05-1953-cv

United States Court of Appeals

FOR THE SECOND CIRCUIT

VIETNAM ASSOCIATION FOR VICTIMS OF AGENT ORANGE, PHAN THI PHI PHI, NGUYEN VAN QUY, Individually and as parent and natural guardian of NGUYEN QUANG TRUNG, THUY NGUYEN THI NGA, his children, DUONG QUYNH HOA, Individually and as Administratrix of the Estate of her deceased child, HUYNH TRUNG SON, On behalf of themselves and others similarly situated, NGUYEN THANG LOI, TONG THI TU, NGUYEN LONG VAN, NGUYEN THI THOI, NGUYEN MINH CHAU, NGUYEN THI NHAM, LE THI VINH, NGUYEN THI HOA, Individually and as parent and natural guardian of VO THANH TUAN ANH, her child, VO THANH HAI, NGUYEN THI THU, Individually and as parent and natural guardian of NGUYEN SON LINH and NGUYEN SON TRA, her children, DANG THI HONG

(*caption continued on inside cover*)

ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NEW YORK

BRIEF FOR PLAINTIFFS-APELLANTS

FRANK DAVIS, ESQ.
JOHNNY NORRIS, ESQ.
DAVIS & NORRIS, LLP
2151 Highland Avenue, Suite 100
Birmingham, Alabama 35205
(205) 453-0094

ROBERT RODEN, ESQ.
SHELBY RODEN LLC
2956 Rhodes Circle
Birmingham, Alabama 35205
(205) 933-8383

JONATHAN C. MOORE, ESQ.
WILLIAM H. GOODMAN, ESQ.
DAVID MILTON, ESQ.
MOORE & GOODMAN, LLP
99 Park Avenue, Suite 1600
New York, New York 10016
(212) 353-9587

CONSTANTINE P. KOKKORIS, ESQ.
225 Broadway, Suite 612
New York, New York 10007
(212) 349-9340

Attorneys for Plaintiffs-Appellants

(*Counsel continued on inside cover)*

NHUT, NGUYEN DINH THANH, NGUYEN MUOI, HO THI LE, Individually and as Administratrix of the Estate of her deceased husband HO XUAN BAT, HO KAN HAI, Individually and as parent and natural guardian of NGUYEN VAN HOANG, her child and VU THI LOAN,

Plaintiffs-Appellants,

—against—

DOW CHEMICAL COMPANY, MONSANTO COMPANY, MONSANTO CHEMICAL CO., HERCULES INC., OCCIDENTAL CHEMICAL CORPORATION, THOMPSON HAYWARD CHEMICAL CO., HARCROS CHEMICALS, INC, UNIROYAL CHEMICAL CO INC, UNIROYAL, INC., UNIROYAL CHEMICAL HOLDING COMPANY, UNIROYAL CHEMICAL AQUISITION CORPORATION, C.D.U. HOLDING INC., DIAMOND SHAMROCK AGRICULTURAL CHEMICALS, INC., DIAMOND SHAMROCK CHEMICAL COMPANY, also known as Diamond Shamrock Refining & Marketing Co., also known as Occidental Electro Chemcial Corp., also known as Maxus Energy Corp, also known as Occidental Chemical Corp., also known as Diamond Shamro, DIAMOND SHAMROCK CHEMICAL, also known as Diamond Shamrock Refining & Marketing Co., also known as Occidental Electro Chemical Corp., also known as Maxus Energy Corp., also known as Occidental Chemical Corp., also known as Diamond Shamro, DIAMOND SHAMROCK REFINING AND MARKETING COMPANY, OCCIDENTAL ELECTROCHEMICALS CORPORATION, HOOKER CHEMICAL CORPORATION, HOOKER CHEMICAL FAR EAST CORPORATION, HOOKER CHEMICALS & PLASTICS CORP., CHEMICAL LAND HOLDINGS, INC., T-H AGRICULTURE & NUTRITION CO., THOMPSON CHEMICAL CORPORATION, also known as Thompson Chemical Corp, RIVERDALE CHEMICAL COMPANY, PHARMACIA CORP., formerly known as Monsanto Co., ULTRAMAR DIAMOND SHAMROCK CORPORATION, MAXUS ENERGY CORP., DIAMOND ALKALI COMPANY, ANSUL INCORPORATED, HOFFMAN-TAFF CHEMICALS, INC., ELEMENTIS CHEMICALS, INC., UNITED STATES RUBBER COMPANY, INC., SYNTEX AGRIBUSINESS, INC., ABC CHEMICAL COMPANIES 1-50, SYNTEX LABORATORIES, INC, VALERO ENERGY CORPORATION, doing business as Valero Marketing and Supply Company,

Defendants-Appellees,

AMERICAN HOME PRODUCTS CORPORATION,
formerly known as American Home Products, WYETH, INC.,

Defendants.

JONATHAN CARTEE, ESQ.
R. STAN MORRIS, ESQ.
CARTEE & MORRIS, LLC
1232 Blue Ridge Boulevard
Birmingham, Alabama 35226
(205) 263-0333

KATHLEEN MELEZ, ESQ.
13101 Washington Boulevard, Suite 463
Los Angeles, California 90066
(310) 566-7452

Attorneys for Plaintiffs-Appellants

TABLE OF CONTENTS

TABLE OF AUTHORITIES

FEDERAL CASES

FEDERAL STATUTES

MISCELLANEOUS

PRELIMINARY STATEMENT

Before this Court is the fundamental question of whether the courts of this nation will enforce well-established, customary international law prohibiting the use of poison during war. This is not a case about the use of a herbicide, or about whether prior to 1975 customary international law prohibited the use of herbicides in war. Nor is it a case about the use of a chemical gas weapon or a poison gas. It is a case about the use of a poison. The poison was dioxin, undisputably one of the most toxic substances ever created, which was present in Agent Orange and other herbicides in excessive and avoidable amounts. The large quantities of dioxin in Agent Orange had no military value or other necessity in view of available, known, and commonly used techniques that would have drastically reduced the amount of that poison in Agent Orange.

The plaintiffs are citizens of Viet Nam who suffer from the dioxin that is still present in the soil they walk on and the food they eat four decades later, and an association that represents those citizens. The defendants are the corporate suppliers of Agent Orange, who knew at the time that the products they supplied contained large and unnecessary quantities of dioxin and whose culpable conduct violated well-established principles of international law. This case seeks to hold these defendants accountable for their actions when they knew they were providing a poison in orange-banded barrels to the United States government which was to be sprayed on millions

of people and vast areas of land in South Viet Nam.

In an amended memorandum opinion and order filed on March 28, 2005, and reported at 373 F. Supp. 2d 7 (E.D.N.Y. 2005), the Honorable Jack B. Weinstein, Senior United States District Judge for the Eastern District of New York, dismissed plaintiffs' claims in their entirety, erroneously characterizing the poison that was Agent Orange as a mere "herbicide" whose undeniably poisonous component – dioxin – was "unintended" and "collateral." The district court reached these conclusions on Rule 12(b)(6) consideration by ignoring the allegations in the amended complaint that Agent Orange as it was constituted contained a dangerous poison whose potential for human harm was both known and readily preventable.

The district court's March 28, 2005 decision also held, this time on Rule 56 consideration, that plaintiffs had failed to adduce evidence relating to their state law claims sufficient to survive defendants' assertion of the government contractor defense, despite extensive record evidence creating genuine issues of material fact as to the elements of that defense. The district court further held, without the benefit of any evidence, that injunctive relief would be inappropriate. All of these rulings by the district court were in error, and appellants seek reversal and remand for trial on all claims.

STATEMENT OF SUBJECT MATTER AND APPELLATE JURISDICTION

The district court's subject matter jurisdiction was predicated upon the federal questions presented by the complaint, pursuant to 28 U.S.C. § 1331. Additionally, the district court was granted specific subject matter jurisdiction by the Alien Tort Statute ("ATS"), 28 U.S.C. § 1350. The district court also had subject matter jurisdiction based upon the complete diversity of citizenship of the parties pursuant to 28 U.S.C. § 1332. Finally, the district court had supplemental jurisdiction over plaintiffs' state law claims pursuant to 28 U.S.C. § 1367.

This Court's appellate jurisdiction is based on 28 U.S.C. § 1291, this being an appeal from a final judgment of the district court.

STATEMENT OF ISSUES PRESENTED FOR REVIEW

Plaintiffs present the following issues for review in this appeal:

1. Whether the district court erred by dismissing plaintiffs' claims for international law violations brought pursuant to the ATS on the ground that spraying defoliants known to contain poisons toxic to human beings in quantities that were known to be preventable through available and commonly used manufacturing techniques did not rise to the level of a violation of the customary proscription against the use of poisons in war, nor to the level of prohibited infliction of injury and destruction unrelated to military necessity.

2. Whether the district court erred in granting summary judgment as to plaintiffs' state law claims on the ground that the undisputed facts supported application of the government contractor defense, despite evidence in the record supporting the conclusion that the defendants had greater knowledge of the dangers of dioxin contained in Agent Orange than the government did, and despite evidence that the manufacturing process that gave rise to the dioxin was not contained in any government specification or procurement contract directed to the defendants.

3. Whether the district court erred in dismissing plaintiffs' claims for declaratory and injunctive relief on the basis that granting such relief would compromise Viet Nam's sovereignty, without the benefit of any evidence to support a discretionary equitable ruling.

STATEMENT OF THE CASE

Plaintiffs filed their complaint against defendants on January 30, 2004, in the Eastern District of New York. A13. Plaintiffs include several individual citizens of Viet Nam who were harmed by exposure to Agent Orange, as well as the Vietnamese Association for Victims Of Agent Orange/Dioxin ("VAVAO"). The VAVAO is a Vietnamese not-for-profit, non-governmental organization whose membership consists of victims of exposure to herbicides used during the war with the United States as well as donors, who are honorary members. A34-102, (First Amended

Complaint ("FAC") ¶5). Plaintiffs brought their claims on their own behalf and on behalf of a class of all of those similarly situated, pursuant to Rule 23 of the Federal Rules of Civil Procedure.

The defendants in this action are the chemical companies who were responsible for the manufacture and delivery of Agent Orange to the United States military, for use by the military and by the government of South Viet Nam. A34-102, (FAC ¶¶ 84-86). The Eastern District assigned the case to Judge Weinstein because of his relationship to the pending Agent Orange litigation brought by or on behalf of United States veterans, over which Judge Weinstein has presided since 1983.

The complaint alleged significant and widespread harm caused to the plaintiffs and their land by the United States' use of dioxin-laced Agent Orange and other herbicides during the Viet Nam War from 1961 to 1971, and the South Vietnamese government's subsequent use of these poisons until 1975. The complaint alleged that the defendants, all of whom were manufacturers of Agent Orange and other herbicides, were responsible for the harms caused by the use of dioxin under both domestic tort law and under international law. Plaintiffs' international law claims were brought pursuant to the ATS, 28 U.S.C. § 1350. The plaintiffs filed an amended complaint against all defendants on September 13, 2004. A18, A34-102.

