture known as `Purple.'" Minutes of a Meeting Held to Discuss and Evaluate the Toxicity of 2,4-D and 2,4,5-T Compounds (Apr. 26, 1963) ("April 1963 Meeting Minutes"), at 3. Their analysis required reaching a conclusion "about dose levels and hazards to health of men and domestic animals from 2,4-D and 2,4,5-T based on the medical literature and unpublished data of various research laboratories." Id. Those in attendance included officials from various branches of the military and various other government agencies, and representatives from manufacturers Dow Chemical and AmChem Products. Id. at 2. The group heard various presentations on the subject. At the end of the meeting, the participants adopted "acute toxicity" figures for Agent Purple. They concluded

> in summary and after careful review of toxicological data related to 2,4-D and 2,4,5-T plus the knowledge as to the manner these materials have been used for defoliation in military situations in

> Southeast Asia, . . . that no health hazard is or was involved to men or domestic animals from the amounts or manner these materials were used. . .

Id. at 5. Thereafter, the government continued to contract with the defendants for purchase of the same and similar defoliating agents.[fn17]

In other words, the Army examined the toxicology data available to it and concluded that Agent Orange's components, 2,4,5-T and 2,4-D — in the formulation that the government, in its discretion, used when ordering it, and as it was then being manufactured — posed "no health hazard" and were, at least under the circumstances of international armed conflict, suitable for use in Southeast Asia. Since the government continued to order Agent Orange after having evaluated its toxicity levels and declared them acceptable, we "cannot second-guess" the manufacturers' decision to produce the agents in the manner that they did. Lewis, 985 F.2d at 89. Because "[t]he imposition of liability under state law would constitute a significant conflict with the [g]overnment's decision" that the defoliants used in Vietnam as they were produced by the defendants posed no unacceptable hazard, id., we conclude that the first Boyle requirement is met.

(ii) The Grispo language. There is language in Grispo that seems to require something more: that when the government "mak[es] a discretionary, safety-related military procurement decision contrary to the requirements of state law," it

"incorporate□ th[e] decision into a military contractor's contractual obligations." Grispo, 897 F.2d at 632. But we concluded in Lewis that the government's order of replacement Babcock cables with knowledge of the risks to pilots associated with the defect in question was itself sufficient to prevent "second-guess[ing]" of the manufacturer's choice to continue using the same cable coating, even though nothing in Lewis suggests either (1) that the government included in the re-order contract a specification instructing that the suspect material be used, or (2) that the defendant manufacturer had been apprised of the government's investigation of the alleged corrosion problem. See Lewis, 985 F.2d at 89 ("We hold that when the [g]overnment reordered the specific Babcock cable, with knowledge of its alleged design defect, the [g]overnment approved reasonably precise specifications for that product such that the manufacturer qualifies for the military contractor defense for any defects in the design of that product." (emphasis added)).

Insofar as there is a tension between the two cases, we think it is resolved by Boyle. In framing the first Boyle requirement, the Boyle Court sought to "assure that the suit [in which the contractor defense is asserted] is within the area where the policy of the `discretionary function' would be frustrated" absent the availability of the defense. Boyle, 487 U.S. at 512. Although the Court used the term "reasonably precise specifications," we think that, as in Lewis, reordering the same product with knowledge of its relevant defects plays the identical

role in the defense as listing specific ingredients, processes, or the like.

In Boyle, the alleged state law duty of care was "precisely contrary to the duty imposed by the [g]overnment contract." Id. at 509. But the opinion did not hold that a conflicting, express contractual duty was required for the contractor defense to preempt state law. The issues as framed by the Boyle Court were not narrowly about duties imposed by contract; they were more broadly about federal policies and interests and the exercise of federal discretion, in the face of contrary state law, in furthering them. See id. at 507 ("Displacement will occur only where . . . a `significant conflict' exists between an identifiable `federal policy or interest and the [operation] of state law.'" (quoting Wallis v. Pan Am. Petroleum Corp., 384 U.S. 63, 68 (1966) (brackets in original) (emphasis added)); see also id. at 509 (stating that even where federal contractual and state tort duties were "precisely contrary," "it would be unreasonable to say that there is always a `significant conflict' between the state law and a federal policy or interest" (emphasis added)).

The government's "uniquely federal interest," id. at 504, in fully taking advantage of its ability to determine what level of risks and dangers must be tolerated in order to achieve a particular military goal need not be belabored. See Agent Orange I Opt-Out Op., 818 F.2d at 191 ("Civilian judges and juries are not competent to weigh the cost of injuries caused by a product against the cost of avoidance in lost military efficiency. Such judgments involve the nation's geopolitical goals and choices

among particular tactics. . . ."). We pause only to note that the federal interest implicated by the lawsuits here is not only the ordinary need to ensure the government's "work" gets "done," Boyle, 487 U.S. at 505, but the ability to pursue American military objectives — in this case, protection of American troops against hostile fire.

The government made an express determination, based on the knowledge available to it at the time, that Agent Orange as then being manufactured posed no unacceptable hazard for the wartime uses for which it was intended, and that the product should continue to be manufactured and supplied to it. In light of this exercise of discretion, we read Boyle to require displacement of any alleged state law rules to the contrary.[fn18]

2. Compliance with Specifications. The plaintiffs' challenge to the defendants' ability to demonstrate the second requirement for Boyle protection — compliance with the contracts' specifications — does not warrant extensive discussion. Nothing about the presence of dioxin in trace amounts within the 2,4,5-T component of Agent Orange rendered the Agent Orange delivered to the government non-compliant with its contractual obligations. The plaintiffs' own expert agrees. See Aff. of Harry Ensley (Feb. 6, 2004), at ¶ 20 ("[T]he 2,4,5-T the government purchased could contain varying amounts of such impurities as . . . dioxin . . ., yet still be in compliance with the government's specifications. . . ."). There is no allegation that the government received Agent Orange with 2,4,5-T present in anything other than

the proportions and purity levels called for by the terms of the contracts. The second requirement is therefore met as a matter of law. See Miller, 275 F.3d at 420-21 (rejecting same argument made by civilian plaintiffs seeking compensation for injuries allegedly caused by Agent Orange).

3. Defendants' Warnings About Known Dangers. The final Boyle requirement for the invocation of the government contractor defense is that the defendants demonstrate that they "warned the United States about the dangers in the use of the equipment that were known to [them] but not to the United States." Boyle, 487 U.S. at 512. The plaintiffs make essentially two arguments in this regard: (1) that the defendants knew more about the hazards of 2,4,5-T than did the government, but failed to warn the government about them; and (2) that even if some members of the government had some knowledge regarding the dangers of dioxin, Boyle requires that for the defense to be applicable, the actual contracting officials must have such knowledge, and those involved in the specification process for Agent Orange knew nothing about 2,4,5-T's hazards.

The thrust of the defendants' response is that (1) none of the plaintiffs claim an injury of the sort that was a danger known by anyone at the time of Agent Orange's production; (2) as to dangers about which the defendants were aware, the evidence demonstrates as a matter of law that they shared that knowledge with the government; and (3) irrespective of what the defendants knew about Agent Orange in general, the government had far

greater knowledge than the defendants about Agent Orange and the dangers posed by its intended use in Vietnam.

We doubt that the defendants can establish as a matter of law on the present record either the second or third of their contentions — that they shared the knowledge of dangers of which they were aware with the government and that the government had far more knowledge about the dangers of Agent Orange in its planned use. Each is intensely factual and hotly disputed.[fn19] We think that the record is clear, however, that the defendants did not fail to inform the government of known dangers at the time of Agent Orange's production of the type that would have had an impact on the military's discretionary decision regarding Agent Orange's toxicity. We therefore conclude that the defendants have established Boyle's third requirement as a matter of law.

Boyle mandates that to obtain the benefit of the government contractor defense, a contractor must inform the government about known "dangers in the use of the equipment." Boyle, 487 U.S. at 512. But the Boyle Court was silent as to what types of risks rise to the level of dangers that must be disclosed. Prior to Boyle, we were of the view that manufacturers need disclose to the government only those hazards that (1) are "based on a substantial body of scientific evidence"; and (2) create dangers likely "serious enough to call for a weighing of the risk against the expected military benefits," that is, "substantial enough to influence the military decision to use the product." Agent Orange I Opt-Out

Op., 818 F.2d at 193. Until now, neither we nor the Supreme Court has been called upon to decide, post-Boyle, what constitutes "knowledge" of a "danger" that would trigger a duty to inform as to the "equipment" being ordered.

This much is plain: Boyle did not contemplate requiring disclosure of any and all potential risks by the contractor to the government, irrespective of their relation to the governmental discretionary decision at issue. The Boyle Court was concerned primarily with protecting the government's ability to assume certain kinds of risks without assuming the costs of liability for those risks. See Boyle, 487 U.S. at 511-12. It protected this ability by ensuring that where the government accepts such a risk knowingly, a state law that would require finding that same risk unacceptable must be displaced. We therefore do not think that the Boyle Court meant that a defendant seeking the protection of the defense was required to demonstrate that it had shared all known hazards with the government, irrespective of whether those hazards allegedly not conveyed would have had an impact on the government's exercise of discretion about the design defect alleged. It would be impractical to require that a manufacturer compile and present to the government in advance a list of each and every risk associated with a product it is producing for the government. The operation of a tank or a transport plane — more so the manufacture and use of a chemical agent — involves, at the extremities, virtually limitless risks. Even if it were possible to generate such complete lists, their comprehensiveness would overwhelm

government decision makers with largely irrelevant data, extending the time and costs associated with federal contracting and obscuring those risks most likely to have an impact on contracting decisions. A rule that required full disclosure of all possible risks to anyone would be contrary to Boyle's underlying rationale of protecting the federal interest in "getting the Government's work done." Id. at 505.

We therefore adhere to our pre-Boyle precedent. We conclude, much as we did before Boyle was decided, that a defendant may satisfy the third Boyle requirement if it demonstrates that it fully informed the government about hazards related to the government's exercise of discretion that were "substantial enough to influence the military decision" made. Agent Orange I Opt-Out Op., 818 F.2d at 193. The defendants can demonstrate a fully informed government decision by showing either that they conveyed the relevant known and "substantial enough" dangers, id., or that the government did not need the warnings because it already possessed that information, see Lewis, 985 F.2d at 89-90 ("There is no requirement that appellees inform the Air Force of dangers already known to the Air Force.").

Here, the plaintiffs allege that the defendants knew of dioxin's hazards but failed to inform the government of them. The documents to which they cite for this proposition, however, pertain almost universally to the risk of chloracne (a severe skin disease) and liver damage to workers manufacturing Agent Orange. These risks, the manufacturers thought, were created by the dioxin

"impurity" that resulted from producing trichlorophenol, a component of 2,4,5-T. See, e.g., V.K. Rowe, Test. for the 2,4,5-T Hr'g (undated), at 28 (referring to dioxin build-up in trichlorophenol manufacture), PA 3501-02.; Mem. of V.K. Rowe, Dow Chemical Co., at 1 (Jun. 24, 1965) ("Rowe Jun. 1965 Mem.") (referring to dioxin "impurities" present in trichlorophenol that could be "carried through into the T acid").

There is, indeed, ample evidence that the defendants were concerned about the health effects of dioxin, specifically chloracne[fn20] and liver damage,[fn21] on their workers. Tests were conducted that involved exposing animals to pure dioxin, which revealed some "severe response[s]," see Report on the Chloracne Problem Meeting on March 24, 1965 (Mar. 29, 1965) ("Mar. 29 Report"), at 5; similar tests performed on humans some years later using a one-percent dioxin solution that resulted in skin lesions, see Letter of Albert M. Kligman to V.K. Rowe, Dow Chemical Co. (Jan. 23, 1968) PA 3732. At least two defendants considered whether the dioxin in trichlorophenol's manufacture would be manifest in the trichlorophenol itself or in the end products containing trichlorophenol, see, e.g., id. at 4; Mem., Dow Chem. Co. (Mar. 10, 1965) ("Mar. 10 Dow Mem."), Mem. from E.L. Chandler, Diamond Shamrock Co. ("Chandler Mem.") (Jul. 9, 1962), but the danger with which they were concerned was limited to the possibility of a chloracne outbreak among those handling it, see Mar. 10 Dow Mem. (discussing possible need to take precautions that would "prevent injury" akin to what had been

taken following past incidents of chloracne outbreaks); Chandler Mem. (indicating two commercial customers had claimed chloracne problems with "Diamond esters," one of which had no similar problems with other manufacturers' product). There is no evidence to which we have been directed or that we have otherwise found that the defendants' knowledge of 2,4,5-T's risks extended to dioxin as a carcinogen, as a toxin that potentially might cause diseases long after exposure, or as a significant health risk (apart from chloracne) to those exposed to herbicides containing 2,4,5-T being used as such, in wartime conditions or otherwise, except for workers manufacturing them or their component chemicals.[fn22]

How much the government knew about the workplace dangers associated with production of 2,4,5-T while it was considering the use of and ordering Agent Orange is unclear. The minutes from the 1963 meeting at Edgewood Arsenal contained references to a lack of workplace incidents involving 2,4-D and 2,4,5-T. April 1963 Meeting Minutes at 4, Appendix A. The domestic safety record of herbicides containing these two chemicals, including the manufacturers' alleged reports to the Department of Agriculture regarding the absence of ill effects from the herbicides on their workers, was also relayed to the President's Science Advisory Committee in a May 1963 briefing entitled "Possible Health Hazard of Phenoxyacetates as Related to Defoliation Operations in Vietnam." At least two domestic manufacturers, however, had already experienced chloracne breakouts and other problems among its workers.

The documents make clear, however, that the military was concerned about the likely effect on those exposed to the herbicides in the manner in which they were, and were to be, used in Vietnam. This is hardly surprising. The principal purpose of Agent Orange was to attempt to protect American troops from attack by limiting vegetation around American facilities and emplacements that could provide cover to enemy combatants. To that extent, the chemical agents were to be used on American and allied positions, not those of the Viet Cong.

And the undisputed record with respect to dangers that were posed by the use of Agent Orange is that during the entirety of the production of Agent Orange, the defendants knew only that it was possible that those handling herbicides containing 2,4,5-T might develop the skin disease chloracne. The Edgewood participants, including delegates from various branches of the government, military and civil, were aware of this type of risk. See April 1963 Meeting Minutes at 5 (AmChem representative related experiences of "industrial firms making . . . continuous field applications over very large areas" and noted "skin sensitization was the maximum effect produced" in "probably one out of a thousand persons"). Yet the government continued to order Agent Orange in the manner specified in the procurement contracts.

If the government had decided to manufacture Agent Orange, as it considered doing for a period during the late 1960s, the

defendants might well have been required more fully to inform the government of all the possible dangers associated with the manufacture of the chemical (none of them, incidentally, being malignancies). The record suggests that they were prepared to do so. See "Plan `Orange' Production," Dow Chemical Co. (Apr. 20, 1967), at 3 (stating that "[a] serious potential health hazard to production workers is involved in the production of 2,4,5-T" and noting that its "knowhow regarding elimination of the hazard" could be made available to the government), attached to Letter from A.P. Beutel, Vice Pres., Dir. of Gov't Affairs, Dow Chemical Co., to H.G. Fredericks, Deputy Dir. of Procurement and Production, Edgewood Arsenal (Apr. 20, 1967).

We conclude, however, that no reasonable factfinder could find that the defendants had knowledge of a danger that might have influenced the military's conclusion that "operational use" of Agent Orange posed "no health hazard . . . to men or domestic animals," April 1963 Meeting Minutes, at 3, 5, and its presumably related decision to continue to purchase Agent Orange as it was then being produced by the defendants. We find nothing in the record to support an assertion that the defendants "cut□ off information highly relevant to . . . discretionary decision[s]" of the government, Boyle, 487 U.S. at 513, i.e., that they possessed knowledge of dangers unknown to the government that, had they been shared, might have influenced the government's decision regarding the extent of the hazard posed by use of Agent Orange or its choice to continue its use.

We acknowledge that there may well have been some aspects of the dangers of Agent Orange resulting from the trace presence of dioxin that personnel of one or more of the defendants were aware of that members of the military may not have known, at least contemporaneously. We cannot conceive of a long-term relationship between the military and a civilian contractor in which complete equivalence of knowledge at all times in the relationship can be expected or could be established. But nothing in the record of which we are aware would create a triable issue of fact as to whether there was never-disclosed knowledge of a sort that might have influenced the government's decision-making process regarding Agent Orange as it was used in Vietnam.

Accordingly, we conclude that the defendants have established as a matter of law the third requirement of Boyle.

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We feel obliged to note, finally, what seems to us to be obvious: The question raised by government contractor defense cases arising in the context of contracts for military agents and equipment is the extent to which contractors are protected when they provide materials designed to assist the government in obtaining what are ultimately military objectives — in this case the principal objective being to protect members of the armed forces from enemy attack. Considerations of the validity of those objectives and the reasons for which the military seeks them are far beyond

the competence of this Court. Our determination as to the protection of a military contractor must be made using the same principles regardless of the nature of the military conflict in which they are pursued, or the extent to which it is controversial or enjoys popular support.

II. Discovery Rulings

The plaintiffs also appeal from the discovery limitations imposed by the district court during the months following its initial February 9, 2004, decision granting the defendants' motion for summary judgment. We review discovery rulings for abuse of discretion. Wood v. FBI, 432 F.3d 78, 82 (2d Cir. 2005).

As we have noted, the district court's February 9, 2004, government contractor defense opinion granted the plaintiffs a six-month discovery period and permission to seek reconsideration of its summary judgment ruling. Shortly thereafter, the plaintiffs requested "the documents from all of the other litigation that these [defendants] have been involved in, involving the same pesticides and the same type of claims." Tr. of Civil Conference Before The Hon. Joan M. Azrack at 10. They did so without having attempted review of the MDL record. Id. at 16. The defendants objected on the grounds that documents from other cases were likely to be largely irrelevant to the question of the applicability of the government contractor defense, duplicative of MDL materials where relevant in any event, and overly burdensome to produce. Id. at 13-14.

On March 2, 2004, Magistrate Judge Azrack denied the request, ruling that the plaintiffs first had to familiarize themselves with the MDL record before requesting additional documents. On March 19, 2004, Judge Weinstein granted the plaintiffs access to six deposition transcripts from non-MDL cases.

The plaintiffs now argue that the district court abused its discretion by limiting the plaintiffs to the documents produced in the MDL during the 1980s and six subsequent depositions. They assert that in the intervening period, the defendants have been sued by other end-users of their commercial herbicides, citizens exposed to industrial contamination from the herbicides' production, and their workers. Discovery in these cases, they contend, was more extensive than the discovery against the defendants that occurred during the 1980s and would be germane to the defendants' knowledge of the adverse health effects caused by their herbicides. They list thirteen other cases involving three defendants (Dow Chemical, Monsanto, and Hercules) and various government hearings from which they suspect discovery and papers would be helpful. Beyond broad claims that the discovery in those cases was more focused on the defendants' knowledge as compared with the MDL, however, the plaintiffs do not cite specific bases for a conclusion on our part that the documents would differ materially from the voluminous documents available to them through the MDL. The defendants do not respond to the plaintiffs' discovery-related arguments.

The Federal Rules of Civil Procedure permit parties to "obtain discovery regarding any matter, not privileged, that is relevant to the claim or defense of any party," Fed.R.Civ.P. 26(b)(1), but a district court may limit discovery if, among other things,

> it determines that: (i) the discovery sought is unreasonably cumulative or duplicative, or is obtainable from some other source that is more convenient, less burdensome, or less expensive; (ii) the party seeking discovery has had ample opportunity by discovery in the action to obtain the information sought; or (iii) the burden or expense of the proposed discovery outweighs its likely benefit. . . .