On November 2, 2004, the defendants filed several substantive and potentially dispositive motions: (1) a motion for partial summary judgment based on statutes of limitations A562-566; (2) a motion to dismiss for lack of subject matter jurisdiction and for failure to state a claim under Rule 12(b)(6) of the Federal Rules of Civil Procedure, A1097-1105, which argued, in sum, that plaintiffs' claims were not justiciable based, among other things, upon the political question doctrine, and that plaintiffs' international law claims brought pursuant to the ATS failed to meet the criteria for such claims established by the United States Supreme Court in *Sosa v. Alvarez-Machain*, 542 U.S. 692 (2004); (3) a motion for summary judgment based upon the government contractor defense (paralleling similar summary judgment proceedings ongoing in the U.S. Veterans' cases)(filed as part of Joint Appendix in U.S. Veterans appeal); (4) a motion to dismiss VAVAO as a plaintiff because of alleged lack of standing to assert claims on behalf of its constituent members, A1453; (5) a motion to dismiss the claims for injunctive and declaratory relief, on numerous grounds; and (6) several motions by individual defendants claiming lack of any liability based on corporate and other organizational defenses. A785; A1016; A1025; A1097.

The United States government also weighed in on defendants' side. Because of the implications to the federal government of the issues presented by the case, the

district court ordered the parties to serve upon the United States Attorney for the Eastern District copies of all papers in this action. *Vietnam Ass'n for Victims of Agent Orange/Dioxin v. Dow Chem. Co.*, 327 F. Supp. 2d 198 (E.D.N.Y. 2004). The government was also invited to submit a brief as amicus curiae on such issues it deemed of interest. *Id.* at 198-99. The government submitted a lengthy statement of interest supporting defendants' position on the international law issues and on the question of justiciability.

Plaintiffs responded to this avalanche of motions, briefs, and the government statement of interest on January 18, 2005, A21-23. Simultaneously, the Center for Constitutional Rights, EarthRights International and the International Human Rights Law Clinic of the University of Virginia Law School filed a motion for leave to submit a brief amicus curiae on plaintiffs' behalf. A22. Defendants filed reply briefs on February 8, 2005. A26-27. On February 28, 2005, the district court heard oral arguments on all the pending motions.[1] A2304-2579. The parties, the government, and the amici curiae all participated in the oral argument. Plaintiffs made a brief post-argument submission by letter on March 8, 2005. A32, A2268-72.

[1] At the same hearing, the district court heard oral argument with respect to the defendants' motion for summary judgment in the parallel U.S. veterans cases based upon the government contractor defense.

On March 10, 2005, the Court issued a Memorandum, Order, and Judgment, A32, which was amended on March 28, 2005. A33. The Amended Memorandum and Order is reported as *Vietnam Ass'n for Victims of Agent Orange/Dioxin v. Dow Chem. Co.*, 373 F. Supp. 2d 7 (E.D.N.Y. 2005). While ultimately dismissing the action based upon three narrow grounds, the trial court ruled in plaintiffs' favor with regard to all of the other arguments that defendants urged in support of dismissal.

First, the district court categorically rejected defendants' objection to the VAVAO's standing to assert claims on behalf of its members. 373 F. Supp. 2d at 49-51. The court agreed with plaintiffs that the VAVAO had constitutional "association" standing under *Hunt v. Washington State Apple Adver. Comm'n*, 432 U.S. 333 (1977), to assert claims for injunctive relief on behalf of its members. 373 F.Supp. 2d at 50. The court found defendants' arguments to the contrary "dubious on constitutional grounds" and "inappropriate on prudential grounds." *Id.* 49. The district court also made short shrift of defendants' assertion that the ATS did not provide a private right of action to individuals, noting that *Sosa* "recognizes the right of a private person to sue" under the ATS. *Id.* at 52.

The district court next rejected defendants' and the government's assertion that there is no aiding and abetting liability under the ATS. The court concluded that "under an aiding and abetting theory, civil liability may be established under

international law." *Id.* at 52. The district court noted that the federal courts, "including those of this jurisdiction, have consistently answered the question in the affirmative," as to whether the ATS encompasses liability of private actors, including private corporations, for violations of international law. *Id.*; *see also Kadic v. Karadzic*, 70 F.3d 232, 239 (2nd Cir. 1995).

The district court similarly rejected defendants' assertion that the ATS applies only to actions by individuals, not corporations, so that defendant corporations could not themselves be held liable for violations of international law. 373 F.Supp. 2d at 54-59. The district court cited to the examples of corporate criminal liability established in the post-World War II Nuremberg trials, and made the common-sense point that "[l]imiting civil liability to individuals while exonerating the corporation directing the individual's action through its complex operations and changing personnel makes little sense in today's world." *Id.* at 58. Moreover, both the Supreme Court and this Court have acknowledged that corporations can be sued under the ATS. *See Sosa*, 542 U.S. at ___ n. 20, 124 S.Ct. at 2766 n. 20; *Wiwa v. Royal Dutch Petroleum*, 226 F.3d 88 (2nd Cir. 2000).

The district court next rejected defendants' arguments that the applicable statute of limitations required dismissal of plaintiffs' claims. 373 F. Supp. 2d at 59-64. Noting that the ATS contains no statute of limitations, the court adopted the position

of plaintiffs' expert and concluded that "under international law, there are no statutes of limitation with respect to war crimes and other violations of international law." *Id.* at 63 (citing Paust Op. at 12, A1528-74). The district court also found that, "[a]part from the difficulties of law presented by statutes of limitations and tolling, the defendants have failed to establish with the requisite probability required by Rule 56 when the plaintiffs knew, or could be deemed to have known, that they were diseased because of the spraying of herbicides supplied by defendants." *Id.* at 63-64.

Next, the district court rejected the defendants' argument that the plaintiffs' claims were nonjusticiable, finding these arguments "not persuasive." *Id.* at 64. In dismissing the broad-brush arguments made by defendants and the government, the district court concluded that these arguments "do not square with the well-accepted principle that '[i]nternational law is part of our law, and must be ascertained and administered by the courts of justice of appropriate jurisdiction as often as questions of right depending upon it are duly presented for their determination.'" *Id. (*quoting *The Paquete Habana*, 175 U.S. 677, 700 (1900)).

The district court also rejected the related argument that *Sosa* required dismissal because plaintiffs' claims would impermissibly "inping[e] on the discretion of the Legislative and Executive Branches in managing foreign affairs." *Id*. at 78-79 (quoting *Sosa*, 542 U.S. at ___, 124 S. Ct. at 2744). "The analysis employed to reject

the claim of political question nonjusticiability applies with equal force to defendants' sub-point regarding interference with political branches' management of foreign affairs." *Id.* at 79.

Finally, the district court held that the government contractor defense did not apply to bar plaintiffs' *international law* claims (despite its holding, described below, that the government contractor defense did operate to bar plaintiffs *state law* claims). *Id.* at 91. In holding that this defense does not bar plaintiffs' international law claims, the district court noted that the government contractor defense is "peculiar to United States law" and "does not apply to violations of human rights and norms of international law." *Id; see also Boyle v. United Techs Corp.*, 487 U.S. 500, 512 (1988); *Zyklon B Case (Trial of Bruno Tesch and Two Others)*, 1-5 Law Reports of Trials of War Criminals 93; *United States v. Flick*, 6 Trials of War Criminals 1187, 1198, 1202; *United States v. Krupp*, 9 Trials of War Criminals 1327, 1437-1439. The argument that the government "told me to do it" was soundly rejected at Nuremberg and suffered the same result in the court below. The district court also rejected the related argument that plaintiffs' claims were barred by the defense of necessity. "Defendants in the case at bar were ordered by the government to produce as much Agent Orange as they could and to promptly deliver it to the government. Such a commercial order, even in wartime, hardly constitutes "necessity" under the domestic

or international law." 373 F. Supp. 2d at 98. Put more bluntly, if the defendants "were ordered to do an act illegal under international law they could have refused to do so, if necessary by abandoning their businesses." *Id.* at 99.

Despite all these favorable findings, the district court dismissed the action, in its entirety, based upon three grounds. First, the court held that as a matter of law plaintiffs were not entitled to injunctive or declaratory relief. The district court's sole articulated reason for its dismissal of all claims for injunctive or declaratory relief – made without any evidentiary hearing or factual findings – was that such "injunctive relief is wholly impracticable. Furthermore, it could compromise Viet Nam's sovereignty." *Id.* at 45.

Second, the district court granted summary judgment as to all of plaintiffs' state law claims on the basis that such claims were barred by the government contractor defense. *Id.* at 44-45. In its Amended Memorandum, Order, and Judgment, the district court did not articulate any separate rationale explaining why the government contractor defense barred these plaintiffs' state law claims. Instead, the district court simply relied upon its earlier opinion granting summary judgment against the U.S. veterans' claims on the basis of the government contractor defense, and stated that these plaintiffs' state law claims were barred based upon the same law and evidence. *Id.* (citing *Isaacson v. Dow Chem. Co.*, 304 F. Supp. 2d 404 (E.D.N.Y. 2004)). The

Isaacson opinion, in turn, held that the undisputed facts satisfied every element of the government contractor defense, despite evidence in the record in direct conflict with the evidence supporting application of the government contractor defense.

Finally, the district court dismissed all of plaintiffs' international law claims brought pursuant to the ATS. The district court held that plaintiffs' allegations did not satisfy the standards for such claims established by the U.S. Supreme Court in *Sosa v. Alvarez-Machain*, 542 U.S. 692 (2004). Indeed, the district court held that there "is no basis for any of the claims of plaintiffs . . . under any form of international law." 373 F. Supp. 2d at 145. The district court premised its holding on a factual determination – which, plaintiffs argue herein, was entirely improper on a Rule 12(b)(6) motion – that Agent Orange should be characterized as a "herbicide" rather than, as the complaint alleged, a "poison." *Id.* at 40-42. The court further assumed – equally improperly, plaintiffs contend – that any harm to humans resulting from the use of this "herbicide" was merely an unintended "collateral consequence" of defoliation operations, rather than the direct, avoidable, and known result of defendants' manufacture and delivery of a highly contaminated product to the government. 373 F. Supp. 2d at 41.

Based on these assumptions, the court found that at the time of the Viet Nam War, no clear rule of international law barred the use of herbicides in war. 373 F.

Supp. 2d at 145. Finding a lack of proscriptions on the wartime use of herbicides that cause, at most, collateral and unintended harm to human beings, the district court held that plaintiffs had not identified a norm of international law with the clarity and specificity that *Sosa* requires. The district court did not squarely analyze, and thus did not rule on, the question that plaintiffs believe was before it, and that is before this Court now: whether the spraying of a known toxic substance over vast, populated land areas violated of the customary proscription against the use of poisons in war, and against the infliction of injury and destruction unrelated to military necessity .

Judgment was entered on March 30, 2005. A33. Plaintiffs filed a timely notice of appeal on April 8, 2005. A33.

STATEMENT OF FACTS

The district court set forth the following test for plaintiffs to satisfy to establish liability under the ATS for the defendants' manufacturing and supplying of Agent Orange, and other herbicides, to the government during the Viet Nam war:

> To establish liability, the plaintiffs would have to show that the usage was illegal under international law; that defendants *knew how* their product would be used; and that with knowledge, they supplied the product, facilitating and becoming a party to the illegality.

373 F.Supp at 91.

As set forth in more detail below, plaintiffs demonstrate that defendants manufactured and sold to the United States Government ("USG") a product which

they knew contained the poison dioxin at unnecessary and excessively high levels, the presence of which was avoidable had the defendants followed then-existing standards in the industry to prevent the presence of the poison dioxin in their product. Plaintiffs demonstrate that these defendants knew that the dioxins contained in the product they manufactured and sold to the government were highly toxic and posed serious and sometimes fatal health risks to humans and the environment. Finally, plaintiffs contend that these companies knew how their product would be used in Viet Nam.