Id. R. 26(b)(2)(C). A district court has wide latitude to determine the scope of discovery, and "[w]e ordinarily defer to the discretion of district courts regarding discovery matters." Maresco v. Evans Chemetics, Div. of W.R. Grace & Co., 964 F.2d 106, 114 (2d Cir. 1992). A district court abuses its discretion only "when the discovery is so limited as to affect a party's substantial rights." Long Island Lighting Co. v. Barbash, 779 F.2d 793, 795 (2d Cir. 1985). A party must be afforded a meaningful opportunity to establish the facts necessary to support his claim. Id.

The plaintiffs here have failed to demonstrate that the district court's rulings limiting the scope of discovery constituted an abuse of discretion. We think the district court reasonably

concluded that the MDL files were likely the best source regarding the information the plaintiffs' sought: defendants' knowledge of 2,4,5-T's risks at the time of production. The plaintiffs' motion to Judge Azrack was an unlimited and unfocused request for many thousands of additional documents, made without any attempt to review what was already available to them or to tailor their request to materials reasonably expected to produce relevant, non-duplicative information. Accordingly, the district court's limitations were well within its discretion under Rule 26.

III. Stephensons' Motion to Amend

Finally, the Stephensons challenge the district court's denial of their motion to amend their complaint. Federal Rule of Civil Procedure 15(a), as in effect at the time of the court's order, provided that "[a] party may amend the party's pleading once as a matter of course at any time before a responsive pleading is served. . . . Otherwise a party may amend the party's pleading only by leave of court or by written consent of the adverse party; and leave shall be freely given when justice so requires." Id. "We review the determination of a district court to deny a party leave to amend the complaint under Fed.R.Civ.P. 15(a) for abuse of discretion." McCarthy v. Dun & Bradstreet Corp., 482 F.3d 184, 200 (2d Cir. 2007).

Here, at the time of the Stephensons' motion, the defendants had not filed an answer to their complaint. Stephenson, 220 F.R.D. at 24. Accordingly, the Stephensons were entitled to amend

their complaint as a matter of right without leave of the district court, because "a motion is not a responsive pleading," 6 Charles Alan Wright, Arthur R. Miller & Mary Kay Kane, Federal Practice and Procedure § 1483, at 584 (2d ed. 1990); see id. at 586 ("Nor does a summary judgment motion made before responding [to plaintiff's complaint] have any effect on a party's ability to amend under the first sentence of Rule 15(a)."); accord, e.g., Zaidi v. Ehrlich, 732 F.2d 1218, 1219-20 (5th Cir. 1984); Miller v. Am. Exp. Lines, Inc., 313 F.2d 218, 218-19 & n. 1 (2d Cir. 1963). Because the defendants had not filed a responsive pleading when the Stephensons sought to amend their complaint, the district court erred in denying the amendment.

We conclude, however, that in light of our finding regarding the government contractor defense, the district court's erroneous denial of the Stephensons' motion was harmless. Repleading could not avoid the application of the government contractor defense and, therefore, remand to permit the amendment would be futile. See Sinicropi v. Nassau County, 601 F.2d 60, 62 (2d Cir. 1979) (concluding that even if district court had erred in denying motion to amend, any error would be harmless because the proposed amendment would have been barred by res judicata), cert. denied, 444 U.S. 983 (1979); cf. Unlaub Co., Inc. v. Sexton, 568 F.2d 72, 78 (8th Cir. 1977) (concluding any abuse of discretion by district court in failing to permit defendant to amend his answer was harmless because "[n]one of the matters set forth in the proposed amended answer would affect the result").

CONCLUSION

For the foregoing reasons, we affirm the judgments of the district court.

[fn1] Plaintiff Garncarz is the only plaintiff who alleges harmful exposure to Agent Orange outside of Vietnam. She contends that her husband died from conditions resulting from his exposure to Agent Orange along the Korean Demilitarized Zone. She does not, however, raise any distinct arguments arising out of her husband's alleged exposure in Korea. We therefore consider her case, for present purposes, as indistinguishable from the others before us.

[fn2] The Court's opinion in Vietnam Assoc. for Victims of Agent Orange/Dioxin v. Dow Chem. Co., — F.3d —, 2008 WL —, 2008 LEXIS App. —, No. 05-1953-cv (2d Cir. 2008), filed today, sets forth in some detail, based on the record in that litigation, the history of the employment of Agent Orange and related chemicals to prosecute the war in Vietnam.

[fn3] The several formulations were, like Agent Orange, named according to the color-coded band on the drums containing the chemicals. Since Agent Orange was the most widely deployed, the parties refer to all the herbicides collectively as "Agent Orange" unless the particular circumstance requires that the agents be distinguished. We adopt the same convention.

[fn4] Most of these contracts have been produced to the plaintiffs, but some are difficult to read in the form in which they survive, and, as discussed below, some are missing.

[fn5] We also held that the defendants had properly removed the Isaacson case from state to federal court. Id. at 256-57. As explained in the companion opinion, see Stephenson v. Dow Chem. Co., 346 F.3d 19, 21 (2d Cir. 2003), this holding was subsequently vacated by the Supreme Court and remanded to the district court for a further determination as to the propriety of removal. See Dow Chem. Co. v. Stephenson, 539 U.S. 111, 112 (2003).

[fn6] At oral argument, we requested supplemental briefing on the question of whether we are bound by our decision in Agent Orange III to conclude that these plaintiffs are not bound by the settlement agreement addressed in Agent Orange I. We received the parties' submissions on August 3, 2007. In light of our disposition regarding the government contractor defense, however, we decline to reach the issue.

[fn7] Although not expressly raised by the appellants or noted by the district court, the defendants' Rule 56.1 Statement appears to have been in blatant violation of Local Rule 56.1, which requires summary judgment movants to list each undisputed material fact "followed by citation to evidence which would be admissible. . . ." S.D.N.Y. & E.D.N.Y. Local R. 56.1(a), (d), available at http://www1.nysd.uscourts.gov/rules/rules.pdf. The defendants' approach to compliance with this rule

has rendered our task of determining on appeal whether there are genuine issues of disputed material fact considerably more difficult than it should have been.

[fn8] The district court also denied plaintiffs' motion to strike certain of defendants' affidavits and exhibits — a ruling the plaintiffs did not appeal — and found removal of the state court cases proper. Judge Hall's companion opinion addresses this latter ruling.

[fn9] Because the plaintiffs' briefs make no arguments regarding the district court's findings as to their failure-to-warn or manufacturing defect claims, we deem these claims to have been abandoned. See Hughes v. Bricklayers & Allied Craftworkers Local #45, 386 F.3d 101, 104 n. 1 (2d Cir. 2004).

[fn10] Not all of the plaintiffs have raised the same arguments on appeal. Because the defendants have grouped the plaintiffs together as one unit in opposing this appeal, and because by Order dated September 15, 2005, we granted the plaintiffs permission to rely on the arguments made by one another, we here treat each issue raised on appeal by one plaintiff, with the exception of the Stephensons' motion to amend, as having been raised by all.

[fn11] The defense is referred to in the case law as the "government contractor defense" or the "military contractor defense." For purposes of this opinion, we refer to it as either the "government

contractor defense" or simply the "contractor defense."

[fn12] The plaintiffs also complain that because the defendants cannot produce every contract between them and the government for Agent Orange, it is impossible for the defendants to prove what contractual specifications they were subject to under the missing contracts and, therefore, impossible for the defendants to meet their burden of proof under the government contractor defense.

This argument is without merit for many reasons. We note here only that although it is true that a defendant who had no way to demonstrate what specifications were within the contract or contracts at issue would likely have difficulty successfully asserting the contractor defense, the plaintiffs here do not attempt to rely on particular contracts or to distinguish one contract from another. None of their arguments regarding the first Boyle prong rely on the specifications of a particular contract versus the specifications of another. The plaintiffs therefore have not demonstrated that the inability to produce each and every contract is relevant to the applicability of the government contractor defense for the Agent Orange contracts as a whole.

[fn13] Pure lead, without defect, may be a defect of a child's painted toy.

[fn14] "Fed.R.Civ.P. 56 does not impose an obligation [on the court considering a motion for summary judgment] to perform an independent

review of the record to find proof of a factual dispute." Amnesty America v. Town of West Hartford, 288 F.3d 467, 470 (2d Cir. 2002).

[fn15] The plaintiffs at times refer to the defendants' failure to use the Boehringer process as resulting in a "manufacturing" defect. Not so. The plaintiffs allege a defective process, not that the process used was somehow erroneously applied. They therefore allege a design defect. As the Eleventh Circuit noted,

> [the] distinction between "aberrational" defects and defects occurring throughout an entire line of products is frequently used in tort law to separate defects of manufacture from those of design. Stated another way, the distinction is between an unintended configuration, [a manufacturing defect], and an intended configuration that may produce unintended and unwanted results[,] [a design defect].

Harduvel, 878 F.2d at 1317 (internal citation omitted).

[fn16] Although not dispositive here, we nonetheless note that the plaintiffs' argument regarding the defendants' purported failure to use state-of-the-art manufacturing processes would appear problematic in ways that do not affect our decision as to the applicability of the government contractor defense as a matter of law, but which might present insurmountable obstacles were we to remand for consideration of the plaintiffs' claims on their merits. For example, documents that are

part of the record on appeal indicate that the Dow Chemical Company purchased the proprietary information for the Boehringer process in December 1964 and began using it in its chemical plants two years later. See Mem. from J.D. Doedens, Chemicals Dep't, Dow Chem. Co. (Mar. 1, 1965), at 2; Mem. from K.E. Coulter, Midland Division Research & Dev., Dow Chem. Co. (Apr. 25, 1967), at 2. The plaintiffs do not explain how they can seek to hold Dow Chemical liable for Agent Orange produced using the method they now contend should have been used by all manufacturers at all relevant times, or how they might seek to distinguish among manufacturers or between particular manufacturers' batches of herbicides in proving that their exposure to the defoliants caused the injuries about which they now complain. See Agent Orange I Opt-Out Op., 818 F.2d at 189 (noting the "undisputed facts that the amount of dioxin in Agent Orange varied according to its manufacturer and that the government often mixed the Agent Orange of different manufacturers and always stored the herbicide in unlabeled barrels"). Nor is it clear that under these circumstances, the defendants' knowledge dating from the late 1950s that the Boehringer plant was using a new manufacturing process would necessarily translate into a state law tort duty to have adopted it themselves.

[fn17] The government also evaluated the toxic effects of 2,4,5-T at other points during its use in Vietnam. For example, just several weeks after the Edgewood meeting, on May 9, 1963, the President's Scientific Advisory Committee was briefed on the "Possible Health Hazard of Phenoxyacetates As

Related to Defoliation Operations in Vietnam." The Bionetics Study — a government-sponsored research project that included research into the health effects of 2,4,5-T — also began in 1963. It was this research that ultimately triggered, among other curtailments of 2,4,5-T's use, cessation of the defoliation campaign. Dr. R.A. Darrow, Fort Detrick, "Historical, Logistical, Political and Technical Aspects of the Herbicide/Defoliant Program, 1967-1971," at 20-22.

[fn18] We note that the second and third Boyle requirements remain essential to proving the government contractor defense even where, as here, the defendants do not rely on a contractual duty to demonstrate the required conflict between federal interests and state law. The government's discretionary determination about the design defect alleged was necessarily made in the shadow of the government's expectations regarding the product it expected to receive. Defendants therefore must demonstrate that the product it delivered to the government was precisely what the government requested. The third prong is likewise unaffected: The government's discretionary determination must be a fully informed one.

[fn19] We concluded in Agent Orange I, based on much the same record now before us, that "the critical mass of information about dioxin possessed by the government during the period of Agent Orange's use in Vietnam was as great as or greater than that possessed by the chemical companies." Agent Orange I Opt-Out Op., 818 F.2d at 193. The Fifth Circuit, relying in large part on

our Agent Orange I determination, concluded the same. See Miller, 275 F.3d at 421. But we are required to review the factual record anew as it is presented to us, not as it was presented to a different panel twenty years ago. And we note, as we did in Agent Orange I, that we were in 1987 without the benefit of briefing by the parties on this subject. Agent Orange I Opt-Out Op., 818 F.2d at 190.

[fn20] As to the dangers related to chloracne, the documents submitted show that knowledge of the risk varied among manufacturers. Not all manufacturers had experienced chloracne outbreaks. Among those that did, it was not clear that dioxin was in the final products emanating from the contaminated plant. See V.K. Rowe, Test. for the 2,4,5-T Hr'g (undated), at 28-29 (indicating testing of Dow trichlorophenol and 2,4,5-T following 1964 chloracne outbreak in manufacturing plant revealed no "chloracnegens," and that source of outbreak was contaminated waste oil, "not exposure to trichlorophenol"). Dow thought that dioxin concentrations of less than one part per million presented no chloracne hazard to workers or consumers, Rowe Jun. 1965 Mem., at 1, and changed its production process such that the concentration of dioxin in its Agent Orange would be reduced to the point where, in its view, the hazard would be eliminated.

[fn21] Variance among the defendants regarding their knowledge of the risks of liver damage to humans was similar to that related to chloracne, with some, but not all, of the defendants aware that animal tests showed liver damage was a possible

result of direct exposure to dioxin and that there was liver damage among workers engaged in manufacturing 2,4,5-T. There were also isolated instances of other health concerns arising from manufacturing processes — for example, temporary nerve damage (Monsanto) and unspecified "systemic injury" (Dow). See Deposition Excerpts of Dr. Wallace, at 2468; Rowe Jun. 1965 Mem. at 1. None of the documents reveal knowledge of any such danger to non-workers.

[fn22] As to the specific subject of dioxin as a carcinogen, the Dow Chemical Company testified before Congress that its numerous tests and experiments regarding dioxin's toxicity did not examine the chemical's carcinogenicity. Test. of Dr. Julius E. Johnson, Vice President, Dow Chemical Co., Apr. 7 and 15, 1970, at 371. The plaintiffs do point us to a memorandum written by Monsanto's medical director, R. Emmet Kelly, in which he expresses the need to "minimize the presence of this known chloracne agent" because dioxin "[v]ery conceivably [could] be a potent carcinogen." Mem. from R. Emmet Kelly, Monsanto Company (Mar. 30, 1965). But this "conception" alone — without any context as to its basis or the relationship between the harms of dioxin in its pure form versus the trace amounts of the chemical found within Agent Orange — is not enough to convince a reasonable factfinder that dioxin was a known carcinogen at the time of Agent Orange's production or, more importantly, that the defendants knew that the trace amounts of dioxin in Agent Orange might prove to be a carcinogen for those not involved in its manufacture or direct handling. See Agent Orange I Opt-Out Op.,

818 F.2d at 193 ("[T]he fact that dioxin may injure does not prove the same of Agent Orange . . . ."). We express no view regarding whether the defendants might have done more to investigate dioxin's dangers, as it is well beyond the purview of our inquiry. Cf. Kerstetter v. Pac. Sci. Co., 210 F.3d 431, 436 (5th Cir. 2000) (discussing relationship between contractor defense and latent defects).

APPENDIX B

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

In re "AGENT ORANGE" PRODUCT LIABILITY LITIGATION	:	MDL No. 381
JOE ISAACSON and PHYLLIS LISA ISAACSON, Plaintiffs, -against- DOW CHEMICAL COMPANY, et al. Defendants.	:	MEMORANDUM & ORDER (REMOVAL) 98-CV-6383 (JBW)
DANIEL RAYMOND STEPHENSON, Plaintiff, -against- DOW CHEMICAL	:	99-CV-3056 (JBW)

COMPANY, et al. :
:
Defendants. :
----------X

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Jack B. Weinstein, Senior United States District Judge

Table of Contents

I. Introduction

Plaintiffs, Vietnam veterans, sue manufacturers who supplied Agent Orange, a herbicide used in the 1960's by the United States armed forces as a spray, primarily from aircraft, to reduce foliage behind which the enemy might lurk. They allege that they suffer from diseases that have just recently become apparent, and that the cause of their ailments is the negligence of the manufacturers in delivering to the government Agent Orange containing an unnecessary toxic substance - dioxin. Mistakes in and of Vietnam can be attributed to the United States under at least three presidents. *Cf.* "The Fog of War" (Sony Classics 2003) (former Secretary of Defense Robert S. McNamara on Agent Orange and related matters). These errors do not

form the basis for a tort action by these plaintiffs against these defendants.

In earlier waves of such suits in the 1970s, 1980s and 1990s, the courts concluded that none of the available evidence would support a finding to a more-probable-than-not standard of causality between exposure to Agent Orange and disease (except for a quickly discoverable and curable form of skin irritation, chloracne). The scientific basis for that conclusion of lack of any substantial proof of causality, either general or specific to individuals, remains much the same. *See* Institute of Medicine, Veterans and Agent Orange: Update 2002 (2003).

Congress has now provided for payment to veterans of compensation for a series of diseases presumptively caused by exposure to Agent Orange. *See McMillan v. Togus Regional Office, Dep't of Veterans Affairs,* 294 F. Supp. 2d 305 (E.D.N.Y. 2003) ("Based on statistical associations, the Academy's studies have resulted in the creation of presumptions that certain diseases are attributable to Agent Orange for purposes of Veteran's compensation. These 'associations' are not equivalent to cause in a legal sense for such purposes as mass tort liabilities. These presumption decisions are made by the Secretary for Veterans Affairs. A showing of cause to any degree of probability is not required. The result is summarized in the privately funded National Veterans Legal Services Program, Self-Help Guide on Agent Orange, Advice for Vietnam Veterans and their Families (2000 plus supplement) ("Self-Help Guide"), financed, in part, by this court from proceeds from

an Agent Orange Settlement Fund created by contributions from manufacturers of Agent Orange.").

Some three hundred and thirty million dollars was distributed to veterans and their families from an Agent Orange Fund resulting from a class action. Payments into the fund of one hundred and eighty million dollars were made by defendants in the instant case in settlement of the class action designed to terminate any liability they might have -- present or future -- for the production of Agent Orange. *See* Deborah E. Greenspan, Special Master, *In Re "Agent Orange" Product Liability Litigation:* Final Report of the Special Master on the Distribution of the Agent Orange Settlement Fund (1997) ("Final Report"). A total of 105,817 individual veterans' claims were processed, of which 52,220 were approved for payment from the Fund. *Id.* at 30. 24,776 individual appeals were decided by the court and Special Master for Appeals. The Class Assistance Program for members of veterans' families granted funds to programs that served 239,110 members of Vietnam veterans' families. *Id.* at 41. Funds to many Vietnam veterans in Australia and New Zealand were distributed by committees in those countries.

In the present suit, plaintiff Joe Isaacson alleges that he has non-Hodgkin's lymphoma and other ailments that he attributes to exposure to Agent Orange while serving as a crew chief for an attack fighter squadron in Vietnam from 1968 to 1969; his wife sues for loss of consortium. Plaintiff

Daniel Raymond Stephenson alleges that he has multiple myeloma, a cancer of the bone marrow, from exposure to Agent Orange while serving both on the ground in Vietnam from 1965 to 1966 and as a helicopter pilot from 1969 to 1970; his wife and children sue for loss of consortium. These diseases are recognized by the Veterans Administration as presumptively connected to Agent Orange exposure. *See* Self-Help Guide at 5-6. Under the government program, both plaintiff veterans qualify for a veteran's disability benefit regardless of when these diseases first appeared. *Id.* Both veterans allege that they discovered their diseases after the Agent Orange Fund had been fully expended and it was too late to apply for payment as a member of the class; that they had not been properly represented as members of the class; and that the settlement did not bind them.