On this set of facts,[2] taken as true for purposes of a motion to dismiss, it is clear beyond cavil that plaintiffs have stated a claim for relief based on these chemical companies' violation the law of nations as contained in the customary international law at the time which forbid the use of poisons as weapons of war. It is that conduct, cognizable in tort under the ATS, not the mere manufacturing and supplying of an herbicide, that this case is about.

A. Use of Chemical Weapons in Viet Nam

In late 1961, President Kennedy approved a joint recommendation of the Departments of State and Defense to initiate, on a limited scale, a chemical warfare

[2] Plaintiffs' statement of facts includes documents that plaintiffs either possessed or knew about and upon which they relied in bringing the suit, the amended complaint, all facts set forth in prior proceedings in the MDL-381 litigation, facts referred to by the district court in its opinion below, as well as prior opinions in the Agent Orange litigation involving the U.S. veterans, and facts which are part of the public record or which the Court may take judicial notice of.

campaign in Viet Nam involving the use of defoliants. *In re Agent Orange Product Liability Litig.*, 597 F.Supp. 740, 775 (E.D.N.Y. 1984). Operation Trail Dust, as the Air Force's chemical warfare program was originally called, and which later became Operation Ranch Hand, began its spray missions in January 1962. *Id*.[3] By late 1962 approval was granted for offensive use of herbicides to destroy planted fields and crops suspected of being used by the Viet Cong. 597 F.Supp at 775.

From the inception of its use, there was opposition to the USG's chemical warfare program from both inside and outside of the government. Several influential people in the U.S. State Department, such as Roger Hilsman and W. Averell Harriman, were opposed to the spraying from the outset, citing its effects on the civilian population of Viet Nam and the risk that by engaging in chemical warfare, the U.S. would be perceived as a barbaric imperialist. A50, (FAC, ¶66). As early as 1964, the Federal of American Scientists expressed opposition to the use of chemical weapons on the grounds that the United States was capitalizing on the war as an opportunity to experiment and engage in biological and chemical warfare. *Id.* ¶71, A51.

[3] See generally, W. Buckingham, *Operation Ranch Hand, The Air Force and Herbicides in Southeast Asia 1961-1971* at 29-31 (1982); G. Lewy, *American in Viet Nam*, 257-66 (1978).

The USG's use of these chemical weapons escalated in late 1964 as the war escalated. Controls and limitations on spraying were gradually relaxed and the areas sprayed were expanded. A frequent target of the Ranch Hand operation was the complex of roads and footpaths in southern Viet Nam used as a supply route by forces loyal to the Democratic Republic of Viet Nam ("DRVN") and the National Liberation Front ("NLF") personnel, commonly known as the "Ho Chi Minh Trail." Also heavily targeted by the herbicide campaign were the thickly wooded Demilitarized Zone, the Mekong Delta and U.S. military bases. *Id.* ¶58, A48.

The use of chemical weapons for crop destruction also gradually expanded. In 1965, 45% of the total spraying was designed to destroy crops. The crop destruction was not limited to the spraying of fields suspected of being used by the NLF. Fields used exclusively by civilians were also frequently sprayed. A recent study based on US government documents and using sophisticated mapping techniques estimated that the total volume of herbicides procured and sprayed from 1961-1971 alone, which excludes the additional four years that the RVN continued to use defendants' products, exceeded 76 million liters. *Id.* ¶60, A48.

On April 15, 1970, after years of increasing evidence of toxicity of dioxin in Agent Orange, the Department of Defense ("DOD") suspended military use of Agent Orange, "pending a more thorough evaluation of the situation." Buckingham, at 166;

597 F.Supp. at 777.[4] Thereafter, herbicide spraying for defoliation continued for a short while, using Agent White. Crop destruction, using Agents White and Blue, continued throughout 1970. Buckingham at 166. In January 1971 the last Ranch Hand mission took place. *Id; see also,* A52-53 *(*FAC ¶ 77).

After cessation of chemical warfare in Viet Nam by the USG, vast quantities of Agent Orange remained. A53 (FAC ¶ 78); 597 F.Supp at 777. The RVN government continued to use the chemical manufactured by the defendants until the fall of that government in 1975. A53 (FAC ¶¶ 78-79).

B. The Chemical Weapons Used

[4] That same day, the Secretaries of Health, Education and Welfare, Agriculture and the Interior, stirred by the publication of studies that indicated 2,4,5-T was a teratogen (i.e., caused birth defects), issued a joint statement suspending domestic use of herbicides containing 2,4,5-T around lakes, ponds, ditch banks, recreation areas and homes and crops intended for human consumption. W. Buckingham, *Operation Ranch Hand, supra,* at 166; Meyers, at 167; *see also Dow Chemical Co. v. Ruckelshaus,* 477 F.2d 1317, 1318-19 (8th Cir.1973); *Citizens Against Toxic Sprays, Inc. v. Bergland,* 428 F.Supp. 908, 914 (D.Or.1977); *United States v. Vertac Chemical Corp.,* 489 F.Supp. 870, 881 (E.D.Ark.1980).

Agent Orange was the most widely used chemical weapon, particularly after 1964. 597 F.Supp. at 776. Agent Orange was a 50-50 mixture of the n-butyl esters of 2,4-dicholorophenoxyacetic acid (2,4-D) and 2,4,5-trichlorophenoxyacetic acid (2,4,5-T).[5] The latter component was found to contain the contaminant TCDD or 2,3,7,8-tetrachlorodibenzo-p-dioxin (i.e., dioxin), which is regarded as one of the most toxic chemicals known to man, if not the most toxic of all. *See Report to the Secretary of the Department of Veterans Affairs ("Zumwalt Report")*,[6] May 5, 1990, p.4.[7] A1831-61. Dioxin does not occur naturally, nor is it *intentionally* manufactured by any industry.

[5] *See*, A.L. Young, J.A. Calcagni, C.E. Thalken & J.W. Tremblay, *The Toxicology, Environmental Fate, and Human Risk of Herbicide Orange and its Associated Dioxin*, USAF OEHL Technical Report (Oct. 1978); R. Bovey & A. Young, *The Science of 2,4,5-T and Associated Phenoxy Herbicides* (1980).

[6] Admiral E. R. Zumwalt, Jr., was the top military commander in Southeast Asia for some period of time. On October 6, 1989, he was appointed as special assistant to Secretary Derwinski of the Department of Veterans Affairs to assist the Secretary in determining whether there is a statistical association between exposure to Agent Orange and a specific adverse health effect. In carrying out that mission, Zumwalt reviewed the numerous data relevant to the statistical association between exposure to Agent Orange and adverse health effects. He also reviewed and evaluated the work of the Scientific Council of the Veterans' Advisory Committee on Environmental Hazards and commissioned independent scientific experts to assist him in evaluating the validity of numerous human and animal studies on the effects of exposure to Agent Orange and/or exposure to herbicides containing TCDD.

[7] See also CDC Protocol for Epidemiologic Studies on the Health of Viet Nam Veterans (November 1983), p. 4. The CDC Protocol also contains a literature review as of 1983 of the health effects on animals and humans exposed to herbicides and dioxin, pp. 63-78. The literature review documents health problems such as chloracne, immunological suppression, neurological and psychological effects, reproductive problems such as birth defects, carcinogenic effects such as soft tissue sarcomas, lymphomas and thyroid tumors, and various gastrointestinal disorders.

Other herbicides containing dioxin and other types of toxic and poisonous byproducts were used for both defoliation and crop destruction including Agent Blue (cacodylic acid), Agent White (a mixture of 80% tri-isopropanol anime sale of 2,4-D and picloram), Agent Purple (a formulation of 50% n-butyl ester of 2,4-D, 30% n-butyl ester of 2,4,5-T, and 20% isobutyl ester of 2,4-D), Agent Green (100% n-butyl ester of 2,4,5-T) and Agent Pink (60% n-butyl ester of 2,4,5-T and 40% isobutyl ester of 2,4,5-T). 597 F.Supp at 775-76; A49(FAC ¶61). Approximately 65% of the herbicides sprayed contained 2,4,5-T, which in turn contains dioxin. *Id.* at ¶ 62, A49.

Unlike civilian applications of the components contained in Agent Orange, which are diluted in oil and water, Agent Orange was sprayed undiluted in Viet Nam. *Zumwalt Report*, p. 5. A1833.

Agent White and Agent Blue contained toxic materials other than dioxin. The commercial version of Agent White was Dow Chemical's Tordon 101, a 50-50 combination of picloram and 2,4-D. Just as dioxin was a contaminant of 2,4,5-T, hexachlorobenzene ("HCB") an extremely toxic and persistent chemical, was an unwanted by-product and contaminant of picloram. "The compound [Agent White] used in Vietnam most likely contained similar amounts of HCB" to technical picloram (which is currently used for manufacturing purposes only). *Veterans and Agent*

Orange: Update 2002, Institute of Medicine (National Academies Press, 2003), 79 (concluding that HCB contamination in picloram technical caused liver tumors).

The EPA-required warning label for picloram technical (as of February 1999) must state "DANGER—POISON" in red ink on a contrasting background, next to a skull and cross-bones, along with "Hazards to Humans and Domestic Animals." A1492-1508. The EPA-approved warning label for Tordon 101 (far less concentrated than Agent White) from 1970 states: "Do Not Contaminate Water. . ." "Do not store near feed, foodstuff. . ." and "HARMFUL IF SWALLOWED" "CAUSES EYE INJURY" "MAY CAUSE SKIN IRRITATION" "Avoid Contact with Eyes, Skin and Clothing" "Wash Well After Handling or Use." A1492-1508.

HCB was known to be toxic in the 1960s. This was primarily due to numerous incidents of HCB poisoning in Turkey from 1955 through 1959. See Cam C, Nigogosyan G, "Acquired Toxic Porphyria Cutanea Tarda Due to Hexachlorobenzene.," *JAMA* 183(2) 88-91 (1963); Ehrlicher, H, "Observations and Experiences in Industry Concerning the Toxicity (Physiopathologic Effect) of Chlorated Benzene Vapours (Mono-to Hexachlorobenzene)," *Zentralbl Arbeitsmed*, 1897, 204-5 (1968).

C. The Extent of Their Use

As the war in Viet Nam escalated, so did the use of chemical weapons. In 1967, the peak year for herbicide spraying in South Viet Nam, 1,687,758 acres were sprayed – 85% for defoliation and 15% for crop destruction. A48 (FAC ¶59)*; see also* W. Buckingham, *Operation Ranch Hand*, *supra*, at 129.

Extensive environmental damage with devastating ecological effects resulted from the chemical warfare campaign, such as the near destruction of the mangrove forests in southern Viet Nam. A54 (FAC ¶ 82). Residues from these highly toxic chemicals transported, loaded and stored at or near USAF bases in Viet Nam, such as Bien Hoa, Da Nang, Nha Trang, Phu Cat, the Aluoi and Asau Valleys, have led to contamination of the soil and food chains in the surrounding areas, resulting in civilian exposure to dioxin by civilians that continues to this day. The use of highly toxic chemicals in the war in Viet Nam has correctly been called the "largest chemical warfare operation in history, producing considerable ecological as well as public health damage." A54 (*Id.* ¶ 83).

The military dispensed Agent Orange in concentrations 6 to 25 times the rate allowable for domestic use. At the time, the DOD claimed that it did not consider Agent Orange toxic or dangerous to humans and took few precautions to prevent exposure to it. A1833 (*Zumwalt Report,* at 5). Yet, as Admiral Zumwalt pointed out,

"evidence readily suggests that at the time of its use experts knew that Agent Orange was harmful to military personnel." A1833 (*Id.* at 5)

Dr. James R. Clary, a former government scientist with the Chemical Weapons Branch, BW/CW Division, Air Force Armament Development Labortory, Elgin AFB, Florida, explains how the military could use a product which it knew contained toxic levels of dioxin:

> When we (military scientists) initiated the herbicide program in the 1960's, we were aware of the potential for damage due to dioxin contamination in the herbicide. We were even aware that the 'military' (citation omitted) formulation had a higher dioxin concentration than the 'civilian' version due to the lower cost and speed of manufacture. However, because the material was to be used on the 'enemy', none of us were overly concerned.

Letter from Dr. James R. Clary to Senator Tom Daschle (September 9, 1988). A1832 (*Zumwalt Report,* at 6).

Millions of Vietnamese were exposed to some amount of dioxin during the pendency of the USG's spraying operations. The maps and tables from Volume I of the *Review of Literature on Herbicides, Including Phenoxy Herbicides and Associated Dioxins* suggest the extent of the spraying. The estimates of the amount of pure poisonous dioxin to which the Vietnamese were exposed range from approximately 240 pounds of TCDD to 368 pounds. A study in the *Review of Literature* states as follows: "Overall, the spraying of more than 11.3 million gallons of Orange/Orange II

from August 1965 through February 1971 is estimated to have released close to 240 pounds of TCDD." *Id.* at 2-22; 597 F.Supp. at 778. Another estimate for the years 1962 to 1971 is 368 pounds. *See* B.B. Dan, Viet Nam and Birth Defects, 252 J.A.M.A. 936 (1984). The differences are not significant for present purposes given the large amount of Agent Orange sprayed and the wide area over which it was spread.

The total land area that the USG admits to have sprayed with its chemical weapons exceeds 5.5 million acres. 597 F.Supp. at 779 (quoting Veterans Administration, Review of Literature on Herbicides, Including Phenoxy Herbicides and Associated Dioxins, Vol. I Table 2-2, at 2-17).

According to Professor Stellman, over 45 million liters of Agent Orange alone were sprayed in Viet Nam. Stellman et al, "The Extent and Patterns of Usage of Agent Orange and Other Herbicides in Viet Nam." *Nature*, Vol. 422, 17 April 2003. A1862-1869.

Thomas Whiteside estimated that about 12% of the entire country was defoliated. Thomas Whiteside, *Defoliation* 41 (New York: Ballantine Books 1970) ("The military sprayed or dumped on Viet Nam fifty thousand tons of herbicide, of which twenty thousand tons have apparently been straight 2,4,5-T."). A1870-1892.

D. Defendants' Knowledge of the Intended Use Of Their Products And the Dangers of The Poison Dioxin Contained In Their Products.

The defendant chemical companies knew four critical facts: (1) their products contained the poison dioxin as well as other toxic chemicals; (2) the presence of dioxin was unnecessary and preventable had the defendants followed then-existing industry standards for the manufacture of their products; (3) the presence of dioxin and other toxic chemicals posed a grave health risk to human beings, animals and the environment; and (4) their product was employed by the USG in a chemical warfare operation in Viet Nam.

In the early 1960s, the USG entered into a series of production and procurement contracts with defendants for the manufacture and sale of chemical compounds for use in a chemical warfare program in Viet Nam. The products were delivered in containers without any label detailing their composition but were instead marked with color-coded three-inch bands, in accordance with the type of herbicide (orange, purple, blue, etc.). A54 (FAC ¶85). These contracts made no mention of dioxin or the need for dioxin. Defendants were able to sell to the government as much of the chemicals as they were able to produce and as fast as they were able to produce it. A54 *(Id.* ¶ 86).

The initial government criteria for defoliation agents stated that the selected agent should "be safe to handle while in storage, shipment or operation . . . [and] . . . *should not be injurious to the health of man and animals who come in contact with it*

during and after military applications." A1894. Clearly, the dioxin that resulted from the defendants' production of Agent Orange and other chemicals did not meet this initial specification. Moreover, it is undisputed that defendants were aware that the product the government was seeking should be free of properties injurious to the health of man and animals. For example, Monsanto actually helped write the government specifications for 2,4,5-T, placing even more responsibility on them to maintain those standards. A1896-1903.

Defendants do not deny that they had knowledge as to what use the U.S. military was going to make of its chemical products. *See*, *infra*. They do not deny, nor could they realistically do so, that they knew that the government was going to use their products in a widespread and indiscriminate campaign of chemical warfare in Viet Nam, and in other countries in Southeast Asia.

(i) Defendants' Knowledge of the Dangers of Dioxin

Between 1961 and 1975 defendants knew that in cases of continuous exposure, dioxin might be extremely hazardous to humans in amounts as low as 1 part per million (ppm), the lowest level at which, at the time, defendants claimed that dioxin could be readily detected. Indeed, defendants knew that dioxin could be hazardous at levels far lower. A56 (FAC ¶ 94). This is one-tenth the level of dioxin that the

district court "concluded" was present for purposes of deciding the motion to dismiss. 373 F.Supp.2d at 41.

Defendants were aware at the time of procurement and production that even extremely small quantities of dioxin, as little as 5 parts per trillion (ppt), were capable of producing birth defects, cancer and death in laboratory animals.A55-56 (FAC ¶91-92).

Defendants knew long before procurement and production that certain hazards could arise from dioxin contamination, including, *inter alia*, chloracne, a severe and systemic disease of the skin and liver damage; yellow atrophy of the liver; severe personality and psychological disorders; as well as, in certain instances, death. A56 (*Id.* ¶ 95).

For example, in 1949, an accidental spill occurred at defendant Monsanto's chemical plant in Nitro, West Virginia, in which a compound containing dioxin was dispersed throughout the building, exposing defendant's workers to the toxic substance. Many of the workers at the Nitro plant developed serious health problems including symptoms, in some cases severe and intractable, of chloracne and other conditions soon after the accident. A56 (*Id.* ¶¶ 96-97).

In 1954 an outbreak of serious and permanently disfiguring forms of chloracne, as well as diseases of the blood-forming elements of the body, including liver disease,

occurred among workers at a Diamond Alkali plant, who were working with phenoxy herbicides, including 2,4,5-T. A57 (*Id.* ¶99). A doctor who inspected the plant after this incident expressed his concerns about the toxicity of the chemical responsible for the chloracne. He stated that "the skin disease is serious" and that "it is impossible to believe how disfiguring this disease is and what a social disability it is." He also explained to the Diamond management that if the workers were being exposed "to more than the maximum amount, we are going to have some liver deaths, - yellow atrophy of the liver." A1956-58.

Beginning in 1960, a dermatologist named Jacob Bleiberg began making rounds at the Diamond plant in Newark in order to see workers and treat their skin conditions. In 1963 he not only observed many cases of chloracne, but also suspected that some of the workers were suffering from porphyria cutanea tarda, a serious liver disorder. Dr. Bleiberg alerted Diamond management to his concerns. A1959-61. In 1972 Dr. Bleiberg described his findings in a letter to the editor of the New York Times that was never published. He noted that "fifty percent of the men developed chloracne…two workers died of liver disease…one man died of liver cancer…almost all of the workers complained of severe fatigue…and 20% of our men had abnormal blood sugar tests indicating diabetes." A1962-65. He did this investigation at the

request of Diamond management, indicating that they were aware of all of his findings.

There were a number of other incidents of which defendants were aware at the time that clearly signaled the extreme toxicity of dioxin in the chemicals they were manufacturing and selling to the government. For example, between 1952 and 1954, workers at the C.H. Boehringer Sohn Company of Germany who were engaged in the production of trichlorophenol (TCP), a chemical closely related to and a component of, 2,4,5-T, developed extremely severe cases of chloracne. The chloracne was so severe that the manufacture of TCP was halted at all Boehringer facilities. The TCP was also found to be extremely lethal in laboratory animals, causing skin lesions and liver necrosis in addition to death. (See Plaintiff's Motion for Reconsideration in *Isaacson v. Dow Chemical et al.,* 98-CV-6383 (EDNY) Brief, p. 104-05, currently on appeal, 05-1820-CV (2nd Cir.). *See also Stephenson v. Dow Chemical et al.,* 99-CV-3056 (EDNY), currently on appeal, 05-1760-CV (2nd Cir.). By 1956, the manufacture of TCP was temporarily banned in Germany. A57-58 (FAC ¶103). Throughout the 1950s defendant Dow remained in close contact and consultation with Boehringer and other German firms concerning the toxicity of the substance. Dow at that time knew of severe diseases, including chloracne, amongst chemical workers. A57 (*Id.* ¶102). It shared this knowledge with the other defendants herein during the period 1961-1975,

and in particular in 1965. A58 (*Id.* ¶ 107). Defendants were also aware of similar experiences at French companies. A57 *(Id.* ¶102).

Defendants were aware, as well, of an incident of contamination involving human deaths from elements of dioxin in perchloronapthalene (Perna) wherein levels as low as 5-10 ppb caused worker deaths and the death of the father of one of the workers. A1966.

Defendants were also aware of defendant Diamond Alkali's experience with 2,4,5-T in Columbia, South America. Starting in 1962, Diamond sold 2,4-D and 2,4,5-T to Quimor, LTD of Bogota, Columbia. In 1963 Diamond Alkali began to receive a series of complaints from customers and employees of one of Diamond's customers, a Columbian company, Quimor, LTD. These conditions were so severe that many of the workers required hospitalization, some for several months, and showed no improvement. A1967.

In February 1964, at Dow's plant in Midland, Michigan, more than 40 workers developed chloracne, some quite severe, due to the presence of dioxin. Dow believed at the time that extreme exposure to dioxin could result in "general organ toxicity," as well as "psychopathological," and "other systemic problems." A58 (FAC ¶106). As a result of this experience with chloracne, Dow decided to explicitly inform the other defendants of its experiences and knowledge, going back to the 1940s. It organized a

meeting in Midland, Michigan in March, 1965, at which it shared all this information with the other defendants. A57-58 (*Id.*, ¶102-108). Though representatives from Monsanto were not present at this meeting, Dow shared the same information with them at the time. A1968.

The chemical companies agreed at the Midland meeting in March 1965 that one ppm of dioxin was an acceptable level, once again, one-tenth the level of dioxin contamination assumed by the court below for purposes of ruling on the motions. This was based solely on the fact that the gas chromatography tests could only detect levels down to one part per million. A1969-74. However, rabbit ear tests were able to detect dioxin levels as low as 4 parts per billion at the time. A1975-77. Even adopting this arbitrary tolerance level, the defendant chemical companies sold millions of gallons of Agent Orange to the government with dioxin levels much greater than one ppm. A1978-79. Despite this agreed upon tolerance level, and the knowledge of the chemical companies as to the methods for reducing dioxin below the accepted tolerance level, internal documents demonstrate that as late as 1969, Monsanto was still showing level of dioxin content as high as 50 ppm. A1980-83.

Throughout this period, all of the chemical companies produced 2,4,5-T with dioxin content greater than one ppm, often greater than 5 or 10 ppm, and sometimes

much more. One Diamond Alkali document from as late as 1969 refers to tests done on TCP from 1965 in which dioxin levels reached as high as 140 ppm. A1978-79.

All of the defendants herein were aware of the foregoing incidents of dioxin poisoning and that the Agent Orange that they were producing contained extremely dangerous levels of dioxin. A59 (FAC ¶10).