Plaintiffs claims are based on theories of strict products liability in tort, including design defects, manufacturing defects, failure to warn, breach of implied warranty, negligence, fraud, and misrepresentation. They seek compensatory and punitive damages. All of the claims center on the presence of 2,3,7,8-tetrachlorodibenzo para dioxin ("dioxin") in Agent Orange.

Defendants manufactured and sold Agent Orange to the United States government for use by the military as a defoliant in Vietnam pursuant to contracts they entered into with the government at various times during the 1960s. They contend that dioxin contamination was known to, and considered

by, the government in light of all the information then available of the possible hazards it posed, at the time Agent Orange was ordered from defendants and used in Vietnam. They claim that they were ordered by the government to supply the product according to government specifications; that the material supplied by the defendants was manufactured, mixed, used and marked on government orders and under its supervision; and that the warnings they would have used had a similar product been sold commercially by them were omitted by government direction -- in short, that the government contractor defense applies.

Because the present plaintiffs discovered what they believe to be their Agent Orange-related diseases after the Agent Orange Fund was fully expended, the appellate courts have now held that these post-Fund-discovery plaintiffs are not bound by the class action settlement that created the Fund. *Stephenson. v. Dow Chemical,* 273 F.3d 249 (2d Cir. 2001), *aff'd as to the Stephensons by an equally divided 4 to 4 court and vacated as to the Isaacsons in light of Sygenta Crop Protection, Inc. v. Henson, in Dow Chemical Co. v. Stephenson,* 539 U.S. 111, 123 S. Ct. 2161, 156 L. Ed. 2d 106 (2003).

Defendants might have moved for summary judgment on the ground that plaintiffs could not prove causality, or for other reasons. Instead, they have chosen to seek dismissal based only on the government contractor defense. "If a subsequent summary judgment motion raises different issues, however, including grounds different from those

raised in the first motion, it is considered proper and will be reviewed and decided by the court." 3 Moore's Federal Practice § 56.10[7].

Two procedural approaches are at war. First, it is desirable to provide a court with all possible credible bases for disposing of a case on the merits at one time in order to avoid the necessity of successive motions. Second, it is useful to minimize the burden of a litigation by resolving it on a theory requiring the least expense and consumption of time even though another theory could be established by the available proof. Such tactical courage is unusual since it risks a loss on appeal should only one member of the Court of Appeals panel prefer the basis proffered for finding in the movants' favor, while another would have favored only another basis which was not put forward, and the third member would reject both.

Here the second path is defensible. Were the motion for summary judgment made on the ground of lack of plausible causality evidence sufficient to support a verdict, enormous epidemiological and exposure data as well as details of plaintiffs' service in Vietnam and medical history might need to be explored in pretrial proceedings at great expense to the parties. *Daubert* and other hearings would probably be required. It is much simpler to decide the case in the first instance on the dispositive government contractor defense.

As indicated below, Part VII, *infra,* the court is tentatively ruling on the motion for summary judgment even though it is allowing plaintiffs additional time for discovery. Plaintiffs' contention that they have faced difficulties in obtaining information sufficient to contest the motion appears based in part on the fact that many of the critical acts occurred many years ago. By tentatively deciding the motion now, and permitting discovery over the period requested by plaintiffs, the court focuses the parties' attention on the critical issues and evidence. *Cf. Mason Tenders Dist. Council Pension Fund v. Messera,* 958 F. Supp. 869, 894 (S.D.N.Y. 1997) (denying request for further discovery when party lacked specificity as to what additional information was required). Normally a court will postpone decision on a summary judgment motion until the completion of discovery. If a court finds, however, that a party cannot present facts sufficient to oppose the motion, it may inter alia "make such other order as is just." Fed. R. Civ. P. 56(f); *see also* 3 Moore's Federal Practice § 56.10[8][a].

The rest of this memorandum is divided as follows: Part II recounts briefly prior Agent Orange litigation; Part III states the facts relating to the government contractor defense; Part IV sets out the law on the government contractor defense; Part V applies the law to the facts; Part VI is the Conclusion dismissing the complaints; and Part VII stays the judgment until the completion of further discovery.

II. Agent Orange Litigations

Litigation arising from claims that Vietnam veterans contracted diseases as a result of defendants' supplying Agent Orange has been extensive. It is briefly summarized below. The docket sheets in this court under MDL 381 (Agent Orange) list almost 17,000 entries (Hon. Sol Schreiber and Hon. Shira A. Scheindlin supervising discovery). In addition there are: hundreds of thousands of inquiries, applications and decisions of the Agent Orange insurance facility; tens of thousands of administrative appeals (Special Master for Appeals W. Bernard Richland); decisions in the operation of the payment plan (Special Masters Kenneth R. Feinberg and Deborah Greenspan); decisions and minutes of the Advisory Committee to the Court of Vietnam Veterans (Charles Timothy Hagel et al advisors); decisions and minutes of the Advisory Committees on Banks and Investments (Richard J. Davis et al advisors); reports of the banks, investment advisers, the insurance facility, and others; extensive correspondence, books, training guides, brochures, reports and video cassettes for those providing services to families under the direction of the court created Agent Orange facility which dealt with families and social agencies in all the states, Puerto Rico and United States dependancies (Dennis K. Rhodes, administrator); and correspondence reports and orders in connection with services to Australian and New Zealand veterans. These huge files are available in the archival storage of this court and in the National Archives. *See* Final Report.

A. Generally

The current controversy is part of a continuing litigation whose first phase ended in settlement after six years of effort by many lawyers and court officers -- special masters, magistrates, and judges. Among the hundreds of published and unpublished decisions, see *Dow Chemical Co. v. Stephenson,* 123 S. Ct. 2161 (2003) (per curiam); *Dow Chemical Co. v. Ryan,* 484 U.S. 953 (1987); *Stephenson v. Dow Chemical Co.,* 346 F.3d 19 (2d Cir. 2003); *Stephenson v. Dow Chemical Co.,* 273 F.3d 249 (2d Cir. 2001); *Miller v. Diamond Shamrock Co.,* 275 F.3d 414 (5th Cir. 2001) (holding that plaintiff's claims were barred by the government contractor defense); *In re "Agent Orange" Prod. Liab. Litig.,* 1999 WL 1045197 (E.D.N.Y. 1999); *Winters v. Diamond Shamrock Chemical Co.,* 149 F.3d 387 (5th Cir. 1998) (holding that plaintiffs' claims were barred by the government contractor defense); *Jenkins v. Agent Orange Settlement Fund,* 131 F.3d 131 (2d Cir. Dec 17, 1997) (unpublished disposition); *Addington v. Agent Orange Veterans Payment Program,* 131 F.3d 130 (2d Cir. Nov 24, 1997) (unpublished disposition); *Gough v. Agent Orange Settlement Fund,* 104 F.3d 353 (2d Cir. Nov 05, 1996) (unpublished disposition); *In re "Agent Orange" Prod. Liab. Litig.,* 996 F.2d 1425 (2d Cir. 1993); *Ryan v. Dow Chemical Co.,* 781 F. Supp. 902 (E.D.N.Y. 1991) (plaintiffs cannot collaterally attack prior settlement); *In re Ivy,* 901 F.2d 7 (2d Cir. 1990) (MDL Panel had jurisdiction to transfer); *In re "Agent Orange" Prod. Liab. Litig.,* 689 F. Supp. 1250 (E.D.N.Y. 1988) (approved settlement and allowed opt-out claimants to be included in class); *In re "Agent Orange" Prod. Liab.*

Litig., 821 F.2d 139 (2d Cir. 1987) (no abuse of discretion in unsealing documents); *In re "Agent Orange" Prod. Liab. Litig.,* 818 F.2d 179 (2d Cir. 1987) (appeal reviewing settlement plan); *In re "Agent Orange" Prod. Liab. Litig.,* 818 F.2d 194 (2d Cir. 1987) (affirming dismissal of *Federal Tort Claims Act* claims of servicemen); *In re "Agent Orange" Prod. Liab. Litig.,* 818 F.2d 204 (2d Cir.1987); *In re "Agent Orange" Prod. Liab. Litig.,* 818 F.2d 210 (2d Cir.1987); *In re "Agent Orange" Prod. Liab. Litig.,* 818 F.2d 216 (2d Cir.1987); *In re "Agent Orange" Prod. Liab. Litig.,* 818 F.2d 226 (2d Cir.1987); *In re "Agent Orange" Prod. Liab. Litig.,* 475 F. Supp. 928 (E.D.N.Y. 1979) (dismissing federal constitutional and statutory claims, reserving possible federal common law claims, denying motion to limit communications to third parties); *In re "Agent Orange" Prod. Liab. Litig.,* 506 F. Supp. 737 (E.D.N.Y. 1979) (finding subject matter jurisdiction on basis of federal common law issues), *rev'd,* 635 F.2d 987 (2d Cir. 1980), *cert. denied,* 454 U.S. 1128 (1981); *In re "Agent Orange" Prod. Liab. Litig. (Callaghan),* 1980 U.S. Dist. LEXIS 9874 (E.D.N.Y. 1980) (granting motion of terminally ill plaintiff to videotape his own deposition); *In re "Agent Orange" Prod. Liab. Litig.,* 506 F. Supp 750 (E.D.N.Y. 1980) (ordering government to refrain from destruction of documents pursuant to internal procedure); *In re "Agent Orange" Prod. Liab. Litig.,* 506 F. Supp. 753 (E.D.N.Y. 1980) (various orders concerning modification of complaint and answers); *In re "Agent Orange" Prod. Liab. Litig.,* 506 F. Supp. 754 (E.D.N.Y. 1980) (ordering videotaped deposition); *In re "Agent Orange" Prod. Liab. Litig.,* 506 F. Supp. 756 (E.D.N.Y. 1980) (establishing agenda for status

conference); *In re "Agent Orange" Prod. Liab. Litig.,* 506 F. Supp. 757 (E.D.N.Y. 1980) (requiring plaintiffs to file individual notices to retain right to bring actions against federal government); *In re "Agent Orange" Prod. Liab. Litig.,* 506 F. Supp. 762 (E.D.N.Y. 1980) (dismissing claims against government as third-party defendant, establishing case management plan, conditionally certifying *Rule 23(b)(3)* class, and denying defendants' motion for summary judgment); *In re "Agent Orange" Prod. Liab. Litig.,* 91 F.R.D. 616 (E.D.N.Y. 1981) (establishing committee to review procedures for videotaped depositions); *In re "Agent Orange" Prod. Liab. Litig.,* 91 F.R.D. 618 (E.D.N.Y. 1981) (allowing motion to amend caption, denying motion to amend complaint, denying defendants' motion for summary judgment on government contractor defense); *In re "Agent Orange" Prod. Liab. Litig.,* 93 F.R.D. 514 (E.D.N.Y. 1982) (allowing defendant to proceed with scheduled destruction of documents); *In re "Agent Orange" Prod. Liab. Litig.,* 534 F. Supp. 1046 (E.D.N.Y. 1982) (denying reargument on dismissal of government as third-party defendant, denying interlocutory appeal, provisionally dismissing claims against non-manufacturer defendants, denying motion to form steering committee for plaintiffs' counsel, denying motion for decertification of class, deferring decision on statute of limitations issues, and establishing elements of government contractor defense); *In re "Agent Orange" Prod. Liab. Litig.,* 537 F. Supp. 977 (E.D.N.Y. 1982) (provisionally dismissing claims against non-manufacturer defendant); *In re "Agent Orange" Prod. Liab. Litig.,* 94 F.R.D. 173 (E.D.N.Y. 1982) (appointing special master to supervise discovery); *In re "Agent Orange"*

Prod. Liab. Litig., 544 F. Supp. 808 (E.D.N.Y. 1982) (denying motion to disqualify defense attorneys; provisionally dismissing claims against certain non-manufacturer defendants, and denying motion to implead suppliers); *In re "Agent Orange" Prod. Liab. Litig.,* 95 F.R.D. 191 (E.D.N.Y. 1982) (clarifying that denial of motion to implead suppliers was without prejudice); *In re "Agent Orange" Prod. Liab. Litig.,* 95 F.R.D. 192 (E.D.N.Y. 1982) (affirming special master's ruling as to location of depositions); *In re "Agent Orange" Prod. Liab. Litig.,* 96 F.R.D. 578 (E.D.N.Y. 1983) (adopting special master's protective order for discovery of government documents); *In re "Agent Orange" Prod. Liab. Litig.,* 96 F.R.D. 582 (E.D.N.Y. 1983) (rejecting *first amendment* challenge to protective order); *In re "Agent Orange" Prod. Liab. Litig.,* 96 F.R.D. 587 (E.D.N.Y. 1983) (adopting with modifications special master's order regarding videotaped depositions); *In re "Agent Orange" Prod. Liab. Litig.,* 97 F.R.D. 424 (E.D.N.Y. 1983) (adopting protective order); *In re "Agent Orange" Prod. Liab. Litig.,* 97 F.R.D. 424 (E.D.N.Y. 1983) (adopting special master's protective order for Department of Agriculture documents); *In re "Agent Orange" Prod. Liab. Litig.,* 97 F.R.D. 427 (E.D.N.Y. 1983) (adopting special master's procedures for discovery of documents possibly subject to executive privilege); *In re "Agent Orange" Prod. Liab. Litig.,* 97 F.R.D. 541 (E.D.N.Y. 1983) (denying interlocutory appeal of decision deferring certification of class and determination of appropriate notice); *In re "Agent Orange" Prod. Liab. Litig.,* 97 F.R.D. 542 (E.D.N.Y. 1983) (affirming special master's denial of discovery request); *In re "Agent Orange" Prod. Liab. Litig.,* 565 F. Supp. 1263 (E.D.N.Y. 1983) (granting summary

judgment for four defendants on government contractor defense; denying summary judgment for other defendants); *In re "Agent Orange" Prod. Liab. Litig.,* 98 F.R.D. 522 (E.D.N.Y. 1983) (adopting order of special master concerning discovery of government documents); *In re "Agent Orange" Prod. Liab. Litig.,* 98 F.R.D. 539 (E.D.N.Y. 1983) (adopting special master's order to unseal documents in connection with summary judgment motions); *In re "Agent Orange" Prod. Liab. Litig.,* 98 F.R.D. 554 (E.D.N.Y. 1983) (denying request for reconsideration of order to unseal documents); *In re "Agent Orange" Prod. Liab. Litig.,* 98 F.R.D. 557 (E.D.N.Y. 1983) (ordering special master to review discovery decisions in light of court's decision to try causality and liability issues); *In re "Agent Orange" Prod. Liab. Litig.,* 98 F.R.D. 558 (E.D.N.Y. 1983) (approving special master's order of additional discovery to clarify circumstances surrounding document destruction); *In re "Agent Orange" ,* 570 F. Supp. 693 (E.D.N.Y. 1983) (clarifying program for discovery); *In re "Agent Orange" Prod. Liab. Litig.,* 571 F. Supp. 481 (E.D.N.Y. 1983) (granting motion of law firm to be relieved as lead counsel for plaintiffs and appointing new plaintiffs' management committee); *In re "Agent Orange" Prod. Liab. Litig.,* 99 F.R.D. 338 (E.D.N.Y. 1983) (approving discovery recommendations of special master); *In re "Agent Orange" Prod. Liab. Litig.,* 99 F.R.D. 645 (E.D.N.Y. 1983) (lifting prior protective order applying to government documents obtained during discovery); *In re "Agent Orange" Prod. Liab. Liab.,* 100 F.R.D. 718 (E.D.N.Y.) (certifying Rule 23(b)(3) and Rule 23(b)(1)(B) classes), *appeal denied,* 100 F.R.D. 735 (E.D.N.Y. 1983), *mandamus denied,* 725 F.2d 858 (2d Cir.

1984), *aff'd,* 818 F.2d 145 (2d Cir. 1987), *cert. denied,* 484 U.S. 1004 (1988); *In re "Agent Orange" Prod. Liab. Litig.,* 100 F.R.D. 778 (E.D.N.Y. 1984) (denying motion to implead suppliers of chemical components); *In re "Agent Orange" Prod. Liab. Litig.,* 580 F. Supp. 690 (E.D.N.Y. 1984) (finding national consensus law on issues of liability, government contractor defense and punitive damages); *In re "Agent Orange" Prod. Liab. Litig.,* 580 F. Supp. 1242 (E.D.N.Y. 1984) (reinstating third-party plaintiffs' claim for indemnity against government with respect to claims of veterans' wives and children), *mandamus denied,* 733 F.2d 10 (2d Cir. 1984), *appeal denied,* 745 F.2d 161 (2d Cir. 1984), *cert. denied,* 465 U.S. 1067 (1984); *In re "Agent Orange" Prod. Liab. Litig.,* 101 F.R.D. 97 (E.D.N.Y. 1984) (ordering in camera disclosure of names of scientists deleted from government report); *In re "Agent Orange" Prod. Liab. Litig.,* 597 F. Supp. 740 (E.D.N.Y. 1984) (approving settlement of class action subject to fairness hearings); *In re "Agent Orange" Prod. Liab. Litig.,* 603 F. Supp. 239 (E.D.N.Y. 1985) (dismissing claims of veterans' wives and children against government), *aff'd in part, vacated in part,* 818 F.2d 201 (2d Cir. 1987), *cert. denied,* 484 U.S. 1004 (1988); *In re "Agent Orange" Prod. Liab. Litig.,* 104 F.R.D. 559 (E.D.N.Y. 1985) (modifying protective orders); *In re "Agent Orange" Prod. Liab. Litig.,* 105 F.R.D. 577 (E.D.N.Y. 1985) (affirming with modification magistrate's order that defendants in two non-settled cases produce deponents); *In re "Agent Orange" Prod. Liab. Litig.,* 611 F. Supp. 1221 (E.D.N.Y. 1985) (dismissing defendants' claim for indemnity from government for settlement payments to veterans' families), *aff'd,* 818 F.2d 204 (2d Cir.