A number of memos written before and during the time in question within and among the chemical companies demonstrate the depth of defendants' knowledge as to the extreme toxicity of dioxin:

> From a letter from Boehringer to Hooker in 1957: "[Dioxin has] a really sinister character." A1984-1985.
>
> A Diamond memo from 1957 calls dioxin "an extremely toxic material." A1986.
>
> A Monsanto memo refers to information gathered from Dow: "According to them [Dow] it is the most toxic compound they have ever experienced. It is presumably toxic by skin contact, as well as by inhalation. According to Dow is it 100 times as toxic as parathion. It is, likewise, capable of causing incapacitating chloracne. A1987.
>
> Another Monsanto memo from 1965 suggests that "very conceivably, [dioxin] can be a potent carcinogen." A1968.
>
> Dow memo, 1965: "The effect of dioxin is systemic." "In Germany, two workmen died, presumably due to exposure to dioxin." A1988-95.

These are just a few of the examples that indicate the vast knowledge of the defendants as to the exceptional toxicity of dioxin and its potential to harm humans, animals and the environment.

Notwithstanding their knowledge of the toxicity of dioxin and its presence in the product they were providing to the United States Government, defendants did not take adequate or reasonable measures to eliminate the dioxin content of their products. Indeed, the dioxin contamination in some samples of the defendants' 2,4,5-T was as high as 140 ppm, a level clearly capable of inflicting devastating injury and death on many thousands of Viet Namese people, including innocent civilians. A60 (FAC, ¶114). Nor did defendants take adequate or reasonable measures to prevent or mitigate the disastrous effect of the herbicides on the environment of the regions in which it knew it would be sprayed. A60 (*Id.*, ¶115) .

(ii) Defendants' Knowledge That Dioxin Was Unnecessary and Avoidable.

As the government asked the chemical companies to produce more and more herbicide as the war escalated, whatever quality control that may have existed became non-existent. With greater demand, the companies in effect sped up their production line, which led to higher temperatures and pressure in the production process. Defendants knew from the experiences of Boehringer and another German company, Badische, that higher temperatures and pressure lead to greater dioxin content. After

Boehringer shut down its plant in the 1950's due to dioxin contamination, it discovered why dioxin was formed and how to avoid it. The company later reopened its plant and managed to keep dioxin levels at a reasonably low level. This new process involved keeping an upper temperature limit of between 150 and 155 degrees Centigrade. In Boehringer's system, an alarm would go off when the temperature rose above 157 degrees. This meant that the reaction to form TCP (when dioxin is normally produced) took 12 to 13 hours, much longer than with higher temperatures. Boehringer shared this information with the chemical companies in 1957, after it had experienced a measure of success in avoiding dioxin formation. *See Isaacson* Motion Exhibits E-3, E-6, and E-16.

Though defendants knew in the 1950s that decreasing temperature in the autoclave reaction would greatly lower levels of dioxin in their 2,4,5-T, they intentionally and deliberately failed to follow these precautions. A1986, A1996-98. Dow's reaction temperature during the early 1960s ran as high as 212 to 225 degrees, nowhere near the safe level of 150 degrees, and the reaction took only 45 minutes. See *Isaacson* Motion, Exhibit E-32. The reason for this was that lowering the temperature of the reaction and therefore slowing down the process would have cost more and taken longer.

Boehringer commented on this reality in a 1961 article: "It is certain that the operating methods we use here are much more expensive with regard to apparatus, solvents, energy (power) and labor than is customary for similar methods. However, the costs are justified in order to have safe operations." See *Isaacson* Motion, Exhibit E-9 at 18. Unlike Boehringer, defendants herein did not have the same concerns about having safe operations.

Since the government specifications specified that no contaminants like dioxin should be present in the end product, clearly an increase in the level of dioxin was unacceptable. Yet, defendants like Monsanto consistently showed high levels of dioxin in their product. In fact, a Monsanto document from 1966 indicates that up to 50% of the lots of 2,4,5-T that were tested failed to meet specifications and showed inordinately high amounts of dioxin. A2004. An official position paper published by Monsanto called dioxin an "unwanted, altogether useless contaminant." A2005-16

Not only did defendants know that the product they were selling at a profit to the government contained the poison called dioxin, but they knew that the presence of dioxin in their products was unnecessary and avoidable. Indeed, there is no mention of dioxin, or the need for dioxin, in any of the military specifications. Clearly, dioxin was not a necessary component of 2,4,5-T as a defoliant.

(iii) Defendants' Knowledge of the Government's Use of Agent Orange

The defendants knew the use to which their product would be put in Viet Nam. *See, e.g.*, 373 F.Supp 2d at 91("There is little doubt that is was widely known in the industry producing herbicides for the Vietnam War how the herbicides were to be used."). They also knew that the product that they were selling to the United States government was many times stronger than that which was permitted for domestic use in the United States. The recommended concentration of 2,4,5-T (the Agent Orange component containing dioxin) for use in the domestic commercial Dow product Esteron was 3/4 to 1 pound acid equivalent per acre. The concentrations used in Viet Nam averaged 13 times this amount. Thomas Whiteside made a calculation based on the concentration sprayed, average rainfall, and typical habits of a Vietnamese woman, and concludes that a woman in an affected area who drank 2 liters of contaminated water a day would be "absorbing into her system a percentage of 2,4,5-T only slightly less than the percentage that deformed one out of every three fetuses of the pregnant experimental rats." A1886; *see also, Zumwalt Report*, at 5 ("The military dispensed Agent Orange in concentrations 6 to 25 times the manufacturer's suggested rate.") A1833. Defendants knew that the product they supplied to the government would be used for military operations in Viet Nam. The defoliation conferences held by the USG, which were attended by representatives of many of defendants, talked explicitly about the fact that the chemicals being developed would be used as part of the

weaponry of war.[8] In one paper presented at the first conference, General Delmore, the commanding officer of the U.S. Army's Edgewood Arsenal, stated the case for chemical warfare:

> And remember, today we are not engaged in a war in Southeast Asia, we are only advisors assisting that country to carry on, but tomorrow morning perhaps we may be engaged in similar type operations, not over there, but perhaps in some other part of the world. We never know when this is going to happen. We are in need right now of chemicals that will do the job at an earlier time, and in a quicker period.

A1915. Slides on the effect of the defoliation efforts in Viet Nam were shown to the chemical company executives and scientists who attended these conferences. A1925.

At the third defoliation conference in 1965, the development of defoliants and herbicides was discussed in military terms in relation to the operations in Viet Nam. Colonel Vincent L. Ruwet stated as follows:

> We are delighted to see your interests in the subject of defoliation for military purposes, and I would like to welcome our guests from the military who have an interest and a need to know in this phase of what is now termed "modern weaponry" that has gained some prominence in operations in Viet Nam. We welcome representatives of our contractors who have concerned themselves in research on defoliation.

A1947.

[8] Excerpts of these conferences are part of the record below. A1904-55. The entire defoliation conference notes can be found in the Alvin L. Young Collection on Agent Orange, at http://www.nal.usda. gov/speccoll/findaids/agentorange/.

It is an irrefutable fact, and a lasting legacy of the shame of the Viet Nam War, that these chemical weapons were employed with little or no regard for human life or the environment in Viet Nam. Defendants' knowledge, which the government shared, of the unnecessarily high toxicity level of Agent Orange is compelling evidence of a violation of the law of nations. Defendants were aware at the time of procurement and production that the chemical compounds they were supplying to the USG and the RVN would be used as part of a chemical warfare program in Viet Nam. They also knew the extent to which these chemical weapons would be used. Even before the war began, Diamond Alkali was aware that "dioxin is so active as to be a *chemical warfare chemical*." (Emphasis added), A2035-36. A 1967 Dow memo indicates that they specifically knew of Agent Orange's intended use:

> We are formulating a specification by the government on a formulation established by the military, and are producing a weapon. It has no use in civilian business. It does require specific production facilities. It does present a serious health hazard in our plant if not properly controlled.

A2037-2038.

Defendants were aware at the time of procurement and production that dioxin was a contaminant and by-product of 2,4,5-T, that its presence in their product was both unnecessary and avoidable, that dioxin was extremely toxic to plants, animals and humans and that it would cause injury and death to the plaintiffs and others similarly situated, a group that included military personnel and civilians. Nonetheless,

they did not object to the intended use of their product for chemical warfare purposes. Instead they produced and supplied the chemical weapons at a profit knowing that by doing so they were participating and complicit in a chemical warfare operation that violated international law. A55 (FAC ¶¶ 87-89).

E. Harm Caused to Plaintiffs

Plaintiffs in this action include several individuals residing in both the North and South of Viet Nam who in one way or another have been harmed by their exposure to Agent Orange and other chemical weapons manufactured and sold by the defendants, as well as VAVAO. Plaintiffs represent a cross-section of the Vietnamese victims of dioxin, and of the various harms it has caused. Plaintiffs' injuries, which they allege were directly caused by their exposure to dioxin, and their history of exposure, are set forth in great detail in the First Amended Complaint, ¶¶ 118-229, A63-80, and in the opinion of the district court, 373 F.Supp 2d at 32-35, and will not be repeated here.

VAVAO is a Vietnamese not-for-profit, non-governmental organization whose membership consists of victims of exposure to dioxin during the war with the United States as well as donors, who are honorary members. The purpose of the organization is to represent and protect the interests of Vietnamese victims of the chemical weapons used in the war with the United States, and to raise funds for treatment and

care of victims and mitigation of the harmful effects of the environmental contamination. The organization is run by an executive board consisting of Vietnamese victims, attorneys, medical and scientific researchers, as well as prominent people from other disciplines. A37-38 (FAC ¶5).

Plaintiffs bring this action on behalf of themselves and all other Vietnamese nationals who were exposed to herbicides used in the war with the United States at any time and were in any way injured, became ill, suffered from birth defects, or died as a result. A86 (*Id.* ¶252).

SUMMARY OF ARGUMENT

The district court wrote a lengthy explanation for its decision to dismiss plaintiffs' international law claims, in the course of which the district court made two fundamental errors requiring reversal.

First, the district court's entire legal analysis is predicated upon its characterization of Agent Orange as a mere "herbicide" or "defoliant" and not a "poison," despite the detailed factual allegations made in plaintiffs' complaint, and the undisputed historical record, that Agent Orange, contaminated as it was with a known deadly toxin at extraordinarily high levels that were preventable using existing and

well-known manufacturing techniques, was in fact a poison harmful to human health. In a section of its opinion titled "Context," 373 F. Supp. 2d at 40-42, the district court noted that an herbicide "is an agent used to destroy or inhibit plant growth, while a 'poison' is a substance that through its chemical action kills, injures or impairs an animal organism. A highly toxic herbicide may be poisonous and poisons may harm plants. *Characterization as both, or as one or the other, depends upon design and degree*." *Id.* at 41(emphasis supplied).

Having invented this characterization test along with a "design and degree" analysis for determining whether a substance constitutes an herbicide or poison, the district court then misapplied its own newly minted test by not considering whether a substance can be both. The district court did not consider allegations relating to "design," i.e., defendants' state of mind at the time they delivered Agent Orange to the government. The district court ignored allegations and record evidence that the defendants knew of the uses to which their product was being put; knew of the presence and toxicity of dioxin in Agent Orange; knew of the dangers to human health presented by dioxin exposure; knew of the levels of dioxin contained in Agent Orange; and knew that those levels were completely unnecessary in view of existing technology, but delivered the highly contaminated product to the government anyway. The district court did not discuss or analyze the bedrock principle of tort law that an

actor is assumed to have intended the natural and probable consequences of its actions. *Restatement (Second) of Torts* § 8A.