1987); *In re "Agent Orange" Prod. Liab. Litig.,* 611 F. Supp. 1223 (E.D.N.Y. 1985) (ruling as to admissibility of opt-out plaintiffs' scientific evidence and expert testimony and granting summary judgment in favor of defendants for plaintiffs' failure to establish causation), *aff'd,* 818 F.2d 187 (2d Cir. 1987), *cert. denied,* 487 U.S. 1234 (1988); *In re "Agent Orange" Prod. Liab. Litig.,* 611 F. Supp. 1267 (E.D.N.Y. 1985) (same), *aff'd,* 818 F.2d 187 (2d Cir. 1987), *cert. denied,* 487 U.S. 1234 (1988); *In re "Agent Orange" Prod. Liab. Litig.,* 611 F. Supp. 1285 (E.D.N.Y. 1985) (dismissing action brought by Hawaiian civilians), *aff'd in part, vacated in part,* 818 F.2d 210 (2d Cir. 1987), *cert. denied,* 484 U.S. 1004 (1988); *In re "Agent Orange" Prod. Liab Litig.,* 611 F. Supp. 1290 (E.D.N.Y. 1985) (dismissing claim of civilian physician for failure to demonstrate exposure to herbicides), *aff'd in part, vacated in part,* 818 F.2d 210 (2d Cir. 1987), *cert. denied,* 484 U.S. 1004 (1988); *In re "Agent Orange" Prod. Liab. Litig.,* 611 F. Supp. 1296 (E.D.N.Y. 1985) (determining class-action plaintiffs' attorney fees and reaffirming settlement); *aff'd in part, rev'd in part,* 818 F.2d 226 (2d Cir. 1987); *In re "Agent Orange" Prod. Liab. Litig.,* 611 F. Supp. 1396 (E.D.N.Y. 1985) (establishing plan for disbursement of settlement fund pending appeals), *aff'd in part, rev'd in part,* 818 F.2d 179 (2d Cir. 1987); *In re "Agent Orange" Prod. Liab. Litig.,* 611 F. Supp. 1452 (E.D.N.Y. 1985) (denying motion to set aside attorney fee-sharing arrangement), *rev'd in part,* 818 F.2d 216 (2d Cir.), *cert. denied,* 484 U.S. 926 (1987); *Ryan v. Dow Chemical Co.,* 618 F. Supp. 623 (E.D.N.Y. 1985) (approving settlement of class action and dismissing with prejudice claims of class members) (Special

Masters for Settlement Kenneth R. Feinberg and David I. Shapiro); *In re "Agent Orange" Prod. Liab. Litig.,* 618 F. Supp. 625 (E.D.N.Y 1985) (approving plan for Australia and New Zealand); *In re "Agent Orange" Prod. Liab. Litig.,* 787 F.2d 822 (2d Cir. 1986) (dismissing claims of non-class plaintiffs against defendant not named in complaints); *In re "Agent Orange" Prod. Liab. Litig.,* 800 F.2d 14 (2d Cir. 1986) (denying motion to disqualify plaintiffs' attorneys from appealing settlement); *In re "Agent Orange" Prod. Liab. Litig.,* 804 F.2d 19 (2d Cir. 1986) (denying repeal of stay on settlement funds pending appeal); *In re "Agent Orange" Prod. Liab. Litig.,* 689 F. Supp. 1250 (E.D.N.Y. 1988) (modifying class assistance program as required by *818 F.2d 179* and granting opt-out plaintiffs opportunity to opt into class for purposes of benefitting from settlement fund). *See also* other Agent Orange cases: *Ryan v. Dow Chemical Co.,* 781 F. Supp. 934 (E.D.N.Y. 1992); *Ryan v. Dow Chemical Co.,* 1991 U.S. Dist. LEXIS 16532 (E.D.N.Y., Nov 12, 1991); *In re Agent Orange Fee Application of Yannacone,* 139 F.R.D. 581 (E.D.N.Y.1991); *Ryan v. Dow Chemical Co.,* 781 F. Supp. 902 (E.D.N.Y.1991). For further information, see *VA Home Page, Agent Orange and Vietnam Veterans, Agent Orange Helpline, e-mail GW/AO Helpline@vba.va.gov* (2003); Jeanne Mager Stellman, Steven D. Stellman, Tracy Weber, Carrie Tomasallo, Andrew B. Stellman and Richard Christian, Jr. A Geographic Information System for characterizing exposure to Agent Orange and other Herbicides in Vietnam, III Enviornmental Health Perspectives 321(2003); Institute of Medicine, Veterans and Agent Orange: Update 2002 (2002); Institute of Medicine, Veterans and Agent Orange:

Update 2000 (2000); Leonard Rivkin & Jeffrey Silberfeld, From Auto Accidents to Agent Orange (2000); Nat'l Veterans Legal Services Program, Self-Help Guide on Agent Orange: Advice for Vietnam Veterans & their Families (2000); Institute of Medicine, Veterans and Agent Orange: Update 1998 (1998); Deborah E. Greenspan, Special Master, *In re "Agent Orange" Product Liability Litigation:* Final Report of the Special Master on the Distribution of the Agent Orange Settlement Fund (1997); Institute of Medicine, Veterans and Agent Orange: Update 1996 (1996); Individual Justice in Mass Tort Litigation (1995); The Legacy of Vietnam Veterans and their Families: Survivors of War: Catalysts for Change: Papers from the 1994 National Symposium (Dennis K. Rhoades ed., 1995); Institute of Medicine, Veterans and Agent Orange: Health Effects of Herbicides Used in Vietnam (1994); Michael Fumento, Science Under Siege: Balancing Technology and the Environment (1993); Ronald E. Gots, Toxic Risks: Science, Regulation, and Perception (1993); Peter H. Schuck, Fashioning a Settlement: Agent Orange on Trial, *in* The Responsible Judge: Readings in Judicial Ethics (John T. Noonan & Kenneth I. Winston, eds., 1993); Michael E. Wildhaber, Veteran's Benefit Manual: An Advocate's Guide to Representing Veterans and their Dependents (1991); Kenneth R. Feinberg, Special Master, *In Re "Agent Orange" Product Liability Litigation:* Report of the Special Master Pertaining to the Disposition of the Settlement Fund (1989); Peter H. Schuck, Agent Orange on Trial: Mass Toxic Disasters in the Courts (1986); Kenneth R. Feinberg, Special Master, *In Re "Agent Orange" Product Liability Litigation:* Report of the Special Maser

Pertaining to the Disposition of the Settlement Fund (1985); *In Re "Agent Orange" Product Liability Litigation:* Preliminary Memorandum and Order on Settlement (1984); New York State Temporary Commission on Dioxin Exposure, Findings, Conclusions and Recommendations of the New York State Temporary Commission on Dioxin Exposure (1983); Carol Van Strum, A Bitter Fog: herbicides and human rights (1983); Fred Wilcox, Waiting for an Army to Die: The Tragedy of Agent Orange (1983); *Procedural History of the Agent Orange Products Liability Litigation,* 52 Brook. L. Rev: 335 (1986); Jeanne Mager Stellman, Steven D. Stellman, Richard Christian, Tracy Weber and Carrie Tomasallo, *The Extent and Patterns of Usage of Agent Orange and other Herbicides in Vietnam,* 422 Nature 681 (2003); Richard A. Nagareda, *Closure in Damage Class Settlements: The Godfather Guide to Opt-Out Rights,* 2003 U. Chi. L. Forum 141, 156; Joseph M. Guzzardo & Jennifer L. Monachino, *Gulf War Syndrome--Is Litigation the Answer?: Learning Lessons from In re Agent Orange,* 10 St. John's J. Leg. Comment. 673 (1995); Aaron D. Twerski, *With Liberty and Justice for All: An Essay on Agent Orange and Choice of Law,* 52 Brook. L. Rev. 341 *(1986)*; Peter H. Schuck, *The Role of Judges in Settling Complex Cases: The Agent Orange Example,* 53 U. Chi. L. Rev. 337 (1986); Paula Batt Wilson, Note, *Attorney Investment in Class Action Litigation: The Agent Orange Example,* 45 Case W. Res. L. Rev. 291 (1994); Michael D. Green, *Expert Witnesses and Sufficiency of Evidence in Toxic Substances Litigation: The Legacy of Agent Orange and Bendectin Litigatin,* 86 Northwestern Univ. L. Rev. 643 (1992); Harvey P. Berman, *The Agent Orange*

Veteran Payment Program, 53 L. & Contemp. Probs. 49 (1990); Robert L. Rabin, *Tort System on Trial: The Burden of Mass Toxics Litigation,* 98 Yale L.J. 813 (1989) (reviewing Peter Schuck, Agent Orange on Trial: Mass Toxic Disasters in the Court (1987)); Charles Nesson, *Agent Orange Meets the Blue Bus: Factfinding at the Frontier of Knowledge,* 66 B.U. L. Rev. 521 (1986); Paul Sherman, *Agent Orange and the Problem of the Indeterminate Plaintiff,* 52 Brook. L. Rev. 369 (1986).

B. Agent Orange I

On February 19, 1979, the plaintiffs filed a 162-page complaint on behalf of named and unnamed Vietnam veterans and members of their families who claimed to have been injured as a result of their exposure to various phenoxy herbicides, including Agent Orange. *See Dowd v. Dow Chemical Company,* 79 CV 467 (E.D.N.Y. 1979). Plaintiffs alleged, among other things, that defendants negligently manufactured and sold to the government for use in Vietnam herbicides that contained 2,3,7,8 tetrachlorodibenzo-p-dioxin (TCDD or dioxin). Plaintiffs relied on theories of strict liability, breach of warranty, intentional tort and nuisance. According to plaintiffs, the veterans' exposure to dioxin-contaminated herbicides in Vietnam resulted in a wide variety of systemic diseases including soft tissue sarcoma and porphyria cutanea tarda as well as miscarriages to veterans' wives and birth defects in their children.

Similar cases were pending in other jurisdictions. *See, e.g., United States v. Vertac*

Chemical Corp., 489 F. Supp. 870, 876 (E.D. Ark. 1980); *Green v. Dow Chem. Co.,* No. 79-651 (N.D. Ill. 1979); *Chapman v. Dow Chemical,* No. 79-652 (N.D. Ill. 1979); *Citizens Against Toxic Sprays, Inc. v. Bergland,* 428 F. Supp. 908, 914 (D. Or.1977); R. Bovey & A. Young, *The Science of 2,4,5-T and Associated Phenoxy Herbicides* 134 (1980). All cases were transferred to this district by the Judicial Panel on Multidistrict Litigation ("MDL Panel") for consolidation of pretrial proceedings. State cases were removed to the federal courts on various theories. Almost 600 cases originally filed in state and federal district courts throughout the country were transferred here for inclusion in this multidistrict litigation, MDL No. 381 (Agent Orange).

There were several actions involving claims by civilians. The civilian plaintiffs included: a proposed class of civilians allegedly exposed to phenoxy herbicides in Vietnam, *Thornton v. Dow,* C-81-005-JLQ (D. Wash. 1981); a proposed class of thirty-five thousand civilian residents of the County of Kaui, State of Hawaii, who alleged exposure to Agent Orange and other phenoxy herbicides during a testing program conducted in 1967, *Fraticelli v. Dow,* CV No. 82-0021 (D. Haw. 1982); civilian employees of defense contractors who were allegedly exposed to phenoxy herbicides in Vietnam in 1967, *Kjome v. Dow,* CV 83C-3876 (N.D. Ill. 1983) and *Vaughan v. Dow,* CV No. 83-1440 (D. Ariz. 1983); a medical doctor who served in Vietnam, in the employ of the State Department, *Hogan v. Dow,* CV-R-81-410ECR (D. Nev. 1981); and a civilian employee of a contractor exposed to Agent Orange in 1975, *Lester*

v. Dow, CV No. H-80-587 (S.D. Tex. 1980). These and similar actions filed by various civilian plaintiffs were also transferred to this district by the MDL Panel. Civilian cases were ultimately dismissed.

1. MDL Panel

Since 1968, section 1407 of title 28 of the United States Code has provided a means for the MDL panel's transfer of related cases pending in different federal district courts to a single district judge for pretrial proceedings. *See* 28 U.S.C § 1407. The savings in time and money when many cases are investigated and prepared together for disposition can be enormous.

Mass tort actions are especially suited to MDL treatment. *See, e.g., In re Silicone Gel Breast Implants Prods. Liab. Litig.,* 793 F. Supp. 1098 (J.P.M.D.L. 1992); *In re Air Crash Disaster at Boston, Massachusetts on July 31, 1973,*399 F. Supp. 1106 (D. Mass.1975); *In re "A.H. Robins Co., Inc., "Dalkon Shield" IUD Products Liab. Litig.,* 406 F. Supp. 540 (J.P.M.D.L.1975) (consolidation for pretrial proceedings of actions involving claims for damages arising out of use of intrauterine contraceptive devices); *In re Celotex Corp. "Technifoam" Products Liab. Litig.,* 68 F.R.D. 502 (J.P.M.D.L. 1975) (transfer of actions in which plaintiffs claimed fire losses and structural damages as a result of defects in defendant's insulation material).

While a trial in this district of all the Agent Orange cases was once contemplated, the transferee

count is not now authorized to try cases transferred from another district by the MDL panel on the basis of that transfer alone. *See Lexecon, Inc. v. Milberg Weiss Bershad Hynes & Lerach,* 523 U.S. 26 1998); David F. Herr, *Annotated Manuel for Complex Litigation 3d* at 31.132 (2002). Many MDL cases are, however, still terminated in the transferee court by motion, settlement or on the basis of other forms of transfer.

The transferee court has broad powers in matters relating to management of the multidistrict case before it. Weigel, The Judicial Panel on *Multidistrict Litigation, Transferor Courts and Transferee Courts,* 78 F.R.D. 575, 584 (1978). Once a case has been transferred by the Panel, the transferee court assumes complete jurisdiction for pretrial purposes. It has authority to decide all pretrial motions including dispositive motions such as those for summary judgment or approval of a settlement. *Id. at 582.* The transferee court is also authorized to handle matters relating to class action certification to prevent inconsistent rulings and to promote judicial efficiency. *See In re Piper Aircraft Distribution System Antitrust Litigation,* 405 F. Supp. 1402, 1403-04 (J.P.M.D.L. 1975).

2. 1983 Class Certification

In 1983, this court certified a large class of Agent Orange related plaintiffs under Federal Rules of Civil Procedure Rule 23(b)(3) for liability issues, and under Rule 23(b)(1)(B) for punitive damages. *In*

re "Agent Orange" Prod. Liab. Litig., 100 F.R.D. at 718. Five factors were recognized as making the desirability of class certification even greater than it would be in most mass tort litigation. The first was size; plaintiffs' class in the litigation potentially numbered millions. If the claims were dealt with individually the result might have "result[ed] in a tedium of repetition lasting well into the next century." *In re No. Dist. of Cal. "Dalkon Shield" IUD Prod. Liab. Litig.,* 526 F. Supp. 887, 894 (N.D. Cal. 1981), *rev'd,* 693 F.2d 847 (9th Cir. 1982), *cert. denied sub nom. A. H. Robins Co. v. Abed,* 459 U.S. 1171 (1983). Second, was the need to assure that the financial burden would ultimately fall on the parties which should, as a matter of fairness, bear it. Third, certification would encourage settlement of the litigation; in a situation where there are potentially tens of thousands of plaintiffs, the defendants may naturally be reluctant to settle with individual claimants on a piecemeal basis. Fourth, a global settlement would permit a sharp reduction of transactional costs. Fifth, a reasoned, fair and economical scheme to administer the recovery settlement would permit swift and effective assistance to veterans and their families.

3. Class and Notice

In 1983, the court defined the class as:

> those persons who were in the United States, New Zealand or Australian Armed Forces at any time from 1961 to 1972 who were injured while in or near Vietnam by exposure to Agent Orange or other phenoxy herbicides, including those composed in whole or in part of 2,

> 4, 5-trichlorophenoxyacetic acid or containing some amount of 2, 3, 7, 8-tetrachlorodibenzo-p-dioxin. The class also includes spouses, parents, and children of the veterans born before January 1, 1984, directly or derivatively injured as a result of the exposure.

In re "Agent Orange" Prod. Liab. Litig., 100 F.R.D. at 729.

Personal notice was mailed to several hundred thousand persons. The largest group represented names on file at the Veterans Administration Agent Orange Registry. A copy of the class order and notice was also sent to the governors of each of the states asking that the notice be referred to the appropriate state organizations dealing with Vietnam veterans. Cooperation was excellent. Many states gave wide circulation to the notice and others provided a list of names and addresses so the notice could be mailed to those veterans.

A court-approved announcement on nationwide television networks and on radio stations with a combined coverage of at least fifty percent of the listener audience in each of the top 100 radio markets was circulated. The text of that notice can be found in 100 F.R.D. at 734. The class notice was also published in three national general circulation newspapers and magazines and six veterans' magazines. Notice was directed to be sent to the ten

largest circulation newspapers in Australia and the five largest circulation newspapers in New Zealand. The text of the newspaper and magazine notice can be found at 100 F.R.D. at 734-35. Informal notice through the news media was widespread. Plaintiffs were authorized to arrange a toll-free telephone number. Callers were to be told where to write to obtain more information concerning the litigation. Those requesting a copy of the notice mailed to class members were sent one. A large number of people called the toll-free number.

4. Settlement

Plaintiffs were represented by highly skilled and aggressive attorneys. Defense counsel were also adroit. Negotiations on behalf of present and potential future plaintiffs was intense.

The parties entered into a settlement agreement. Defendants agreed to pay $ 180 million (the "Settlement Amount") in full and final settlement of all claims for compensatory damages against them, and their foreign and domestic predecessors, successors, parents, subsidiaries, affiliates and insurers, as well as any of their stockholders, directors, officers, employees and agents, that arose out of or were based on, or could have in the future arisen out of or have been based on, any of the matters alleged in the complaint. All amounts paid by defendants were placed into a fund (the "Fund") established, maintained and administered by this court. The Fund was under the

Court's continuous jurisdiction, control and supervision to assure that it earned the maximum interest consistent with safety and that all disbursements were properly made. The sum, at the time, was unprecedented. *See, e.g.,* Ralph Blumenthal, *Veterans Accept $ 180 Million Pact on Agent Orange,* N.Y. Times, May 8, 1984, at A1. Because of high interest rates and investment policies, the total Fund ultimately grew to some $ 330 million.

Claims against the Fund were the exclusive remedy of all Class members arising out of or relating to, or in the future arising out of or relating to, the subject matter of the Complaint. The settlement required the setting aside of $ 10 million of the $ 180 million to indemnify the defendants from any judgments obtained in state court actions by members of the class alleging harm caused by exposure to Agent Orange in or near Vietnam. Any part of the indemnity fund not used was to revert to the benefit of the class members. This $ 10 million was subsequently combined with the rest of the Fund with the consent of defendants.

The Class specifically included persons who had not yet manifested injury. All persons who were otherwise qualified but who had previously requested exclusion from the Class had the opportunity to withdraw their exclusion (opt back in) within a reasonable time as determined by the court. As administered, all those who opted out of the class in effect had the option of reentering the class at any time since any veteran or veteran's family was not

asked what their position had been in the litigation when applying for help from the Fund.

5. Post Settlement

Following the settlement, the court held extensive hearings on fairness and adequacy in New York, Chicago, Houston, Atlanta and San Francisco. Some 500 witnesses were heard. The court considered hundreds of additional written communications from veterans, members of their families, veterans' organizations, and others. In September of 1984 the court issued a preliminary memorandum and order approving the settlement as fair, reasonable and adequate. *In re "Agent Orange" Prod. Liab. Litig.,* 597 F. Supp. 740 (E.D.N.Y. 1984) (Preliminary Memorandum and Order on Settlement). After the further determinations required by that order were made -- the plan for distribution to eligible class members and the amount of reasonable attorneys' fee awards to plaintiffs' attorneys -- final approval of the settlement was granted. *In re "Agent Orange" Prod. Liab. Litig.,* 611 F. Supp. 1396 (E.D.N.Y. 1985) (Memorandum, Order and Judgment on Distribution of the Settlement Fund), *aff'd in part, rev'd in part,* 818 F.2d 179 (2d Cir. 1987); *In re "Agent Orange" Prod. Liab. Litig.,* 611 F. Supp. 1296 (E.D.N.Y. 1985) (Memorandum and Order on Attorney Fees as Modified and Final Judgment), *aff'd in part, rev'd in part,* 818 F.2d 216 (2d Cir. 1987); 818 F.2d 226 (2d Cir. 1987), *cert. denied sub nom. Newton Schwartz v. Dean,* 484 U.S. 926 (1987).

(a) Dismissal of Opt-Out Claims

After the court preliminarily approved the Settlement Agreement, most of the original 2,500 opt-outs chose to come back into the class with the court's permission. Two hundred and eighty-two servicepersons did not. *See In re "Agent Orange" Prod. Liab. Litig.,* 611 F. Supp. at 1230. Their claims were embodied in seventeen different cases.