Instead, the district court limited its discussion to the "degree" aspect of its "design and degree" test. The district court looked at the relative amount of dioxin, measured in parts per million, contained in Agent Orange. Without acknowledging or mentioning allegations and record evidence that dioxin is highly toxic at those low concentration levels, the district court simply concluded, without analysis and based solely on the ratio of herbicide to dioxin in the mixtures sprayed in Viet Nam, that Agent Orange and the other herbicides sprayed in Viet Nam "should be characterized as herbicides and not as poisons. While their undesired effects may have caused some people results analogous to those of poisons in their impact on people and land, such collateral consequences do not change the character of the substance for present purposes." 373 F. Supp. 2d at 41.

The district court's second error in its international law discussion turns on an issue of legal history. The district court expressed the view that there was some uncertainty, prior to 1975, as to whether the use in war of poison gases (which would include the spraying of poisonous liquids by air) was prohibited by any international law norm that was obligatory (as opposed to a moral norm that was voluntarily followed). *See, e.g., id.* at 117 (expressing "uncertainty" as to whether the 1907

Hague Convention relating to the laws of war prohibits even "lethal chemical weapons designed to kill human beings"); *id.* at 120 (characterizing the prohibition against the use of lethal gas weapons contained in the 1925 Geneva Protocol on the Use In War Of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare as "merely a rule based on reciprocity, not on customary international law" until the U.S. ratification of the Protocol in 1975). The district court made this finding in the face of painstakingly documented, and unrefuted historical evidence presented to the district court by both plaintiffs' counsel and plaintiffs' international law experts, that the prohibition on the use of poisons in war was a corollary of the wartime rule prohibiting actions or tactics that cause needless human suffering and devastation unrelated to military necessity and is a principle of customary international law as old as the concept of international law itself.

The district court did not, however, place principal importance on this cramped and erroneous view of pre-1975 international law, because, as we have seen, the district court discounted all allegations and evidence that Agent Orange was a poison and analyzed the international law claims based upon its presumption that Agent Orange was an herbicide, and only an herbicide.[9]

[9] This view of the evidence was the same one put forward by the defendants in their moving papers. For example, defendants' expert, Professor Michael Reisman, who submitted a lengthy opinion on the international law issues in this case, predicated his opinion on the

Based on these procedurally improper and substantively incorrect assumptions, the district court held that plaintiffs' allegations did not raise any international law claims that could be asserted under the ATS under the standards established by the U.S. Supreme Court in *Sosa v. Alvarez-Machain*, 542 U.S. 692 (2004). Indeed, the district court held that there "is no basis for any of the claims of plaintiffs . . . under any form of international law." 373 F. Supp. 2d at 145.

As to plaintiffs' state law claims, the district court erred in granting summary judgment to defendants based on the government contractor defense. Plaintiffs herein adopt the arguments and incorporate the factual record in the veterans' cases, *Isaacson v. Dow Chemical et al.*, 98-CV-6383 (EDNY) currently on appeal, 05-1820-CV (2nd Cir.), and *Stephenson v. Dow Chemical et al.*, 99-CV-3056 (EDNY), currently on appeal, 05-1760-CV (2nd Cir.). *See Isaacson v. Dow Chem. Co.*, 304 F. Supp. 2d 404 (E.D.N.Y. 2004). As the veterans' counsel have amply demonstrated, clear issues of fact as to each of the prongs of the government contractor test should have precluded the entry of summary judgment. Plaintiffs herein do discuss one issue that is unique to this case, namely, the grant of summary judgment with respect to plaintiffs' claims based on Agents White and Blue. Although no discovery had done on these substances in any of the veterans' cases, the district court not only denied plaintiffs'

---

assumption that the herbicides at issue were not harmful to human beings. A1116-1177.

request for such discovery but also entered summary judgment "sua sponte" – at defendants' request, made in a reply brief. The dismissal of this claim under these circumstances contravened black letter law under Rule 56, as well as fundamental fairness.

Finally, the district court's dismissal of plaintiffs' claims for injunctive relief was premature. Without the benefit of any discovery or factual record, the court's dismissal of these claims on the grounds that they would be "impracticable" and would impinge upon Viet Nam's sovereignty was premature. *Id.* at 45. The latter ground was particularly unwarranted in light of the explicit statement of support for the instant lawsuit made by the Ministry of Foreign Affairs of the Socialist Republic of Viet Nam. A2061.

ARGUMENT

I. THE DISTRICT COURT ERRED IN CONCLUDING THAT THE PLAINTIFFS HAD FAILED TO STATE A CLAIM FOR RELIEF UNDER INTERNATIONAL LAW.

A. The Alien Tort Statute Provides A Jurisdictional Basis For Adjudicating Clear Violations Of Established Customary International Law.

Since the ratification of our Constitution it has been the law in this nation that customary international law forms part of the law of the land. *See Sosa v. Alvarez-Machain,* 542 U.S. 692, 124 S. Ct. 2739, 2764 (2004) ("For two centuries we have

affirmed that the domestic law of the United States recognizes the law of nations."); *The Paquete Habana,* 175 U.S. 677, 700 (1900) ("International law is part of our law, and must be ascertained and administered by the courts of justice of appropriate jurisdiction as often as questions of right depending upon it are duly presented for their determination.") *The Nereide,* 13 U.S. 388, 423, 9 Cranch 242, 263 (1815) (Marshall, *C.J.*) ("[T]he court is bound by the law of nations, which is a part of the law of the land."); *Chisholm v. Georgia*, 2 U.S. 419, 474, 2 Dall. 333, 407 (1793) (Jay, *C.J.*) ("[T]he United States had, by taking a place among the nations of the earth, become amenable to the laws of nations; and it was their interest, as well as their duty, to provide, that those laws should be respected and obeyed."). Reaffirming this longstanding principle, the Supreme Court recently stated, "It would take some explaining to say now that federal courts must avert their gaze entirely from any international norm intended to protect individuals." *Sosa,* 124 S. Ct. at 2764-65.

It is not, therefore, a matter of serious legal debate as to whether customary international law is part of our law. Nor is it controversial as to whether a private right of action may lie for aliens to redress tortious violations of customary international law. The "venerable" Alien Tort Statute, as former Chief Judge Newman described it in *Kadic v. Karadzic,* 70 F.3d 232, 236 (2nd Cir. 1996), "validly creates federal court jurisdiction for suits alleging torts committed anywhere in the world

against aliens in violations of the law of nations." *Id.* at 236. The ATS provides that "[t]he district courts shall have original jurisdiction of any civil action by an alien for a tort only, committed in violation of the law of nations or a treaty of the United States." 28 U.S.C. § 1350. This Circuit began the modern line of ATS cases when, in *Filartiga v. Pena-Irala,* 630 F.2d 876 (2d Cir.1980), it decided that, in determining jurisdiction under the ATS, the "law of nations" must be understood as an evolving standard that will encompass more than it did at the time of the statute's enactment. *See id.* at 881; *see also Kadic,* 70 F.3d at 238; *Amerada Hess Shipping Corp., v. Argentine Republic,* 830 F.2d 421, 425 (2nd Cir. 1987), *rev'd on other grounds,* 488 U.S. 428 (1989). Thus, the Court concluded that acts of torture committed by state officials violate the law of nations and support jurisdiction under the ATS. *See Filartiga,* 630 F.2d at 884.

Since then, courts in this Circuit have ruled that genocide committed by private actors is actionable under the ATS, *Kadic v. Karadzic,* 70 F.3d 232, 241-42 (2d Cir.1995), and that jurisdiction is proper over private actors who aid in the commission of human rights violations, *Presbyterian Church of Sudan v. Talisman Energy, Inc.*, 244 F.Supp.2d 289, 321-24 (S.D.N.Y. 2003).

The Supreme Court recently reaffirmed that the ATS provides aliens a private right of action to redress violations of customary international law. In *Sosa*, the Court

held that the ATS was designed to afford the federal courts jurisdiction over well-accepted and clearly defined offenses under international law, analogous in terms of being well-established to such 18th-century international law offenses as piracy and offenses involving ambassadors. *See Sosa*,124 S.Ct. at 2754-56.

The Supreme Court in *Sosa* did not limit the ATS to those violations of international law clearly recognized at the time of its enactment. Rather, the Supreme Court quite consciously chose to leave the door open to allow private causes of action for violations of international law that, like the 18th century archetypes piracy and offenses against ambassadors, are *presently* well-established violations of customary international law. *See Sosa*, 124 S.Ct. at 2761-64 (to be actionable under the ATS, the claim must "rest on a norm of international character accepted by the civilized world and defined with a specificity comparable to the features of the 18th-century paradigms we have recognized").

One of the principal sources of these kinds of enforceable international norms is customary international law. As this Court recently noted, "[c]ustomary international law is comprised of those practices and customs that States view as obligatory and that are engaged in or otherwise acceded to by a preponderance of States in a uniform and consistent fashion." *United States v. Yousef*, 327 F.3d 56, 91, n. 24 (2nd Cir. 2003); s*ee also* Restatement (Third) of Foreign Relations §102(2)(stating that customary

international law "results from . . . [the] consistent practice of states followed by them from a sense of legal obligation"); *The Paquete Habana*, 175 U.S. at 694 (principles of customary international law consist of "settled rule[s] of international law" as recognized through "the general assent of civilized nations.").

B. The District Court's Ruling Is Contrary To Established Norms of Customary International Law Consistently Recognized By The U.S. Military.

The district court's view of international law relating to the use in war of herbicides, poisons, and other tactics calculated to cause unnecessary suffering is directly contrary to the well-settled view of customary international law applicable in these precise circumstances contained in the position first formally expressed in 1945, and later confirmed in 1971, by the United States military itself. In January 1945, during the Second World War, the Secretary of War requested the Judge Advocate General, Major General Myron C. Cramer, to render "an opinion as to the legality under international law of certain crop-destroying chemicals which can be sprayed by airplane against enemy cultivations." A1485-91 ("Cramer Opinion"). General Cramer rendered a formal written opinion on the subject in March 1945. A1489-91 .

After noting the U.S. view that it was not bound by any formal treaty specifically prohibiting the use of poisons in war (principally because of the failure of the U.S., as of that date, to ratify the 1925 Geneva Protocol), General Cramer nevertheless stated that an "exhaustive study of the source materials . . . warrants the conclusion that a customary rule of war has developed by which poisonous gases and those causing unnecessary suffering are prohibited." A1490 (emphasis in original). In language directly contrary to the district court's view of international law, General Cramer elaborates upon the point as follows:

> Nevertheless, the scope of this prohibition is restricted. It does not constitute a complete ban on all gases and chemical substances. A distinction exists between the employment of poisonous and deleterious gases against enemy human beings, and the use of chemical agents to destroy property, such as natural vegetation, crop cultivations, and the like. There is no rule of international law which proscribes chemical in war absolutely, apart from their poisonous and toxic effects upon human beings. The true motive behind the movement to outlaw poison gas is that it is considered a barbarous and inhumane weapon against human beings, because it inflicts unnecessary suffering upon them. This purpose was expressly stated at the Hague Peace Conference of 1899 (Proceedings of the Conference, pp. 282-3; 296-7) and it underlies every international convention drafted since then. It follows that the use of chemical agents, whether the form of a spray, powder, dust or smoke, to destroy cultivations or retard their growth, would not violate any rule of international law prohibiting poison gas, *upon condition, however, that such chemicals do not produce poisonous effects upon enemy personnel, either from direct contact, or indirectly from ingestion of plants and vegetables which have been exposed thereto. Whether [the specific herbicides to be sprayed upon Japanese crops], used as contemplated, are toxic to such a degree as to poison an individual's system is a question of fact which should be definitely ascertained.*

A. 1490 (italics supplied; other emphasis in original).

The fundamental reason the district court's international law ruling should be reversed is precisely because the herbicides used in *this* case did "produce poisonous effects upon enemy personnel" as well as civilians, both "from direct contact" as well as "from ingestion of plants and vegetable which have been exposed" to Agent Orange and other herbicides. Further, the defendants *knew it was going to happen, were presented with an opportunity to prevent it, and shipped the poison anyway*. The U.S. military's correct view of customary international law does not admit of any misapplied "design and degree" test to enable a judge to find, on 12(b)(6) consideration and without weighing any evidence whatsoever, that a poison-laced herbicide is legal under international law. Instead, the question of whether Agent Orange and other herbicides supplied by defendants are "toxic to such a degree as to poison an individual's system" is "a question of *fact*." A1490 (emphasis supplied).