Summary judgment was granted against each opt-out plaintiff on the grounds, *inter alia,* that none could prove by the probability demanded in tort litigation that his or her ailment was caused by Agent Orange, *see* 611 F. Supp. at 1260-63; 611 F. Supp. at 1284-85, and that all the claims were barred by the military contractor defense. *See* 611 F. Supp. at 1263-64; 611 F. Supp. at 1285. As already noted, those dismissed plaintiffs were nonetheless permitted by the court to obtain full benefits from the Fund.

(b) Appeals

Appeals were taken from numerous orders including the orders certifying the class action, approving the settlement, outlining the distribution plan, awarding counsel fees, granting summary judgment against the opt-out claimants, dismissing untimely claims, dismissing all the claims against

the United States, and unsealing discovery materials.

In nine unanimous opinions dated April 21, 1987 a panel of the Second Circuit Court of Appeals disposed of all of the numerous individual appeals except those from the order of the district court providing for public access to documents sealed from public view during the discovery phase of the litigation. Following the denial of several petitions for rehearing and for rehearing *en banc,* six petitions for writs of certiorari were filed with the Supreme Court by the opt-out plaintiffs, by class members who objected to the settlement and distribution, by other plaintiffs whose claims were dismissed, and by one of the plaintiffs' attorneys who sought reversal of the appellate court's rulings on counsel fees. The petitions for writs of certiorari were all denied by the Supreme Court. *In re "Agent Orange" Prod. Liab. Litig.,* 818 F.2d 145 (2d Cir. 1987) (affirming class certification and approving of settlement), *cert. denied sub nom. Pinkney v. Dow,* 484 U.S. 1004 (1988), and *Lombardi v. Dow Chemical Co.,* 487 U.S. 1234 (1988); *818 F.2d 179 (2d Cir. 1987)* (approving Payment Program but rejecting Class Assistance Foundation);818 F.2d 187 (2d Cir. 1987) (affirming summary judgment entered against opt-out plaintiffs on ground of government contractor defense), *cert. denied sub nom. Lombardi v. Dow,* 487 U.S. 1234 (1988); 818 F.2d 194 (2d Cir. 1987) (affirming dismissal of *Federal Tort Claims Act* claims of servicemen and their relatives against the United States, on the grounds that they are barred by the *Feres* doctrine and by the discretionary function exception to the Federal Tort Claims

Act);818 F.2d 201 (2d Cir. 1987) (affirming dismissal of "direct" claims against United States brought by wives and children of servicemen, on *Feres* grounds), *cert. denied sub nom. Adams v. United States,* 484 U.S. 1004 (1988); 818 F.2d 204 (2d Cir. 1987) (affirming dismissal of claims of "Agent Orange" manufacturers against United States for contribution and indemnity for the class action settlement payments); 818 F.2d 210 (2d Cir. 1987) (affirming dismissals of Hawaiian civilians' actions against the United States and the chemical companies), *cert. denied sub nom. Pinkney v. Dow Chemical Co.,* 484 U.S. 1004 (1988); 818 F.2d 216 (2d Cir. 1987) (rejecting plaintiff class' attorneys' fee-sharing agreement and reinstating fee award determined by district court), *cert. denied sub nom. Schwartz v. Dean,* 484 U.S. 926 (1987), 818 F.2d 226 (2d Cir. 1987) (approving district court's calculations of attorneys' fee awards, with abrogated award reinstated), *cert. denied sub nom. Newton Schwartz v. Dean,* 484 U.S. 926 (1987).

In an opinion dated June 10, 1987, a separate panel of the Court of Appeals for the Second Circuit affirmed the district court's order unsealing materials produced or generated during discovery in the Agent Orange litigation; defendants filed a petition for writ of certiorari with the Supreme Court, which was denied on November 17, 1987. *In re "Agent Orange" Prod. Liab. Litig.,* 104 F.R.D. 559, 562 (E.D.N.Y. 1985) (Magistrate's Pretrial Order No. 33, dated December 17, 1984) ("Protective Orders Opinion"), *aff'd,* 821 F.2d 139 (2d Cir. 1987), *cert. denied sub nom. Dow v. Ryan,* 484 U.S. 953 (1987).

6. Plan for Distribution

After additional formal hearings, the court adopted (with slight revision) a plan of distribution prepared by Special Master Kenneth R. Feinberg after consultation with the court; it took into account the suggestions from various veteran advisors. *In re "Agent Orange" Prod. Liab. Litig.,* 611 F. Supp. 1396 (E.D.N.Y. 1985), *modified,* 818 F.2d 179 (2d Cir. 1987), *cert. denied,* 487 U.S. 1234, *and modified,* 689 F. Supp. 1250 (1988). The plan specified two mechanisms for the distribution of the Fund to the class members residing in the United States.

First, it provided for distribution of cash payments to individual veterans based generally on the severity of the veteran's medical condition or death (along with other factors). The objective of the cash payment program was to provide prompt financial benefits to those most in need.

Second, it leveraged Fund assets for the benefit of families of the veterans through the establishment of a grant-making "foundation." The foundation was to provide initial funding for organizations to provide services and benefits specifically targeted to the needs of the class, including, particularly, the children of the veterans. The hope was that through education and provision of directed funding the foundation (1) would create a lasting legacy for the Vietnam veteran community by institutionalizing a services support network

directed at the needs of the population of Vietnam veterans and their families, and (2) establish a basis for the government's recognizing the possible impact of Agent Orange on children and families of the veterans. Both these hopes have been substantially realized.

The United States Court of Appeals for the Second Circuit stayed implementation of the distribution plan pending the resolution of appeals. Finally, on April 21, 1987, this court's decisions certifying the class, finding the settlement to be fair, reasonable and adequate, and adopting the distribution plan (with modification) were affirmed. *In re "Agent Orange" Prod. Liab. Litig.,* 818 F.2d 145 (2d Cir. 1987); *In re "Agent Orange" Prod. Liab. Litig.,* 818 F.2d 179 (2d Cir. 1987) (grant-making to be directly controlled by the court).

7. Distribution of the Settlement Fund

As of June 30, 1997 the Fund had all been distributed or committed for the benefit of the class of plaintiffs in accordance with the plan of distribution approved by the court. The Final Report on the distribution of the Fund was issued in September of 1997.

During the course of the nine-year distribution of approximately $ 330,000,000, the Fund provided $ 267,901,842.66 (consisting of $ 196,595,084.66 through the Agent Orange Veteran

Payment Program and $ 71,306,758 through the Agent Orange Class Assistance Program) to and for the benefit of some 291,000 class members associated with the United States armed forces in the form of either direct cash payments or provision of services. An additional $ 692,834.70 was distributed by the New Zealand Agent Orange Trust to and for the benefit of class members in New Zealand, and $ 7,086,684 was distributed by the Australian Vietnam War Veterans Trust to and for the benefit of Vietnam veterans in Australia. A total of $ 2.7 million was being distributed to veterans or for their benefit when the program ended. The remainder was used to pay attorney's fees and transactional expenses. *See* Final Report at 3.

C. Agent Orange II

In 1989 and 1990, two overlapping class actions, *Ivy v. Diamond Shamrock Chemicals Co.* and *Hartman v. Diamond Shamrock Chemicals Co.,* were brought in Texas courts. *See Ryan v. Dow Chemical,* 781 F. Supp. 902 (E.D.N.Y. 1991). The two actions described in *Ryan* were, in effect, direct challenges to the validity of the settlement and the programs financed by the Fund. Those plaintiffs, who were class members, sued the same chemical companies who were defendants in the original Agent Orange litigation on the same grounds and for the same relief as was originally sought and compromised in the class action. If plaintiffs were successful, they would have automatically reduced the sums available for other class members, since the terms of the settlement set aside $ 10 million for

indemnification of the defendants against suits of that kind.

The cases presented the question of whether members of a class whose action was brought and was still pending in federal court could circumvent the effect of a federal judgment by bringing new actions in a state court relying exclusively on state law. The need to protect other class members, the importance of maintaining the class action as viable litigation device, and the interest of all litigants in the finality of settlements required that the question be answered in the negative.

At the heart of these lawsuits was plaintiffs' belief that it was unfair to bind them to the settlement because the latency of their injuries prevented them from knowing definitively whether or not they were included in the class at the time of the first deadline for opting out of the Agent Orange class action. This court held that they were in fact bound. *In re "Agent Orange" Prod. Liab. Litig.,* 618 F. Supp. at 625*, aff'd,* 818 F.2d 145 (2d Cir.1987), *cert. denied,* 484 U.S. 1004. *See also, Kane v. Johns-Manville Corp.,* 843 F.2d 636, 638-639 (2d Cir. 1988) (affirming reorganization plan that binds future claimants with no present injuries). Nevertheless, plaintiffs' argument raised significant considerations of justice.

All of the courts which considered the Agent Orange Settlement were fully cognizant of the conflict arguments hypothesized by the plaintiffs in

this second wave of complaints. They took steps to minimize the problem in the way they arranged for long-term administration of the Settlement Fund. In many cases the conflict between the interests of present and future claimants was insignificant. Those plaintiffs, like all class members who suffered death or disability before the end of 1994, were eligible for compensation from the Settlement Fund. The relevant latency periods and the age of the veterans ensured that almost all valid claims would be revealed before that time. As veterans become older and diseases of their peer non-veteran group are more and more common, it is less and less likely that a connection of the disease for a particular veteran to Agent Orange can be proved to any substantial degree of probability through epidemiological or other scientific techniques. In addition, the generous government V.A. programs for allowing Agent Orange disabilities on the most tenuous statistical bases for many diseases ensures that those who learn of their disease long after service in Vietnam will be compensated by disability and other payments for their lifetime as service-connected disabled persons. This government program was adopted after the Agent Orange private Fund was established. Accepting benefits from either the private Fund or the V.A. program did not disqualify a claimant from the other remedy.

This court ultimately held that, except for overseeing the expenditure of the Settlement Fund to ensure that it did the greatest possible good for the veterans and their families, the court could do nothing more for plaintiffs in the second wave of complaints. The Court of Appeals for the Second Circuit upheld the decision, stating that "victims

with no visible symptoms, were included in the plaintiff class." *In re "Agent Orange" Prod. Liab. Lit.,* 996 F.2d 1425, 1434 (2d Cir. 1993).

The Court of Appeals' 1993 opinion was believed to have effectively closed the door to claims against manufacturer's of Agent Orange. From 1993 to the commencement of the instant litigation, the spigot of litigation that had gushed since the early 1980s slowed considerably. For published opinions dating from 1993, see, for example, *Miller v. Diamond Shamrock Co.,* 275 F.3d 414 (5th Cir. 2001) (civilian workers' claims were barred by the military contractor defense); *Winters v. Diamond Shamrock Chem. Co.,* 149 F.3d 387 (5th Cir. 1998) (holding that removal was proper under Federal Officer Removal Statute and that claims were barred by statute of limitations); *In re "Agent Orange" Prod. Liab. Lit.,* 1999 WL 1045197 (E.D.N.Y. 1999) (barred by statute of limitations).

D. Agent Orange III, the Instant Litigation

Plaintiffs in a third wave of litigation now contend that their diseases became known to them after the Settlement Fund was expended.

1. District Court

In August of 1998, the Isaacsons began this latest group of Agent Orange cases with the filing of a suit in New Jersey state court, asserting only state law claims. Defendants removed the case to federal

court. Isaacsons' motion to remand was denied by the District Court in New Jersey. Thereafter, the case was transferred to this court by the MDL Panel.

The Stephensons filed their suit pro se in the United States District Court for the Western District of Louisiana in February of 1999. Soon thereafter they obtained counsel. Defendants were granted an order by the MDL Panel, transferring the case to this court. The Isaacson and Stephenson cases were consolidated by this court.

Defendants moved in this court to dismiss the complaints under Rule 12(b)(6) of the Federal Rules of Civil Procedure. They argued that plaintiffs' claims were barred by the 1984 class settlement and subsequent final judgment. The motion was granted. This court concluded that the suit was an impermissible collateral attack on the prior settlement.

A number of other similar cases are now pending in this court. *See Schuckman v. Dow Chemical Co.,* No. 03-02120 (E.D.N.Y. filed May 2, 2003); *Skinner v. Dow Chemical Co.,* No. 03-02935 (E.D.N.Y. filed June 9, 2003); *Kidd v. Dow Chemical Co.,* No. 03-05047 (E.D.N.Y. filed Oct. 2, 2003); *Anderson v. Dow Chemical Co.,* No. 03-05227 (E.D.N.Y. filed Oct. 17, 2003); *Gallagher v. Dow Chemical Co.,* No. 03-05875 (E.D.N.Y. filed Nov. 11, 2003); *Stearns v. Dow Chemical Co.,* No. 03-05965 (E.D.N.Y. filed Nov. 7, 2003); *Breaux v. Dow Chemical Co.,* No. 03-05966 (E.D.N.Y. filed Nov. 7, 2003); *Breaux v. Dow Chemical Co.,* No. 03-05967

(E.D.N.Y. filed Nov. 25, 2003); *Gallagher v. Dow Chemical Co.,* No. 03-05970 (E.D.N.Y. filed Nov. 25, 2003). Calls to the Clerk's office indicate that hundreds of additional such cases can be expected to be filed shortly.

2. Appeals

The Second Circuit Court of Appeals reversed this court's holding that the instant suits constituted an impermissible collateral attack on the settlement, but it upheld the District Court's jurisdiction over Isaacson under the All Writs Act. *Stephenson v. Dow Chemical Co.,* 273 F.3d 249 (2nd Cir. 2001).

The Court of Appeals held that plaintiffs' suits could proceed because there had been no "prior adequacy of representation determination with respect to individuals whose claims [arose] after the depletion of the settlement fund." *Id.* at 258. Both Stephenson and Isaacson fell within the class defined in the 1984 settlement, but their alleged injuries allegedly did not manifest themselves until after the Settlement Fund had been expended. The Court of Appeals found that there was an apparent conflict between plaintiffs and the class representatives because the litigation addressed all future claimants, but only provided recovery for those whose injuries were discovered prior to 1994. It believed that under *Amchem Products, Inc. v. Windsor,* 521 U.S. 591 (1997), and *Ortiz v. Fibreboard Corp.,* 527 U.S. 815 (1999), plaintiffs

were not adequately represented in the prior litigation and could not be bound by the 1984 class settlement without violating their rights to due process.

On appeal to the Supreme Court of the United States, an equally divided court affirmed the Court of Appeals decision as to the collateral attack on the prior settlement. *Dow Chemical v. Stephenson,* 123 S. Ct. 2161 (2003) (per curiam). It vacated the decision with respect to jurisdiction under the All Writs Act. *Id.*

The Court of Appeals for the Second Circuit remanded the cases for further proceedings consistent with its 2001 opinion and the decision of the Supreme Court. *Stephenson v. Dow Chemical Co.,* 346 F.3d 19 (2d Cir. 2003). This court now addresses the merits of plaintiffs' claims on defendants' motion for summary judgment. Other aspects of these cases raising jurisdictional and amendment issues will be treated in separate memoranda.

III. Facts as to Government Contractor Defense

The facts supporting the government contractor defense are the same for each of the defendants. They are set forth in the extensive contractual and other documents consisting of many hundreds of pages supporting each defendant's motion. The statements below are based primarily on the affidavit and documents submitted on behalf

of Diamond Shamrock Corporation (Diamond) which parallel those submitted on behalf of other defendants, and the affidavit and documents submitted on behalf of all defendants.

A. Orders from Government

From 1951 until July 1969, Diamond manufactured at Newark, among other materials, the phenoxy herbicides 2,4-dichlorophenoxyacetic acid ("2,4-D") and 2,4,5-trichlorophenoxyacetic acid ("2,4,5-T"). Diamond also manufactured at Newark trichlorophenol ("TCP"), the intermediate used to produce 2,4,5-T. It prepared the TCP in a heated autoclave using the starting ingredient 1,2,4,5-tetrachlorobenzene ("TCB").

Commencing in 1961 and continuing through 1968, Diamond produced and delivered Agent Orange to the United States pursuant to contracts entered into with the Defense General Supply Center, the Defense Fuel Supply Center, the United States Army or the United States. Air Force. The Contracts set forth or incorporated by reference detailed specifications for the Agent Orange to be supplied to the Government and the 2,4-D and 2,4,5,-T the product contained. Those specifications were promulgated by the Government. Diamond fully complied with them. In addition, Diamond conducted all inspections and tests on Agent Orange, 2,4,-D and 2,4,5-T that were required pursuant to those specifications. Compliance with the government's specifications were certified by

government inspectors in Material Inspection and Receiving Reports.

The contracts contained, or were treated as if they contained, a "DO-C9e" rating assigned to it by the United States pursuant to the Defense Production Act of 1950, as amended, 50 U.S.C. App. § 2061 et. seq., and the regulations promulgated under the Act. The ratings required delivery to help prosecute the military actions of this country in Vietnam and provided the means to obtain scarce materials and equipment to produce Agent Orange.

By September 1966, the United States had determined that the Air Force's requirements for Agent Orange exceeded total domestic production capacity, and that available quantities were insufficient to meet the Air Force's remaining requirements for fiscal year 1967. The United States' procurement of Agent Orange was by this time on an "emergency basis."

The problem of insufficient production capacity was exacerbated by a shortage of TCB, the starting ingredient needed for the production of TCP. Diamond relied on Hooker Chemical Corporation for its TCB supplies. By September 1966, Diamond was unable to produce at full capacity because of the TCB shortage. In November 1966, the Department of Commerce advised Diamond that the United States would require "the maximum capacity of Diamond's production of 2,4,5-T acid."

In December 1966, the Military Assistance Command, Vietnam ("MACV") advised the Commander-In-Chief, Pacific ("CINCPAC") that the United States' projected shortage of Agent Orange was of immediate operational concern to MACV, that the value of herbicide operations in Vietnam had been proven, and that a failure to obtain needed supplies would cause an unacceptable impact on military operations. MACV accordingly requested that the United States investigate the possibility of plant expansion or diversion of product from commercial uses to bolster supplies.

In connection with the United States' consideration of whether to build its own facility for the production of Agent Orange, representatives of Edgewood Arsenal inspected Diamond's production operations at Newark in December 1966. The Director of the Office of Emergency Planning of the Executive Office of the President notified Secretary of Defense Robert McNamara on March 10, 1967 that "the Administrator, Business and Defense Services Administration is currently instituting procedures to insure that the entire output of the chemical 2,4,5-T, which is the limiting component in the production of 'Orange,' will be used on military orders."

On March 24, 1967, the Department of Commerce's Business and Defense Services Administration ("BDSA") directed Diamond, pursuant to Section 101 of the Defense Production

Act of 1950, to accelerate delivery of its existing DO-rated orders for Agent Orange to a monthly rate of 30,600 gallons beginning April 3, 1067, and to a rate of 51,100 gallons once a projected expansion of the Newark Plant was completed in the Fall of 1967. The monthly delivery rates set forth in this directive (the "Directive") represented 100% of the Newark Plant's production capacity for 2,4,5-T, the limiting component in the manufacture of Agent Orange.

The Directive also required Diamond to provide BDSA with a monthly report of production, total shipments, shipments against rated orders, and end of month inventory of 2,4,5,-T and 2,4-D. In addition, the Directive stated that:

> Your requirements for tetrachlorobenzene may be obtained by placing DO rated orders on your supplier. We have informed the Hooker Chemical Corporation of your need for 150,000 pounds per month beginning April 3, 1967, with the understanding that these shipments will be at the rate of approximately 100,000 pounds each twenty days due to the capacity of the facilities used to transport material to your plant. If you encounter any difficulty in obtaining your needs of raw materials, please let me know immediately.