The Cramer Opinion is emphatically *not* a mere voice in the wilderness of international law, the district court's 137-page discourse notwithstanding. It simply represents the least restrictive view of international law that the military could come up with in the face of well-established, non-controversial principles of customary international law.

Unsurprisingly, legal issues concerning the scope of the international law restrictions on the wartime use of herbicides and poisons arose again in the precise context of this very case: the spraying of Agent Orange and other herbicides during the Viet Nam War. During hearings on the military's herbicide program held on March 22, 1971, Senator Fulbright, Chairman of the Senate Foreign Relations Committee, requested a formal opinion from the Department of Defense as to the application of the 1907 Hague Regulations upon the crop destruction program. On April 8, 1971, the Office of General Counsel, Department of Defense, issued a formal opinion which, pursuant to Senator Fulbright's request, "extends beyond the literal text of the 1907 Hague Regulations. Moreover, this opinion will embrace the use of defoliants and antiplant chemicals in general." This formal opinion, written by J. Fred Buzhardt ("Buzhardt Opinion"), states:

> It is our opinion and that of the Judge Advocate Generals of the Army, Navy and Air Force that neither the Hague Regulations nor the rules of customary international law applicable to the conduct of war and to the weapons of war prohibit the use of antiplant chemicals for defoliation or the destruction of crops, *provided that their use against crops does not cause such crops as food to be poisoned nor cause human beings to be poisoned by direct contact, and such use must not cause unnecessary destruction of enemy property*.

A. 1485 (emphasis supplied). Because the military's spraying of poison-laced herbicides in fact caused "food to be poisoned," caused "human beings to be poisoned by direct contact," and caused "unnecessary destruction of enemy property," and

because the defendants caused this result by knowingly supplying *unnecessarily* poisoned herbicides that they knew would be sprayed in such a way that harm to human beings would inevitably result, defendants' actions violated customary international law. The Buzhardt Opinion elucidates why this principle of international law exists:

> The standard of lawfulness, with respect to the use of this agent either as a defoliant or as a means to destroy crops, under the laws of war, is the same standard which is applied to other conventional means of waging war. International law and the laws of war are prohibitive in nature. (United States v. List, et al., Vol. XI, TRIALS OF WAR CRIMINALS, USCPO,1950, at p. 1247). Hence, in order to be unlawful, the use of a weapon in the conduct of war must either be prohibited by a specifically agreed-upon rule, or its use must be such as would offend the general principle of humanitarianism, that is to say, such as would cause unnecessary destruction of property or unnecessary human suffering.
>
> The pertinent article in the Hague regulations of 1907 is Article 23, which is in the "Regulations Respecting the Laws and Customs of War on Land," Annexed to the Hague Convention of 1907 (IV), "Respecting the Laws and Customs of War on Land." Paragraphs (a), (e) and (g) read as follows:
>
> > "Article 23. In addition to the prohibitions provided by special Conventions, it is especially forbidden –
> >
> > > "a. To employ poison or poisoned weapons; . . .
> > >
> > > "e. To employ arms, projectiles, or material calculated to cause unnecessary suffering; . . .

> "g. To destroy or seize the enemy's property, unless such destruction or seizure be imperatively demanded by the necessities of war.

A discussion of Hague Regulation Article 23(a), relating to poisons and poisoned weapons, is set forth in paragraph 37 on page 18 of the Department of the Army Field Manual, FM 27-10, entitled "The Law of Land Warfare" (dated July 1956). It reads in its entirety:

> "37. Poison
> "a. Treaty Provision.
>
> "It is especially forbidden * * * to employ poison or poisoned weapons. (HR, art.23, par.(a).)
>
> "b. Discussion of Rule. The foregoing rule does not prohibit measures being taken to dry up springs, to divert rivers and aqueducts from their courses, or to destroy, *through chemical or bacterial agents harmless to man*, crops intended solely for consumption by the armed forces (if that fact can be determined)."

The discussion in paragraph 37 of the Manual is based on the standard set forth above to the effect that a prohibition against the use of one type of weapon, i.e., poison or poisoned weapons, does not effect any prohibition on the use of other weapons and, in particular, it does not prohibit the use of chemical herbicides for depriving the enemy of food and water. This discussion does not regard chemical herbicides, *harmless to man*, as poison or poisoned weapons, for if they had been so considered, their use against crops intended solely for the consumption by the enemy's armed forces would clearly have been prohibited by Article 23(a) of the Hague Regulations. As the discussion points out, such a use does not fall within the prohibition.

We therefore believe that the correct interpretation of paragraph 37(b) is that the use of chemical herbicides, *harmless to man*, to destroy crops intended solely for consumption by the enemy's armed forces (if that fact

> can be determined) is not prohibited by Article 23(a) or any other rule of international law. . . .
>
> * * *
>
> The thrust of the phrase "harmless to man" made part of the discussion of the rules draws attention to Article 23(e) of the Hague Regulations of 1907, wherein combatants are forbidden to employ weapons "calculated to cause unnecessary suffering." However, the provision in Hague Regulation Article 23(a) concerning the prohibition against using poison or poisoned weapons is a special case of this rule since it, in effect, declares that any use of a lethal substance against human beings is, per se, a use which is calculated to cause unnecessary suffering.

A. 2294 (italics supplied; other emphasis in original).

Thus, it was the view of the U.S. military, both before and at the time the defoliation and crop-destruction campaign in Viet Nam was ongoing, that the legality of the campaign under international law depended upon whether the herbicides were "harmless to man." This is true not merely because of some modern treaty dealing with "poison and poisoned weapons." Rather, this is because use of such "poison or poisoned weapons is a special case of" the rule banning the use of poison as "a use which is calculated to cause unnecessary suffering." As we will explain in greater detail in a subsequent section of this brief, the military's view about the customary international law prohibition against the use in war of poison, poisoned weapons, and other means of warfare calculated to lead to unnecessary suffering is completely uncontroversial. The law in this regard is not only settled, but the development of this

principle parallels the development of international law itself. It is for this reason that the district court had to go to such extraordinary lengths to characterize the controversy in such a way that this principle did not come into play.

C. The District Court Completely Ignored The Undisputed Customary International Law Recognized By The U.S. Military And Based Its Entire Opinion On Its Findings Of Fact Made Under the Guise Of "Context."

The essential holding of the district court flies in the face of the well-recognized role of the district court in ruling on a motion to dismiss pursuant to Rule 12(b)(6) of the Federal Rule of Civil Procedure. Rule 12(b)(6) authorizes the Court to dismiss a complaint on its face only if "it appears beyond doubt that the plaintiff can prove no set of facts in support of his claim which would entitle him to relief." *Conley v. Gibson,* 355 U.S. 41, 45-46 (1957); *see also Phillip v. Univ. of Rochester,* 316 F.3d 291, 293 (2d Cir. 2003). The court must accept as true all allegations in the complaint, and must draw all reasonable inferences in the plaintiff's favor. *See Leatherman v. Tarrant County Narcotics Intelligence & Coordination Unit,* 507 U.S. 163, 164 (1993); *Hartford Courtant Co. v. Pellegrino,* 380 F.3d 83, 90-91 (2d Cir. 2004). Thus, "the court's function on a motion to dismiss is not to weigh the evidence that might be presented at a trial but merely to determine whether the complaint itself is legally sufficient." *Festa v. Local 3 International Bhd. Of Elec. Workers,* 905 F.2d

35, 37 (2nd Cir. 1990). "At the pleading stage, then, [t]he issue is not whether a plaintiff will ultimately prevail but whether the claimant is entitled to offer evidence to support the claim." *Eternity Master Global Fund, Ltd. v. Morgan Guar. Trust Co.*, 375 F.3d 168, 177 (2d Cir. 2004) (citation and quotation marks omitted).

The district court ignored these well-established principles in the short passage that is the key to the district court's ruling – the sleight-of-hand contained in the "Context" section of its opinion, mentioned in the Statement of the Case, which enabled the district court to "characterize" Agent Orange and the other chemicals sprayed in Viet Nam as mere "herbicides" and not "poisons" for "present purposes," i.e., for purposes of dismissing all of plaintiffs' claims on Rule 12(b)(6) consideration.

As the key to the court's entire decision, it is instructive to look at the authority, such that it was, that the district court cited in support of its Rule 12(b)(6) factual finding that Agent Orange and the other herbicides were just that: herbicides only, and not poisons. First, the district court cited to two of its own decisions. One of these held that mercury-containing thimerosal was a "constituent" of a vaccine rather than an "contaminant or adulterant" within the meaning of the National Vaccine Injury Compensation Program. *Wax v. Aventis Pasteur, Inc.*, 240 F. Supp. 2d 191 (E.D.N.Y. 2002) (Weinstein, J.). The case does not discuss international law nor does it make any factual findings concerning the characterization of a substance as a

"poison" for any purpose. The second cited case held that the DPT vaccine was not defective under state products liability law since the plaintiff failed to introduce evidence of an available alternative to the product for the prevention of diptheria, tetanus, and whooping cough (pertussis). *Jones v. Lederle Labs*, 785 F. Supp. 1123 (E.D.N.Y. 1992) (Weinstein, J.). This latter case also does not discuss international law, nor poisons, nor any other matter with conceivable relevance to the district court's Rule 12(b)(6) findings of fact.

Next, the district court cited federal regulations establishing maximum safe levels of arsenic and dioxin in air and bottled water, 21 C.F.R. § 165.110 (levels of dioxin and arsenic in bottled water); 29 C.F.R. § 1910.1018 (levels of arsenic in air). As we shall soon see, ultimately the district court concluded that herbicides containing on average 10 parts per million (10 mg/liter) of dioxin do not, as a matter of law, constitute poisons. Again, the district court's cited authority does not support its decision. The regulation dealing with dioxin, 21 C.F.R. § 165.110, restricts dioxin in bottled water to *less than a billionth* of the level of dioxin derided by the district court as too small, even on Rule 12(b)(6) consideration, to justify characterizing Agent Orange as a poison as well as an herbicide. The cited regulation limits the maximum amount of dioxin allowed in bottled water to 3×10^{-8} parts per million (.00000003 mg/liter). 21 C.F.R. § 165.110. Perhaps the district court was citing the regulation for

the notion that there must be *some* numerical limit on the dangers presented by this extraordinarily potent toxin, but citing regulations concerning levels that are 10 *orders of magnitude* less than the levels cited by the district court in its Rule 12(b)(6) factual findings does not support dismissal in the least. The district court belittled parts per *million* as too small, whereas the federal regulation cited by the district court suggests that dioxin presents dangers at levels in the order of parts per *hundred trillion*. Finally, the district court cited to cases and scientific literature reciting the importance, in the field of toxicology, of examining not just the toxin, but the *dose*. This recitation of the importance of the dose to concluding whether a particular substance is toxic is not accompanied, however, by any discussion or conclusions about the dose at which dioxin becomes toxic. Indeed, such a discussion would have fallen squarely within the district court's own prohibition of any litigation or even discovery concerning causation. 373 F.Supp. 2d at 81; *see also* A172.