The United States also mandated that Hooker Chemical supply the crucial starting ingredient, TCB, only to companies producing Agent Orange. Diamond was able to obtain TCB only because it was using the TCB exclusively for the production of Agent Orange. Thus, even assuming arguendo that Diamond had the opportunity under the *Defense Production Act* to refuse to accept the Directive, as a practical matter such an opportunity would have been meaningless: Diamond would have been forced to close its Plant because the United States controlled all access to the starting ingredient needed for production of any 2,4,5-T.

The United States, simultaneous with its Directive requiring Diamond to accelerate delivery of Agent Orange, acted to increase Diamond's Agent Orange production capacity. In February 1967, the Department of Commerce provided Diamond a "DO-D4" priority rating to obtain equipment and material needed for the Newark Plant expansion. All purchase orders for this project contain the statement that "the material on this order carries a rating of DO-D4 certified for National Defense Use under BDSA-Regulation 2, Case 30440." Representatives of the Defense General Supply Center actively interceded on behalf of Diamond to assist in obtaining equipment needed for the Plant expansion.

In April 1967, the Department of Commerce telephoned the Operations Manager of Diamond's Agricultural Chemicals Division, to relay "serious concern about the delay in starting up the converted

D facilities to produce T Acid." In May 1967, the BDSA assured Diamond that it would assist in obtaining any 2,4-D needed by Diamond while awaiting installation of its new 2,4-D equipment. The BDSA also directed that if Diamond completed its Plant expansion earlier than anticipated, and therefore achieved higher rates of 2,4,5-T production, all of it must be formulated into 'Orange' and shipped to the Department of Defense pursuant to Section 101 of the Defense Production Act." In May 1967, the United States directed that Diamond treat as "classified" all information concerning Agent Orange production.

Effectively the United States commandeered the Newark Plant pursuant to the Defense Production Act for use in the national defense effort. The government mandated that the Newark Plant produce 2,4,5-T exclusively for use in the production of Agent Orange, prohibited the sale of 2,4,5-T to private customers, closely monitored production activity, required Diamond to account for production and inventory levels, controlled access to the crucial starting ingredient, TCB, permitted TCB deliveries only for use in making Agent Orange, ordered Diamond to accelerate deliveries of Agent Orange, and acted to increase the Newark Plant's production capacity by helping to obtain, and assigning a priority rating to, material and equipment needed for the Plant expansion. It closely supervised production and tested the Agent Orange delivered to ensure that it complied with specifications.

Plaintiffs complain that some of the many contracts are missing or illegible. This is to be expected in this by now ancient case. It does not matter since the contracts and other documents are repetitive and redundant. The product of each of the manufacturers was mixed and expended in a way that makes it impossible to now determine whose Agent Orange actually touched which plaintiff when, if at all. Plaints of plaintiffs' counsel that it is difficult to obtain old documents concerning Agent Orange from the National Archives are not compelling; all the evidence relevant to this motion has been available from the beginning from this court's files which could have been recalled from storage for ease in research by the parties and courts. No new data would change the facts critical to the contractor's defense.

B. Awareness by Government of Dangers

The herbicidal properties of 2,4-D and 2,4,5-T as a munition were discovered in research conducted by the United States military during World War II. During the 1950s and 1960s, the United States armed forces developed these compounds as weapons of war, conducting extensive testing and experimentation involving applications of high concentrations of these materials at heavy rates to defoliate large areas indiscriminately as rapidly as possible.

By 1949, the United States Public Health Service ("PHS") investigated cases of the skin condition chloracne possibly caused by dioxin at

Monsanto's 2, 4, 5-T plant in Nitro, West Virginia. During the 1950s and 1960s the PHS developed considerable expertise on dioxin's toxicity; chloracne developed by persons exposed to high levels of dioxin; and dioxin's potential presence as an unintended by-product in the production 2,4,5-T. (Caley Aff. Ex. 18 at 35-39.)

In the early 1950s, scientists at the Army Chemical Corps Chemical Warfare Laboratories located at Edgewood Arsenal, Maryland ("Edgewood") had learned of a toxic by-product in the manufacture of 2,4,5-T. By 1959, many Edgewood scientists knew that dioxin was that toxin and was associated with chloracne. (Gordon Supp. Aff., Ex 7.)

Early in the 1960s, Edgewood personnel, on orders from the White House, investigated the toxicity and potential dangers of 2,4,5-T and 2,4-D, thoroughly reviewing the existing literature and data. (Caley Aff., Ex. 18 at 18-19.) The military scientists at the Chemical Warfare Laboratories at Edgewood Arsenal were evaluating 2,3,7,8-tetrachlorodibenzo-*p*-dioxin ("TCDD"or "dioxin") as a potential chemical warfare agent. They had learned in 1957 of an outbreak of chloracne in a German chemical plant manufacturing 2,4,5-tricholorophenol, the principal raw material used in the manufacture of 2,4,5-T, and had reviewed an article published by Kimmig and Schultz identifying small quantities of dioxin as the cause of the occupational injury to the workers. (Caley Aff., Ex 18 at 8-9.)

During the early 1960s, the United States conducted experiments with many herbicides, including 2,4,5-T and 2,4-D, to devise formulae specifically for military use in Southeast Asia. Based on these experiments, the United States developed several phenoxy herbicides, including "Agent Orange" (approximately 50% the n-butyl ester of 2,4-D and 50% the n-butyl ester of 2,4,5-T), "Agent Pink" (approximately 60% the n-butyl ester of 2,4,5-T and 40% the iso-butyl ester of 2,4,5-T), and "Agent Purple" (approximately 50% the n-butyl ester of 2,4-D, 30% the n-butyl ester of 2,4,5-T, and 20% the iso-octyl ester of 2,4,5,-T). The United States' phenoxy herbicide specifications are collectively referred to as "Agent Orange" for purposes of this memorandum.

In the early 1960s, personnel at Edgewood, on orders from the White House, investigated the toxicity and potential dangers of 2,4,5-T and 2,4-D, thoroughly reviewing the existing literature and data. The President's Science Advisory Committee (PSAC), an organization within the White House, was briefed by the military on the Vietnam defoliation program and learned of dioxin as a contaminant in Agent Orange.

At the time it developed its specifications for Agent Orange, the United States knew that 2,3,7.8-tetrachlorodibenzo-p-dioxin ("dioxin") was at the time formed as a by-product during the manufacture of TCP, the intermediate used to produce 2,4,5-T,

and that dioxin was also present in 2,4,5-T. It also knew that dioxin was believed to be toxic.

Throughout the time period that Diamond and the other defendants produced Agent Orange for the United States, the government knew that dioxin was being produced during the manufacture of TCP, that dioxin was also present in 2,4,5-T, that it was present in Agent Orange as produced by Diamond and each of the other defendants, and that dioxin was toxic. The United States knew from its own experiments and decisions on whether to constructs own plants, or to use existing private sources, that production of Agent Orange invariably resulted in some dioxin being present in Agent Orange, and that there was a risk that dioxin was carcinogenic and might cause other diseases. Its knowledge and information was at all times greater than that of defendants.

In 1963, the Institute for Defense Analyses reported to the Department of Defense that herbicides such as 2,4-D and 2,4,5-T were safe when used commercially "in quite dilute solutions," but could be hazardous to health and to military operations because of their use in overkill concentrations by less experienced personnel under the pressure to act quickly in a military environment. Nevertheless, the government determined that "extremely high dose rates" of undiluted herbicides were required for effective military use. (Gordon Opp. Aff., Ex. 7 at PP 7-9; Reply Affidavit of Michael M. Gordon in Support of

Motion for Reargument of Memorandum and Order of Remand (Jn. 29, 1992), Ex 19 at P 7.)

The PSAC reviewed and approved the military plans for the Vietnam defoliation program in 1963. The presence of dioxin as a possible toxic contaminant in Agent Orange was discussed by various members of PSAC in 1963, 1965, and at other times. (Caley Aff., Ex. 18 at 28.) While one of the persons involved in those discussions was Dr. Melvin Calvin, a winner of the Nobel prize in chemistry, who at the time was a member of the Board of Directors of the Dow Chemical Company, the government itself conducted its own toxicological tests before proceeding with an operational defoliation program in Vietnam. Dr. Bernard McNamara, one of the military scientists involved in the evaluation of dioxin at Edgewood Arsenal, conducted the military's toxicity testing to evaluate the safety of Agent Purple (with apparently somewhat the same dioxin content as Agent Orange) for use in Vietnam in 1963. (Caley Aff., Ex. 18 at 12-14.)

An analytical method of measuring dioxin levels directly in Agent Orange was not available until the early 1970s. In early part of the 1960s, a bioassay known as the rabbit ear test was available to detect the presence of low levels of chloracnegens of any kind in the process. In the middle part of the decade, the analytical method was improved so that it was capable of measuring dioxin content in trichlorophenol, the intermediate used to produce 2,4,5-T. Amounts of dioxin lower than 1 ppm,

however, could not be detected using this analytical method. But, 2,4,5-T manufactured from trichlorophenol containing no detectable dioxin using this analytical method would be expected also to contain less than 1 ppm dioxin. Samples of Agent Orange produced by various manufacturers in the 1960s were analyzed in 1972 using a newly developed more sensitive analytical method. Samples of dioxin detected ranged from 0.05 ppm to 47 ppm. As time went on, the capability of measuring dioxin was increasingly refined so that almost infinitesimally small amounts could be detected--and are now discovered widely in the atmosphere. *See* U.S. Environmental Protection Agency, *Information Sheet 1, Dioxin: Summary of the Dioxin Reassessment Science,* May 25, 2001.

In connection with the government's 1967-68 contemplated project to build its own Agent Orange manufacturing plant at Weldon Springs, Missouri, the government considered and worked with information regarding cases of chloracne in the manufacture of 2,4,5-T, the toxicity of dioxin, dioxin's presence in Agent Orange, and the manufacturing process of Agent Orange. The government learned of factors in the manufacturing process which it believed affected the amount of dioxin created in the manufacturing process and included a section titled "DIOXIN" in the draft manual for operations of the government plant. (Caley Aff., Ex 18 at 45-46.) The government believed that it could develop a new technology that would reduce, control or prevent the formation of dioxin. Its interest in controlling the formation of dioxin was chiefly related to steps needed to protect

the health of plant employees and to limit explosions during the manufacturing process. The government's proposed Agent Orange plant was cancelled before it was due to begin production.

The government also was aware that in merchandising similar herbicides the manufacturers typically produced a much diluted version and labeled the product with warnings as to exposure. Nevertheless, the manufacturers were ordered to deliver the product at full strength in barrels essentially unmarked except for the orange stripe on each barrel. The government neither informed the defendants of the way it would use their product or of any precautions it would take in utilizing Agent Orange in the field. The manufacturers had no control over warnings, use or precautions.

Prior to 1965, the Air Force's Environmental Health Laboratory, under the direction of Dr. Walter W. Melvin Jr., performed a series of evaluations of the effects of 2,4,5-T. Even before these studies, Dr. Melvin knew of an association between chloracne and the production of 2,4,5-T, and knew that dioxin was the chloracnegen produced in the manufacture of 2,4,5-T. In the summer of 1966, both the Office of the Army Surgeon General and the Navy's Bureau of Medicine and Surgery requested and received from the National Academy of Sciences toxicity information on 2,4,5-T. In connection with the government's proposed project to establish its own Agent Orange production facility at Weldon Springs, Missouri, the government carefully considered all available information regarding cases of chloracne in

the manufacture of 2,4,5-T, the toxicity of dioxin and dioxin's presence in Agent Orange as produced by defendants.

A government-sponsored study by the Bionetics Research Laboratories, that was begun in 1963 and completed in 1968, first suggested an association between exposure to large doses of 2,4,5-T and possible teratogenic effects in laboratory animals. It was as a result of this government study, and other information available only to the government, that a temporary ban on the use of Agent Orange in Vietnam was announced by the government in April 1970. That ban was made permanent in December 1970.

Knowledge possessed by the government -- albeit somewhat speculative as to the actual hazard, if any, posed by Agent Orange as it was used in Vietnam - was far greater than that possessed by defendants. There was never a period when defendants possessed as much knowledge as the government of the dioxin content of Agent Orange and of its dangers as it was used in Vietnam.

C. Designation by Government of Specifications

Formal military specifications and purchase descriptions for 2,4,5-T and 2,4-D and Agent Orange were prepared and promulgated by the government. The government also strictly and precisely defined the markings that were to be placed on drums of Agent Orange supplied by defendants, prohibiting

the placement of warnings on the drums by any defendant. The government did not specify the details of the manufacturing process to be utilized by defendants; it was, however, fully aware of the process that would be used, including the resulting dioxin elements.

Having all this superior knowledge of dangers, the government compelled defendants to supply Agent Orange meeting government specifications until late 1969 through government directives, pursuant to Section 101 of the Defense production Act of 1950. It commandeered United States industry's entire capacity to manufacture 2,4,5-T, ordering defendants to accelerate the delivery of Agent Orange. It specified the contents, packaging and method of delivery of the Agent Orange it compelled defendants to produce for the war effort. It required that there be no warnings on the Agent Orange containers delivered by defendants.

The government insisted on defendants' essentially abandoning their private commercial production and sale of a variety of diluted types of herbicides for the undiluted one developed and ordered by the government. The specifications were the government's, not defendants'. The United States armed forces accepted the dangers it was aware of because, from a military point of view, the benefits in potential savings of the lives of members of our armed forces and those of our allies outweighed the possible risks. Only late in the hostilities was information available to the government, but not the defendants, together with

geopolitical considerations, powerful enough to lead to termination of the Agent Orange program.

Warnings of contents or possible toxicity were not permitted by the government. *See, e.g.,* attached to affidavit of Michael M. Gordon: DA 30-070-CM1,-1635, NY 2-6 ("Marking; a pale pink band, 3 inches wide, shall be painted around the center of the drums. There shall be no other identification as to contents or manufacturing origin, with the exception of lot number identification."); DS 00004105 ("Marking Specifications"); DS 00004098 (elements of product); DS 00002573 (specifications); DS 00002576 (color of drum and orange stripe); DS 00002579 (inspections by government): DS 00002710 (markings, orange band). *See also* Fenner Tr at 54-55 (manufacturers prohibited from placing any warnings on drums). The method of use in Vietnam was classified. *See DS 00016965.* See also the Affidavit of William A. Krohley at 5- 46 with extensive reference to documents, transcripts and other discovery material.

Federal officers acting pursuant to their authority under the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. §§ 135-135k ("FIFRA"), directed defendants to supply Agent Orange without the warnings and directions which would have been used for any of defendants' commercial herbicides for civilian use. Federal officers did not register Agent Orange under FIFRA and did not comply with FIFRA requirements for warnings, relying on a statutory exception for "public officials while engaged in the performance of their

official duties." 7 U.S.C. § 135e(a)(3). This exception extended to defendants as "person[s] acting for" such public officials pursuant to 7 U.S.C. § 135f(d). (Gordon Supp. Aff., Ex. 7 at PP 3-5.)

As pointed out above, defendants' Agent Orange contracts precisely specified the markings defendants were to place on the drums of herbicide. *See* Brock Aff., Ex. 11; McCarville Aff., Ex 14; Gordon Aff., Ex.12; Krohley Aff., Ex. 13; and Caley Aff., Ex 18. Federal officials prohibited defendants from any additional markings, warnings, instructions for use, or even identification of the contents of the drums, apparently for "security reasons." BDSA Division of Chemical and Allied Products worksheet for Request for Priorities Assistance (Mar. 27, 1967), Ex. 20 at P 11 (report by BDSA analyst Jane Lewis requesting that Thompson Chemical Co. be directed to accelerate delivery of Agent Orange to the Department of Defense); Letter from W. J. Zepp at the BDSA to the Dow Government Marketing Manager (Sept. 17, 1968), Ex 21 at PP 3-5 (relieving Dow from the directive accelerated production and delivery of Agent Orange to the Department of Defense). As this court stated: "It is clear from the records that the highest officials in the United States were aware of the dangers and decided not to mark." Transcript before the court (E.D.N.Y. Feb. 26, 1992), Ex. 22; *see In re "Agent Orange" Prod. Liab. Litig.,* 597 F. Supp. at 818 (defendants' Agent Orange contracts "called for no warning on the drums about precautions and dangers"); *In re "Agent Orange" Prod. Liab. Litig.,* 996 F.2d 1425, 1436 (2d Cir. 1993) ("The Government strictly prescribed the markings on

Agent Orange Barrels, and prohibited all extraneous label information, including warnings."), *cert. denied, Ivy v. Diamond Shamrock Chemicals Co.,* 510 U.S. 1140 (1994). In addition to being prohibited from warnings, "the defendants had no control over how the government used the product after it was delivered." *In re "Agent Orange" Prod. Liab. Litig.,* 597 F. Supp. at 818.

Having all the above knowledge regarding dioxin and Agent Orange, the government made a "fully-informed" decision that the clear benefits of Agent Orange produced according to its specifications, control and inspections outweighed any risks. *In re "Agent Orange" Prod. Liab. Litig.,* 818 F.2d at 194. The government believed that Agent Orange was an "effective weapon" in a "unique battlefield environment." Transcript of Deposition of Army General W. C. Westmoreland, Ex. 23 at 31-32. The government continued to order defendants to supply Agent Orange until late 1969. As one high-level official testified, "we were overwhelmingly convinced we were doing the right thing to save lives." Transcript of Deposition of Dr. Foster, Ex. 24 at 23-25.

IV. Law

A. Summary Judgment Standard

Rule 56(c) of the Federal Rules of Civil Procedure provides that summary judgment "shall be rendered forthwith if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there

is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Fed. R. Civ. P. 56(c); *Celotex Corp. v. Catrett,* 477 U.S. 317 (1986).

The party seeking summary judgment "bears the initial responsibility of informing the district court of the basis for its motion," and identifying which materials "it believes demonstrate the absence of a genuine issue of material fact." *Celotex,* 477 U.S. at 323. The burden then shifts to the nonmoving party to "set forth specific facts showing that there is a genuine issue for trial." *Anderson v. Liberty Lobby, Inc.,* 477 U.S. 242, 250 (1986); *see also* Fed. R. Civ. P. 9(b) ("In all averments of fraud or mistake, the circumstances constituting the fraud shall be stated with particularity.").

All inferences are to be drawn from the underlying facts in the light must favorable to the party opposing the summary judgment motion. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.,* 475 U.S. 574, 587-88 (1986). The mere existence of some peripheral factual disputes will not defeat an otherwise properly supported motion for summary judgment. *Anderson,* 477 U.S. at 247. "Only disputes over facts that might affect the outcome of the suit under the governing law will properly preclude the entry of summary judgment. Factual disputes that are irrelevant or unnecessary will not be counted." *Id.* at 248.

B. Government Contractor Defense

Defendants argue that plaintiffs' claims are barred by the government contractor defense as developed by the Supreme Court of the United States. In *Boyle v. United Technologies Corp.,* the Court set forth what is known as the government contractor defense:

> Liability for design defects in military equipment cannot be imposed, pursuant to state law, when (1) the United States approved reasonably precise specifications; (2) the equipment conformed to those specifications; and (3) the supplier warned the United States about the dangers in the use of the equipment that were known to the supplier but not to the United States.

487 U.S. 500, 512 (1988). "The military contractor's defense is premised on federal displacement of state law where state law significantly conflicts with the federal interest embodied in the federal government's sovereign immunity for discretionary functions." *In re Brooklyn Navy Yard Asbestos Litigation,* 971 F.2d 831, 839 (2d Cir. 1992). "Striped of its essentials, the military contractor's defense under *Boyle* is to claim, 'The Government made me do it.'" *In re Joint Eastern and Southern Dist. New York Asbestos Litigation (Grispo v. Eagle-Picher Industries, Inc.),* 897 F.2d 626, 632 (2d Cir. 1990).

The federal common law government contractor defense is warranted by the uniquely federal interest in government procurement and a "significant conflict" between federal policy and state tort law. *Boyle,* 487 U.S. at 507. The Supreme Court found a basis for the defense in the *Federal Torts Claim Act*'s (FTCA) exemption for the performance of discretionary government functions. *Id.* at 511; 28 U.S.C. § 2680(a). It stated that the "selection of appropriate design for military equipment to be used by our Armed Forces is assuredly a discretionary function within the meaning" of Section 2680(a). *Boyle,* 487 U.S. at 511. Suits against military contractors under state tort law would have the same effect that the FTCA exemption sought to avoid.

Even prior to the Supreme Court's ruling in *Boyle,* the theory of a generic military contractor defense was applicable to the Agent Orange litigation. This court cited an early incarnation of the government contractor defense in dismissing claims by veterans and members of their families who had opted out of the 1984 class action settlement. *In re "Agent Orange" Prod. Liab. Litig.,* 611 F. Supp. 1223, 1263 (E.D.N.Y. 1985) (noting that at the time the defense had been "criticized," but remained "the law of the case"); *see also In re "Agent Orange" Prod. Liab. Litig.,* 534 F. Supp. 1046 (E.D.N.Y. 1982). The Court of Appeals for the Second Circuit affirmed dismissal based on the government contractor defense, stating that under certain circumstances "federal law shields a contractor from liability for injuries caused by products ordered by the government for a distinctly military use." *In re*

"Agent Orange" Prod. Liab. Litig., 818 F.2d 187, 190 (2d Cir. 1987); *see also In re "Agent Orange" Prod. Liab. Litig.,* 818 F.2d 145, 173 (2d Cir. 1987) (describing military contractor defense as an "impossible, hurdle to surmount" for the plaintiffs). More recently, the Court of Appeals for the Fifth Circuit affirmed the district court's dismissal of an Agent Orange suit based on the government contractor defense. *Miller v. Diamond Shamrock,* 275 F.3d 414 (5th Cir. 2001).

To assert the government contractor defense, defendants must prove each of three elements:

1. Reasonably Precise Specifications

The "reasonably precise specifications" must be "imposed" by the government, a situation in which the government officials are the "agents of decision." *Grispo,* 897 F.2d at 630. *Boyle* is largely silent on what government actions constitute ordering "reasonably precise specifications." A court deciding whether the government has ordered such specifications will look to whether the government had the responsibility for drafting and approving the specifications of the product and had sole discretion in their modification. *Zinck v. ITT Corp.,* 690 F. Supp. 1331, 1336 (S.D.N.Y. 1988).

In *Lewis v. Babcock Industries, Inc.,* the plaintiff sustained injuries when the ejection mechanism in an Air Force fighter jet malfunctioned.

985 F.2d 83, 85 (2d Cir. 1993). The Second Circuit Court of Appeals found that the government had examined and approved components of the product. The government ordered a specific cable device, even though it knew the cable was susceptible to corrosion. The court held that when the government asked for a specific product, it had approved reasonably precise specifications. *Id.* at 89.

In *Zinck,* the government began a program to develop night vision goggles ten years before the contractor's involvement. The government initiated the design and controlled all phases of the program. *Zinck,* 690 F. Supp. at 1336. This constituted reasonably precise specifications. *See also Maguire v. Hughes Aircraft Corp.,* 912 F.2d 67 (3d Cir. 1990) (holding that government participation in design of ball bearing constituted more than rubber stamp); *Ramey v. Martin-Baker Aircraft Co.,* 874 F.2d 946 (4th Cir. 1989) (Navy issued the original design specifications, inspected and tested product components, and examined model of product); *Kleemann v. McDonnell Douglas Corp.,* 890 F.2d 698 (4th Cir. 1989) (contractor's design was approved by Navy and extensive discussions were held between contractor and Navy); *Smith v. Xerox Corp.,* 866 F.2d 135 (5th Cir. 1989) (Army reviewed and approved drawings and specifications prepared by the contractor and government supplied relevant environmental specifications it wanted product to meet); *Stout v. Borg-Warner Corp.,* 933 F2d 331 (5th Cir. 1991) (even though design specifications were silent on the issue of whether contractor could add a protective device, government thoroughly reviewed design); *Kerstetter v. Pacific Scientific Co.,* 210 F.3d

431 (5th Cir. 2000) (government was extensively involved in approval process); *Tate v. Boeing Helicopters,* 55 F.3d 1150 (6th Cir. 1995) (first prong is satisfied if parties engage in "continuous back and forth" review process); *Oliver v. Oshkosh Truck Corp.,* 96 F.3d 992 (7th Cir. 1996) (the fact that contractor may have retained some discretion within government specifications does not defeat the defense when government has substantially reviewed or evaluated the design); *Butler v. Ingalls Shipbuilding,* 89 F.3d 582 (9th Cir. 1996) (Navy involved in design of the product, including testing and installation); *Wisner v. Unisys Corp.,* 917 F. Supp. 1501, 1510 (D. Kan. 1996) (government designed product with virtually "microscopic precision"); *In re Aircraft Crash Lit., Frederick, Md.,* 752 F. Supp. 1326 (S.D. Ohio 1990) (detailed specifications were result of constant interaction and negotiations); *Russek v. Unisys Corp.,* 921 F. Supp. 1277, 1288 (D.N.J. 1996) (government oversaw and participated in the design process and ultimately approved design in question with "continuous back and forth" review process); *Miller v. United Technologies Corp.,* 660 A.2d 810 (Conn. 1995) (defense not defeated by the fact that the government was considering improvement to the design of the product, or that the government also approved an alternative design of the product); *Allison v. Merck & Co., Inc.,* 878 P.2d 948 (Nev. 1994) (first prong shows more than mere government approval).

Satisfaction of the first prong of the government contractor defense requires involvement on the part of the government in the design process.

Evidence of this involvement may consist of its own experiments and tests of a predecessor product it is developing or cooperative procurement work with the suppliers. If the defense is to be viable, the government cannot surrender to the contractor complete discretion as to the minutiae of the specifications; active participation is required. *See, e.g., Trevino v. General Dynamics Corp.,* 865 F.2d 1474 (5th Cir. 1989) (first prong not satisfied when Navy set only general performance standards for product and left the design to the complete discretion of the contractor); *Snell v. Bell Helicopter Textron,* 107 F.3d 744 (9th Cir. 1997) (record showed no discussion between government and contractor about the design of a critical feature of the product); *Johnson v. Grumman Corp.,* 806 F. Supp. 212 (W.D. Wis. 1992) (if government delegates design discretion to the contractor, first prong is not satisfied merely because government approves the specifications submitted by the contractor).

Ordering ordinary off-the-shelf toothpaste in its usual commercial packaging would not satisfy this prong. Ordering special ingredients in a G.I. issue tube would. If the product is not ordered as "by model number, a quantity of stock" merchandise, there is a "significant conflict" with state tort requirements placed on manufacturers supplying the general public. *Boyle v. United Technologies Corp.,* 487 U.S. at 509. As Judge Minor pointed out in his concurrence in *Grispo,* 897 F.2d at 638-39: "Agent Orange itself was composed of stock items, but the Government prescription of how those items should be combined and packaged was the key to the military contractor defense asserted by the

manufacturer of that toxic chemical. *See, Agent Orange,* 818 F.2d at 191."

2. Conformity to Specifications

The second element of the government contractor defense requires that the product ordered must have conformed to the government's specifications. *Boyle* does not explicate a standard or level of performance at which courts may deem a contractor's performance as in conformity. In its simplest terms, a product conforms with government specifications when the government "receives what it sought." *Lewis v. Babcock Industries, Inc.,* 985 F.2d 83, 89 (2d Cir. 1993). Further evidence of conformity is provided when the government approves what it receives. *Id.* In *Babcock Industries,* the government requested cables of "certain dimension and strength characteristics," which it received. *Id.* at 89. The government also inspected and approved the cables. The Second Circuit Court of Appeals held that there were sufficient indicia of conformity with the government's specifications. *Id.; see also Zinck v. ITT Corp.,* 690 F. Supp. 1331 (S.D.N.Y. 1988) (government inspectors individually inspected each set of night goggles produced). "Nonconformance with a specification means ... that the ... alleged defect must exist independently of the design itself, and must result from a deviation from the required military specifications." *Kerstetter v. Pacific Scientific Co.,* 210 F.3d 431, 435 (5th Cir. 2000).

As a matter of law, satisfaction of the second unit of the government contractor defense requires specific conformity with specifications or government approval of the delivered product. *See, e.g., Kleemann v. McDonnell Douglas Corp.,* 890 F.2d 698 (4th Cir. 1989) (holding that appropriate specifications for conformity purposes are detailed quantitative ones and second prong is satisfied when Navy approved adjustments to product); *Smith v. Xerox,* 866 F.2d 135 (5th Cir. 1989) (product would not have been utilized had it not passed inspection); *Quiles v. Sikorsky Aircraft,* 84 F. Supp.2d 154 (D. Mass. 1999) (conclusion of conformance is subject to contrary evidence of non-conformance in fact).

If the government is aware that the product being procured has inherent dangers, the manufacturer is not liable if it follows specifications. *See, e.g. Oliver v. Oshkosh Truck Corp.,* 96 F.3d 992 (7th Cir. 1996) (unsafe placement of exhaust pipe and fuel tank on truck did not deviate from Marine Corps' specifications). In preparing for war, the armed forces will necessarily knowingly use products and equipment presenting some dangers to our forces or others where the vectors of lethality point towards the enemy.

The conformity prong of *Boyle* is not satisfied if the contractor fails to substantially follow the government's requirements, and the government is not aware of the deviations. *See, e.g., Miller v. United Technologies Corp.,* 660 A.2d 810 (Conn. 1995) (contractor must comply with quantitative specifications, not qualitative remarks, precatory

goals or safety guidelines); *Pietz v. Orthopedic Equipment Co.,* 562 So.2d 152 (Ala. 1989) (conformity prong is not satisfied when contractor is forced to deviate from specifications even though specifications were deficient). *But see Landgraf v. McDonnell Douglas Helicopter Co.,* 993 F.2d 558 (6th Cir. 1993) (contractor informed Army that design did not exactly follow written specifications and Army approved the departures); *Miller v. Diamond Shamrock Co.,* 275 F.3d 414, 420 (5th Cir. 2001) ("Acceptance and use of an item following its production can establish that the items conformed to its specifications.").

3. Warning of Dangers Not Known to Government

The final element of the government contractor defense requires that the contractor warn the government "about the dangers in the use of the equipment that were known to the supplier but not to the United States." *Boyle,* 487 U.S. at 512. The third prong does not require contractors to warn the government of dangers already known to the government. *Babcock Industries, Inc.,* 985 F.2d at 89-90. In the military context, it is possible for the government to have greater knowledge of dangers than the contractor, and the third prong may be satisfied if the government "has greater knowledge of the problems" with the product. *Id.* at 90.

It is common for the Armed Forces to procure highly specialized devices or demand novel uses of

civilian technology. *See, e.g.,* Defense Advanced Research Projects Agency (DARPA), Technology Transition (1997). As a result, its testing and knowledge of many products necessary in war exceeds that of any private entity. The government often outsources the production of a good, and the contractor is often in no position to warn of dangers since the details of ultimate intended use may not be revealed to it. Where the design and manufacturing of a product is a partnership between government and private interests, the contractor has a duty to warn of dangers not known to the public sector. *Babcock Industries* provides an example of when the government has been long aware of a problem, and its equal knowledge of the dangers immunized the contractor from liability. *Babcock Industries, Inc.,* 985 F.2d at 90.

Similarly, in *Zinck,* the government provided the impetus for the production of night vision goggles. The contractor was brought in after the government initially developed the concept. The district court found that the government was "alerted to the goggles' limitations during field tests, certainly to an extent greater than [the contractor] was." *Zinck,* 690 F. Supp. at 1337. *See also, e.g., Maguire v. Hughes Aircraft Corp.,* 912 F.2d 67 (3d Cir. 1990) (contractor provided engineering memoranda to the Army disclosing that ten percent of the proposed new bearings would fail); *Oliver v. Oshkosh Truck Corp.,* 96 F.3d 992 (7th Cir. 1996) (contractor satisfied duty to warn when government and contractor were aware of the same dangers); *Ramey v. Martin-Baker Aircraft Co.,* 874 F.2d 946 (4th Cir. 1989) (Navy had full knowledge of dangers

in the prevailing maintenance protocols); *Trevino v. General Dynamics Corp.,* 865 F.2d 1474 (contractor must warn only of dangers about which it had some knowledge); *Smith v. Xerox Corp.,* 866 F.2d 135 (5th Cir. 1989) (knowledge that a different but similar product was deficient cannot be imputed to contractor); *Stout v. Borg-Warner Corp.,* 933 F.2d 331 (5th Cir. 1991) (danger was so obvious to anyone who observed product in operation that it was unnecessary for contractor to have warned of danger); *Zinck v. ITT Corp.,* 690 F. Supp. 1331, 1336 (S.D.N.Y. 1988) (Army designed product and did field testing and any knowledge regarding dangers of the product was passed from the Army to the contractor); *Crespo v. Unisys Corp.,* 1996 U.S. Dist. LEXIS 20956 (D.N.J. 1996) (government had superior knowledge of dangers).

C. Claims Based on Failure to Warn

Boyle applies the government contractor defense to design defects, stating that "liability for *design defects* in military equipment cannot be imposed, pursuant to state law ...." 487 U.S. at 512 (emphasis added). The doctrine has been extended to cases in which the contractor has allegedly failed to satisfy its duty under state law to warn the plaintiff about the dangers associated with the product. In *Grispo,* the court declared:

> When a federal contract and state tort law give contrary messages as to the nature and content of required product warnings, they cause the sort of conflict *Boyle* found so detrimental to the federal

> interest in regulating the liabilities of military contractors. Just as with conflicting federal and state design requirements, the existence of conflicting federal and state warning requirements can undermine the Government's ability to control military procurement.

897 F.2d 626, 629 (2d Cir. 1990).

In order for the government contractor defense to displace the duty to warn under state tort law, "the applicable federal contract must include warning requirements that significantly conflict with those that might be imposed by state law." *Id.* at 630. Displacement of state law must be preceded by a showing that the contents of the warnings-or the absence of warnings-were dictated by the government. *Densberger v. United Technologies Corp.,* 297 F.3d 66 (2d Cir. 2002) (stating that plaintiffs cannot sue contractors "if government controlled which warnings the contractor was allowed to provide"); *see also Garner v. Santoro,* 865 F.2d 629 (5th Cir. 1989). The test was set out in *Densberger*.

> The three requirements of the *Boyle* test for failure-to-warn cases are: (1) 'government control over the nature of product warnings'; (2) 'compliance with the Government's directions'; and (3) 'communication to the Government of all product dangers known to it but not to the Government.'

Densberger, 297 F.3d at 75 n.11 (quoting *Grispo,* 897 F.2d at 630 n.4.). This test also applies to circumstances in which the government dictated that there be no warnings at all. Displacement occurs whether the warnings for general commercial use were required pursuant to state law or federal regulations.

D. Claims Based on Manufacturing Defects

The Supreme Court applied the government contract defense to design defect claims, and the Court of Appeals for the Second Circuit extended the defense to failure-to-warn claims. This circuit has not yet extended *Boyle* to claims based on manufacturing defects. *Compare Zinck v. ITT Corp.,* 690 F. Supp. 1331, 1337 (S.D.N.Y. 1988) (government contractor defense does not apply to manufacturing defect claims), *and Nicholson v. United Technologies Corp.,* 697 F. Supp. 598, 603 (D. Conn. 1988) (same), *with Snell v. Bell Helicopter Textron, Inc.,* 107 F.3d 744 (9th Cir. 1997) (government contractor defense applies).

In deciding whether *Boyle* applies to manufacturing defect claims, courts look to the nature of the conflict between the application of the state tort law and the federal interest in government procurement as described in *Boyle*. In *Grispo,* for example, when extending *Boyle* to failure to warn cases, the court inquired into the nature of any conflicts with the federal interest in regulating government contractors. 897 F.2d at 629. The

displacement of state tort law defining manufacturing defects will occur only where a "'significant conflict' exists between an identifiable 'federal policy or interest and the operation of state law.'" *Boyle,* 487 U.S. at 507. In *Boyle,* the Court held that the duty of care under state tort law of design defects was at odds with the design responsibilities imposed by the United States.

The Court's inquiry did not end with the discovery of a conflict between state law and federal procurement. The government contractor defense was grounded in the Federal Tort Claim Act exemption applicable to "discretionary functions." *Id.* at 511. In *Boyle,* the design of the military equipment involved engineering judgments and thoughtful tradeoffs, all of which fell under the rubric of discretionary functions. Thus, the conflict was resolved by application of the government contractor defense, articulating a three-prong test. *Id.* at 512; *supra* Part IV.B. The federal common law defense was available only if the government wielded significant control over the design process. In extending *Boyle* to failure to warn cases, the Court of Appeals based its decision on whether the "federal contract and state tort law [gave] contrary messages as to the nature and content of required products warnings." *Grispo,* 897 F.2d at 629. The "contrary message" created the type of conflict about which *Boyle* warned and for which the Court crafted the government contractor defense. Under *Grispo,* therefore, when the government controls which warnings the contractor can use, *Boyle* governs.

This court need not determine whether *Boyle* also requires the displacement of the state tort law of manufacturing defects. *See Snell,* 107 F.3d at 744 (defense applicable where government approved precise specifications); *Roll v. Tracor, Inc.,* 102 F. Supp.2d 1200, 1201-02 (D. Nev. 2000) (defects in manufacturing come within the defense if the government approved the manufacturing technique leading to the deficit). If the government explicitly or implicitly approves the design and method of production and it is aware of resulting defects, *Boyle* would apply as in any design defect case. In the instant case, the government was aware of the manufacturing process that would be used, and that it could result in dioxin's presence in Agent Orange. It thus threw its cloak of contractors defense immunity over Agent Orange producers even though it and they knew of the dioxin in Agent Orange.

In determining the merit of a possible manufacturing defect claim, in the instant case, the court looks to whether defendants satisfied the second prong of the Boyle test, namely whether the product produced was in conformity with the government's specifications. *See, e.g., Harduvel v. General Dynamics Corp.,* 878 F.2d 1311, 1321 (11th Cir. 1989) ("To say that a product failed to conform to specifications is just another way of saying that it was defectively manufactured."); *Mitchell v. Lone Star Ammunition, Inc.,* 913 F.2d 242, 246 (5th Cir. 1990) (equating a failure to conform to government design specifications with a manufacturing defect); *Zinck,* 690 F. Supp. at 1338 ("For the same reasons that [the defendant] satisfied the second prong of the

government contractor defense, plaintiffs cannot prevail on their claim of manufacturing defect.").

As indicated in the section on Facts, Part III, *supra,* and application of Law to Facts, Part V, *infra,* the government was aware that under the manufacturing processes utilized by defendants, dioxin was an inevitable component of Agent Orange. If defendants delivered a product that conformed with the government's specifications and its expectations, a manufacturing defect claim must fail.

E. Cost of Denying Defense

The Supreme Court in *Boyle* was concerned about the cost and difficulty of procurement without the protection provided by the government contractor defense. As it noted:

> The imposition of liability on Government contractors will directly affect the terms of Government contracts: either the contractor will decline to manufacture the design specified by the Government, or it will raise its price. Either way, the interests of the United States will be directly affected.

487 U.S. at 507. It also declared:

> The financial burden of judgments against the contractors would ultimately be passed through, substantially if not totally, to the United States itself, since defense contractors will predictably raise their prices to cover, or to insure against, contingent liability for the Government ordered designs. To put the point differently: It makes little sense to insulate the Government against financial liability for the judgment that a particular feature of military equipment is necessary when the Government produces the equipment itself, but not when it contracts for production.

The cost problem is manifested in the present case where the defendants paid a large price to settle on the basis of dubious claims when they were only carrying out the government's orders. They are now being faced with possibly huge liabilities should these suits (and many others like it) go forward. Courts applying *Boyle*-based rules need to bear in mind that the legislature can step into the breach and provide compensation should the contractor defense block a private action. In the case of Agent Orange it has done so through a presumptive schedule of V.A. compensation for ill veterans -- including the present plaintiffs. *See also Dalehite v. United States,* 346 U.S. 15 (1953) (compensation provided by Congress after the Texas City explosion disaster); Texas City Disaster Relief Act, Pub. L. No. 84-378, 69 Stat. 707 (1955); Monograph, Individual Justice in Mass Tort Litigation 17 (1995).

F. Decisions Applying Defense to Agent Orange

The majority opinion in *In re Joint Eastern and Southern District New York Asbestos Litigation (Grispo),* 897 F.2d 626, 634 (2d Cir. 1990), suggested in *obiter dictum* that *Boyle* may have limited the force of the Court of Appeals' prior Agent Orange based decisions applying the government contractor defense to that product:

> the scope of our holding in *Agent Orange* has been trimmed by *Boyle* such that *Agent Orange* no longer carries the weight Eagle-Picher places upon it. *Agent Orange* grounded the military contractor defense upon broad separation-of-powers concerns counseling the insulation of military decisionmaking from judicial oversight. *See Agent Orange,* 818 F.2d at 190-91. Although these concerns certainly animated the Supreme Court's opinion in *Boyle, see Boyle,* 108 S. Ct. at 2517-18 (discussing need to prevent judicial "secondguessing" of selection of design of military equipment), *Boyle* ultimately cast the military contractor defense upon narrower grounds than we did in *Agent Orange.* In particular, *Boyle* predicated the military contractor defense upon the existence of a "significant conflict" between federal contracting requirements and state tort duties. For the conflict to be "significant," the Government must control product

> content by approving "reasonably precise specifications." *See id.* at 2518. *Agent Orange* neither honed in upon the need for a "significant conflict" nor required that government specifications be "reasonably precise." *See Agent Orange,* 818 F.2d at 192 (first element of military contractor defense established upon showing "that the government established the specifications for Agent Orange"). We think these differences underscore the more exacting standard a military contractor must satisfy after *Boyle* to establish the military contractor defense and thus limit the value of the facts of *Agent Orange* as a benchmark in a failure-to-warn action for satisfaction of the military contractor defense after *Boyle.*

(Footnote omitted).

This statement of the *Boyle* rule in that asbestos case-- while accurate as to the asbestos case then before the Court of Appeals for the Second Circuit-- does not mention the fact that Agent Orange fully met the requirements of *Boyle.* First, the government knew more than the manufacturers about the dangers attendant on its design, specifications and manufacturing hazards of Agent Orange and dioxin, so that warnings to the government by defendants were not required. Second, the lack of warnings to users was a requirement of the government which specified exactly how the product was to be packaged in

drums with an orange stripe, but no warnings. Third, the government determined how the product would be used. Any suggestion of an implied reservation about applicability of the contractor defense of Agent Orange in the *Joint Asbestos* cases have no bearing on a case involving Agent Orange itself. It should also be noted that the asbestos manufacturer-defendant was authorized to deliver its product in the same packaging it used for civilian consumers. *Id.* at 627 ("Commercial packages are acceptable under this specification."). This was not the case with Agent Orange. As the Court of Appeals for the Second Circuit pointed out in *Densberger,* "In failure to warn cases, ... the ultimate product users cannot sue the contractor for failure to warn if the government controlled which warnings the contractor was allowed to provide *to those users,* and thereby precluded the warnings at issue from being given." 297 F.3d at 75 (emphasis in original).

The trial court correctly noted in *Zinck,* 690 F. Supp. at 1337:

> "It is clear from the record, in light of all the information received to date, that the government knew as much as, or more than, the defendant .... There is no substantial basis for believing that further discovery will reveal any persuasive information on this subject." "Agent Orange" *Litigation,* 611 F. Supp. 1223 at 1263 (E.D.N.Y. 1985) [,aff'd 818 F.2d 187 (2d Cir. 1987), *cert. denied,* 487 U.S. 1234 (1988).]

The dismissal of Agent Orange claims based upon the government contractor defense was affirmed by the Court of Appeals for the Second Circuit, which stated:

> We agree with the district court that the information possessed by the government at pertinent times was as great as, or greater than, that possessed by the chemical companies.

In re "Agent Orange" Prod. Liab. Litig., 818 F.2d 187, 190 (2d Cir. 1987). This fact has not changed over the years. Even though plaintiffs are not now bound by doctrines of *res judicata, stare decisis* or collateral estoppel from raising the issue anew, examination of the evidence resubmitted in this motion to dismiss mandates that the contractor defense remains a bar to the suit.

The dismissal of Agent Orange claims by this court and the Court of Appeals for the Second Circuit in phases I and II of the Agent Orange litigation was based upon facts that were thoroughly developed during years of discovery. Those facts -- relating to the government's specifications for Agent Orange, defendant's compliance with those specifications, and the knowledge of the government and defendants as to the hazards of Agent Orange -- have remained constant. The papers submitted on this motion to dismiss and the conclusions to be drawn from them are not disputable; they establish the *Boyle* defense beyond cavil.

Nor has the law's affects, in its operative essential now applied, changed prior Agent Orange conclusions. In *Boyle,* the Supreme Court adopted essentially the same three-pronged test for the application of the government contractor defense that had been applied in this court's 1985 Agent Orange decision:

> Liability for design defects in military equipment cannot be imposed, pursuant to state law, when (1) the United States approved reasonably precise specifications; (2) the equipment conformed to those specifications; and (3) the supplier warned the United States about the dangers in the use of the equipment that were known to the supplier but not to the United States.

487 U.S. at 512.

Five years after *Boyle,* the Court of Appeals for the Second Circuit reiterated that the government contractor defense would still preclude claims of Vietnam veterans and their family members who claimed that their exposure to Agent Orange caused injuries that were manifested after the 1984 settlement. *In re "Agent Orange" Prod. Liab. Litig.,* 996 F.2d at 1436*, cert. denied,* 510 U.S. 1140 (1994):

> It is clear from the chemical companies' contracts with the Government that the Government specified Agent Orange's ingredients in

> great detail. There also is documentary evidence tending to show that the Government strictly prescribed the markings on Agent Orange barrels, and prohibited all extraneous label information, including warnings. Finally, there is evidence that the Government's knowledge of the hazards of Agent Orange and dioxin was at least as great as that of the chemical companies, making it unlikely that there were "dangers ... that were known to the suppliers but not to the United States," of which the suppliers should have warned. *Boyle, supra,* 487 U.S. at 512. In sum, although the availability of the government contract defense might not be a foregone conclusion, there is a reasonable probability that it would apply, barring any recovery by the plaintiffs.

The Court of Appeals for the Fifth Circuit, following *Boyle,* conducted a detailed evaluation of the same undisputable Agent Orange facts - now, once again, before this court --with respect to each of the three elements of the government contractor defense. The Court of Appeals for that Circuit expressly agreed with the decisions of this court and the Court of Appeals for the Second Circuit and affirmed summary judgment based on the government contractor defense:

> This case is yet another episode in the great Agent Orange saga. In this appeal, we review the district court's decision to grant the defendant-appellees' motion for summary judgment where the decision was based exclusively on the military contractor defense.
>
> ***
>
> The plaintiffs have failed to demonstrate any genuine issue of material fact with respect to any one of the three elements of the military contractor defense. Thus, the district court properly granted the defendants' motion for summary judgment.

Miller v. Diamond Shamrock, 275 F.3d 414, 416, 423 (5th Cir. 2001).

V. Application of Law to Facts

A. Design Defect Claim

Each element of the Government Contractor Defense has been established. Viewing the pleadings and facts in a way most favorably to plaintiffs, no juror could fail to find:

> 1) The government approved precise specifications for the Agent Orange as set forth in contracts with various administrative agencies and divisions of the Armed Forces. These differed

substantially from "off-the-shelf" products the defendants were producing for their civilian markets.

2) The Agent Orange delivered by defendants conformed to these government specifications. This was verified by close checks through government inspectors.

3) The government knew substantially more about possible dangers of Agent Orange as it intended to, and did, use it than did any or all of the defendants combined.

B. Failure-to-Warn Claim

Each element of the Government Contractor Defense has been established. Viewing the pleadings and facts in a way most favorably to plaintiffs, no juror could fail to find:

1) The government had control over the markings, including possible product warnings. It forbade the placement of warnings on the barrels.

2) The Agent Orange delivered by defendants conformed to the government order that there be no product warnings on the Agent Orange. This was verified by close checks through government inspectors.

> 3) The government knew substantially more about possible dangers of Agent Orange as it intended to, and did, use it than did any or all of the defendants combined.

C. Manufacturing Defect Claim

Having found that the Agent Orange produced by defendants conformed to the government's precise specifications, the manufacturing defect claim cannot stand. Moreover, the government was aware of alternative manufacturing processes that might potentially mitigate the presence of dioxin in Agent Orange. In its quest for maximum production of Agent Orange as a tool of war, the government's benign connivance failed to specify another production process, sanctioning defendants' use of the then-existing technology, leading inexorably to some dioxin in Agent Orange.

VI. Conclusion

Failure to apply the government contractor defense in cases such as this one would substantially inhibit the United States from obtaining equipment and products for its armed forces in time of emergencies or war. Failure to afford this defense would have the potential of enormously increasing the cost to the government of purchasing such materials because suppliers would have to include in the price the cost of almost unlimited and unknowable possible liability for future tort claims. Added to costs of such prospective suits would be the difficulty of resolving many claims through a global

settlement protecting against future claims [degree] a problem illustrated by this very litigation and the overhanging huge numbers of potential future like suits.

The cases are dismissed without costs or disbursements.

VII. Discovery and Stay

At the hearing on this motion to dismiss, plaintiffs explained their failure to adequately respond by noting difficulties in obtaining evidence for their position. This problem is understandable since the events at issue occurred forty or more years ago. Plaintiffs have asked for an additional six months for discovery. *See* Part I, *supra.*

To ensure due process, this decision is stayed until October 12, 2004. Discovery on the issues posed by the government contractor defense may continue to August 10, 2004. Plaintiffs may make a motion to reconsider by filing papers on or before September 10, 2004. If made, the motion will be heard on October 10, 2004. In the meantime, the magistrate judge, clerk of the court, other parties and the undersigned will make every effort to assist plaintiffs in consolidated discovery limited to the issues raised on this motion to dismiss.

SO ORDERED.

Jack B. Weinstein

Dated February 9, 2004
Brooklyn, New York

APPENDIX C

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

In re:	:	**ORDER**
	:	
"Agent Orange"	:	MDL No. 381
	:	
PRODUCT LIABILITY LITIGATION	:	
JOE ISAACSON and PHYLLIS LISA ISAACSON,	:	
	:	98-CV-6383 (JBW)
Plaintiffs,	:	
	:	
-against-	:	
	:	
DOW CHEMICAL COMPANY, et al.,	:	
	:	
Defendants,	:	
	:	
DANIEL RAYMOND STEPHENSON, et al.,	:	99-CV-3056 (JBW)
	:	
Plaintiffs,	:	
	:	
-against-	:	
	:	
DOW CHEMICAL COMPANY, et al.	:	

:
Defendants. :
----------X

JACK B. WEINSTEIN, Senior District Judge:

By order of February 9, 2004 all actions by former members of the armed services who served in Vietnam were dismissed on the ground of the government contractor defense. *In re "Agent Orange" Prod. Liab. Litig.*, 304 F. Supp. 2d 404 (E.D.N.Y. 2004). Plaintiffs requested a stay of the judgment so they could conduct further discovery. All available relevant files were made available. The court and the magistrate judge gave plaintiffs full assistance. To the extent that the long-past events of the herbicide episode of the Vietnam War can be ascertained within acceptable time limits, the parties have had full opportunity to expose them.

In extensive, well researched and drafted papers dated November 3, 2004, plaintiffs move "for this court to reconsider its ruling granting summary judgment to the defendants on the basis of the government contractor defense." Their documents establish that not all defendants had identical procurement contracts, knowledge of the dangers of contamination with dioxin of the various herbicides they supplied to the government, or knowledge of how they were to be used in Vietnam. Nor did all members of the government have equal knowledge of the dangers in their production and methods of use.

The conclusion remains unshaken, however, that enough responsible members of the government

knew as much or more than the defendants about the dangers of Agent Orange and other herbicides as used by our Armed Forces in Vietnam. Equal or superior knowledge must be attributed to the government. Moreover, the chemical mixtures supplied by defendants and packaged according to government specifications were in a form decided upon by the government and applied by it with attendant increased dangers from those risked by civilian users of defendants' generally marketed herbicides designed and packaged for civilian use with appropriate labels and directions. It is not possible to ascertain which plaintiff was exposed to which defendant's herbicide because of the government selected method of packaging, delivery to Vietnam, mixing and application.

Substantial dedicated research at Columbia University has resulted in some successful reconstruction of herbicide aircraft runs. *See*, *e.g.*, Jeanne Mager Stellman *et al.*, *The Extent and Patterns of Usage of Agent Orange and Other Herbicides in Vietnam*, 422 NATURE 681 (2003). None of the research or information supplied by plaintiffs, or available in the literature, or in any of the files permits attribution of a particular defendant's product to a particular plaintiff. Exposure, directly or indirectly, of a particular member of the Armed Forces to a particular herbicide attributable to a particular manufacturer is entirely speculative. No further discovery will establish otherwise. That was one of the reasons why the *Agent Orange* litigations have been approached and dealt with on an industry-wide-defendant basis.

It is not possible to disentangle large numbers of contracts and deliveries from an industry-wide responsibility or unitary defense. The detailed attempt by plaintiffs to unravel this tightly knit skein of existing, non-existing and non-available past evidence has failed. It cannot succeed. Attribution of particular product to particular dioxin to particular exposure to cause of a particular injury is impossible except by an industry-wide statistical attribution.

As a matter of fairness and law among the government, these plaintiffs and these defendants, the contractor defense had been established. Despite its deep regard for the plaintiffs and any disease they are suffering, as well as an appreciation of their concern about the use of Agent Orange, the court is barred from assisting them. It is fair, however, to note once again that the use of Agent Orange and other herbicides to clear foliage during the Vietnam War prevented many more American and allied casualties than could possibly be attributed to exposure to such herbicides.

Some concern for the plaintiffs is alleviated by the statute enacted by Congress to compensate diseased United States personnel who served in or near Vietnam. Under the most minimal standards of proof, they are permitted to rely on the presumption that there is a possibility that their disease was caused by Agent Orange or other herbicides and to receive compensation from the Veterans Administration. *See*, *e.g.*, *McMillan v. Togus Reg'l Office, Dep't of Veterans Affairs*, 294 F. Supp. 2d 305, 315 (E.D.N.Y. 2003) ("Based on `statistical

associations,' the Academy's studies ha[ve] resulted in the creation of presumptions that certain diseases are attributable to exposure to Agent Orange for purposes of Veteran's Compensation. These `associations' are not equivalent to cause in a legal sense for such purposes as mass tort liabilities. These presumption decisions are made by the Secretary for Veterans Affairs. A showing of cause to any degree of probability is not required. The result is summarized in the privately funded National Veterans Legal Services Program, *Self-Help Guide on Agent Orange, Advice for Vietnam Veterans and their Families* (2000 plus supplement), financed, in part, by this court from proceeds from an Agent Orange Settlement Fund created by contributions from manufacturers of Agent Orange."). Whatever the truth of plaintiffs' claims of causation, the law that must be applied in this court can offer none of them succor.

No statistical or other analysis to date known to the court would permit a finding supporting a tort verdict of more probable than not specific causation of a particular plaintiff's disease by negligence in a particular defendant's production of dioxin contaminated herbicide used by the United States in Vietnam. Since this issue has not been briefed, the court draws no conclusion from the available scientific data or its lack and does not dismiss on this ground. Should the Court of Appeals for the Second Circuit remand on the ground that the government contractor defense does not provide a basis for dismissal, the court will address the underlying general and specific causation issues with an open mind and dispatch.

The stay is lifted. Defendants shall submit a specific judgment in favor of each named defendant against each named plaintiff whose claims arise from service in the Armed Forces of the United States.

SO ORDERED

_____
Jack B. Weinstein

Dated: Brooklyn, New York
November 16, 2004

APPENDIX D

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

In re:	:	**JUDGMENT**
	:	
"Agent Orange"	:	MDL No. 381
	:	
PRODUCT LIABILITY LITIGATION	:	
DANIEL RAYMOND STEPHENSON, et al.,	:	99-CV-3056
Plaintiffs,	:	
-against-	:	
DOW CHEMICAL COMPANY, et al.	:	
Defendants.	:	

JACK B. WEINSTEIN, Senior District Judge:

Upon consideration of all pleadings, motions and proceedings and the full record in MDL No. 381 and in the above-captioned action, for the reasons stated in *Isaacson v. Dow Chem. Co.*, 344 F. Supp. 2d 873 (E.D.N.Y. 2004), and prior opinions in MDL-381,

IT IS ORDERED AND ADJUDGED THAT:

1. Defendants Dow Chemical Company; Monsanto Company; Hercules, Inc.; Occidental Chemical Corporation; Ultramar Diamond Shamrock Corporation; Maxus Energy Corporation; Chemical Land Holdings, Inc.; T.H. Agriculture and Nutrition, Co., Inc.; Thompson-Hayward Chemical Company; Harcros Chemicals, Inc.; Uniroyal, Inc.; C.D.U. Holding, Inc,; and Uniroyal Chemical Company shall have judgment against Plaintiffs Daniel Raymond Stephenson, Susan Stephenson, Daniel Anthony Stephenson, and Emily Elizabeth Stephenson;

2. The action is dismissed on the merits;

3. No costs or disbursements are awarded to any party against any other party.

SO ORDERED.

_____
Jack B. Weinstein

Dated: March 2, 2005
Brooklyn, New York

APPENDIX E

UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT
DANIEL PATRICK MOYNIHAN UNITED STATES COURTHOUSE
500 PEARL STREET
NEW YORK 10007

[CATHERINE O'HAGAN WOLFE, CLERK
Letterhead]

At a stated term of the United States Court of Appeals for the Second Circuit held at the Daniel Patrick Moynihan United States Courthouse, 500 Pearl Street, in the City of New York, on the 7th day of May two thousand eight.

Nos. 05-1760-cv, 05-1509-cv, 05-1693-cv, 05-1694-cv, 05-1695-cv, 05-1696-cv, 05-1698-cv, 05-1700-cv, 05-1737-cv, 05-1771-cv, 05-1810-cv, 05-1813-cv, 05-1817-cv, 05-1820-cv, 05-2450-cv, 05-2451-cv.

Appellants having filed a petition for panel rehearing, or, in the alternative, for rehearing *en banc*, and the panel that determined the appeal having considered the request for panel rehearing, and the active members of the Court having considered the request for rehearing *en banc,*

IT IS HEREBY ORDERED that the petition is denied.

For the Court:
Catherine O'Hagan Wolfe, Clerk
By: _____
Frank Perez, Deputy Clerk