So without any discussion at all of whether there is a maximum safe level of dioxin in an herbicide intended to be sprayed by aircraft across populated areas, or what that level might be (necessarily a matter of "causation"), the district court simply recited statistics and conjecture as to the amount of dioxin contained in the Agent Orange sprayed in Viet Nam, and stated that "it is concluded for 12(b)(6) purposes that the Agent Orange touched the ground or people in the order of approximately

999,990 herbicide or benign substance, and 10 dioxin." 373 F. Supp. 2d at 41. At the end of the discussion, having touched on irrelevant thimerosal poisoning and DDT vaccine products liability lawsuits, federal air and water regulations whose only discussion of dioxin indicates that the district court's analysis is off by a factor of 1,000,000,000 (one billion), literature mentioning "dose" as an appropriate toxicological inquiry without any discussion of what constitutes a safe dose of dioxin, and without having reached any conclusion or even made any speculation about just how unsafe dioxin is when mixed with an herbicide sprayed without restraint across an entire countryside, the district court reached for the very limits of its judicial authority, and beyond, by writing:

> Agent Orange and the other agents used, *see* Table 1 *supra* Part II, for the purposes of this 12(b)(6) motion, should be characterized as herbicides and not poisons. While their undesired effects may have caused some results analogous to those of poisons in their impact on people and land, such collateral consequences do not change the character of the substance for present purposes.

373 F. Supp. 2d at 41.

With these two short sentences, the district court converted what the U.S. military itself in 1945 described as a "question of fact" into an already-decided matter of law for the trial judge. A1489-91 (Cramer Opinion). In so doing, the district court ignored the very foundation of Rule 12(b)(6) jurisprudence that the Rule was not intended as a procedural vehicle to resolve factual questions, but only legal ones

presented by the allegations of the complaint with all inferences resolved in plaintiffs' favor. Without these two sentences converting fact questions into settled matters of law, the rest of the district court's analysis would be without foundation, because the remainder of the discussion was carefully restricted (with two narrow exceptions described below) to a discussion of the question of whether international law prohibits the use of *herbicides*, not poisons harmful to humans, in war to defoliate native trees and to destroy crops.

While the district court found support in international law literature for its conclusion that no definite norm of international law existed prior to 1975 prohibiting the use of herbicides in war,[10] there is absolutely *no* support, and the district court cited none, for the idea that the use of poison and poisoned weapons in war is or was permissible under international law. As we have mentioned, the district court only touched on this subject in two places in its discussion of international law. First, the district court concluded that nothing in the 1907 Hague Convention prohibited the use of poison gases or sprays (as opposed to poisons applied directly to weapons or bullets). 373 F. Supp. 2d at 116-118. In any event, according to the district court, it

[10]Plaintiffs cited considerable authority in the court below for the proposition that the use of herbicides, particularly to destroy crops not intended for use by enemy forces, did violate established norms of international law prior to 1975. Plaintiffs concede there is authority going both ways on that subject, but do not concede that the trial court's holding in this regard was correct.

certainly did not prohibit the use of herbicides because it was "not 'calculated to cause unnecessary suffering.'" 373 F. Supp. 2d at 118. Ignoring allegations and evidence that the chemical companies knew of the preventable dangers of dioxin and the ordinary principle of tort law that an actor intends that which he knows is substantially certain to follow, the district court found that the defendants' conduct "was not designed to harm people or land independently as a punishment or to inflict hurt viciously and consciously." Plaintiffs submit that the question of defendants' intent is a question of fact and that the trial judge here, as in its characterization of Agent Orange and other herbicides as non-poisons, usurped the role of the jury.

Second, the district court concluded that, prior to 1975, nothing in the 1925 Geneva Protocol prohibited the use of poison gases or sprays in war. 373 F. Supp. 2d at 120. The district court then concluded that even if the 1925 Geneval Protocol gave rise to any customary international law norms prior to U.S. ratification of the Protocol in 1975, those norms could not apply to herbicides even if poisonous because, unlike the mustard gas used in World War I, Agent Orange did not have "an almost immediate disabling effect" on human beings. 373 F. Supp. 2d at 121. Again, this conclusion is directly contrary to the conclusion of the U.S. military in the Cramer and Buzhardt opinions, which is in turn based upon centuries of international law history and jurisprudence, detailed in Section I(e), *infra*. The district court did not cite any

authority for the idea that the customary prohibition on poisons is restricted to those poisons that have an "almost immediate disabling effect" as opposed to long-term toxic effects, such as dioxin.

Finally, the district court wrote a section on customary international law itself. The discussion addresses nothing but the debate about whether customary international law bans herbicides and crop destruction. 373 F. Supp. 2d at 130-138. The district court, in an opinion occupying 137 pages of the Federal Supplement, did not write a single word addressing whether customary international law prohibits poison gases and sprays, much less whether that law prohibits such uses when the poison results from a known, preventable manufacturing defect, and the poison is substantially certain to cause human suffering as used. How could it? As the U.S. military has known for decades, and as the history of international law itself makes clear, the widespread spraying of a substance known to contain poisons, unrelated to military necessity, is a violation of customary international law, no matter how many treaties and statutes are dissected and dismissed in a district court opinion.

D. The District Court Barred Discovery or Briefing Of Any Issues Related To Causation, But Its Holding Is Based Directly

Upon Its Incorrect View That The Quantities of Dioxin Sprayed In Vietnam Could Not Cause Human Harm.

The scope of the district court's error under international law is clear from the foregoing discussion. It is also clear that the district court incorrectly applied the correct standard under Rule 12(b)(6), reaching far beyond the pleadings and resolving factual issues in the face of directly contrary allegations contained in the complaint. There is, however, another important dimension to the district court's error. The district court invited the preliminary motions that the defendants filed, and admonished the parties that neither discovery nor legal argument concerning the important issue of causation would be allowed until after the district court's, and perhaps this Court's, determination of these threshold legal issues – the viability of plaintiffs' international law claims, the applicability of the government contractor defense, justiciability, etc. The issue of causation, the district court ruled, would be an issue for later consideration should plaintiffs' claims survive the motions based upon these threshold legal issues. 373 F.Supp.2d at 81; A172-219, A220-224

But the district court's determination that Agent Orange and other chemicals used were mere herbicides, and not poisons, was implicitly, and necessarily, based upon a determination of causation. The district court, as we have seen, said that an average of 10 parts per million of poisonous dioxin simply does not support characterization of Agent Orange as a poison as well as an herbicide. Without saying

it, however, what the district court is really holding here is that dioxin at levels of 10 parts per million cannot cause harm to humans. That is precisely the question of causation that the district court said was premature, and yet the very heart of its international law holding is a determination of causation. And it is meaningless that the district court did not mention causation in its discussion, or that its real basis was strictly upon what the district court believed was a very minute concentration of dioxin (which the district court ruled was itself a poison). Let us use a hypothetical example. Let's assume that in the future there is invented a chemical that causes instant death if humans are exposed to it at levels exceeding one part per million. If defendants had sprayed this mythical Chemical X at concentrations of 10 parts per million, killing all it touched, then of course that is the spraying of a poison. The fact that 999,990 parts per million is inert would not resuscitate those killed by the lethal combination.

The relative amount of poison in the mix, therefore, cannot have formed the true basis for its dismissal of the notion that Agent Orange, as constituted, was a poison. Instead, it is clear from its holding that the district court fundamentally believes that dioxin at these levels cannot and did not cause significant harm to humans. This is the core of the district court's holding, hidden behind words of "context" and "characterization." It was fundamentally unfair for the district court to rule on

causation in this manner without giving plaintiffs an opportunity to present the numerous modern studies and expert views linking dioxin with many diseases and conditions.

Of course, the district court itself stated that, from a procedural standpoint, causation should be presumed for purposes of the motion to dismiss, particularly "[s]ince there has been no discovery on general and specific causation," 373 F.Supp. 2d at 81, and so the particulars of the modern science on dioxin toxicity is not, strictly speaking, germane to the issue presented to this Court. But a few items are instructive and directly undercut the district court's implicit and improper fact-finding. For example, in an intensive study of the Ranch Hand personnel in the U.S. Air Force who conducted most of the spraying and had most contact with Agent Orange, which study was published in February 2004, the authors concluded that the incidence of melanoma and prostate cancer were increased among white Ranch Hand veterans relative to national rates. They also concluded that among veterans who spent at most 2 years in Southeast Asia, the risk of cancer at any site, of prostate cancer, and of melanoma was increased in the highest dioxin exposure category.[11] This updated study was in contrast to an earlier epidemiological study of U.S. Air Force veterans which

[11] Akhtar, *et al., JOEM*, 2004;46:123-136.

found no statistically significant dermatological differences between those exposed to Agent Orange and an unexposed cohort group.[12]

The findings of the 2004 U.S. Air Force study are even more significant when one considers the level of exposure to dioxin of the veterans studied. In the study, the highest level of exposure was still about "one tenth of the maximum predicted dose among workers in the National Institute for Occupational Safety and Health Study.[13] The exposure of the plaintiffs in this case would be greater than even the most exposed categories ever studied in the United States or elsewhere, i.e., those exposed as civilians by occupation or as a consequence of industrial accidents, rather than the lower exposure rates of veterans who served in the Vietnam era.[14] A combined cohort study of workers exposed to phenoxy herbicides, chlorophenols and dioxin found an increase in the risk of mortality due to cancers of all types in exposed workers.[15]

---

[12] *See,* Air Force Health Study, *An Epidemiologic Investigation of Health Effects in Air Force Personnel Following Exposure to Herbicides,* XV-9 (Feb. 24, 1984) (Ranch Hand II Study--1984 Report).

[13] *See,* Fingerhut, M.A., Halperi, W.E., Marlow, D.A., et al., "Cancer mortality in workers exposed to 2,3,7,8-tetrachlorodibenxo-p-dioxin," *N Eng J Med.,* 1991;3244:212-218.

[14] Akhtar, *JOEM,* 2004;46:131.

[15] *Id.,* citing Kogevinas, M., Becher, H., Benn, T., et al., "Cancer mortality in workers

exposed to phenoxy herbicides, chlorophenols, and dioxins. An expanded and updated international cohort study," *Am J Epidemiol.* 1997;145:1061-1075.

In sharp contrast to the veterans, the Vietnamese plaintiffs herein have levels and lengths of exposure that lasted for many years and included not just direct exposure, but also indirect exposure through contamination of the water and food supply. As the district court observed twenty years ago, "[w]e are not dealing here (in the veterans cases) with exposure of workers in a factory or laboratory to dioxin in concentrated amounts where the probative force of the evidence of causality may be substantial." 597 F.Supp at 783. Indeed, this litigation brought by the Vietnamese "presents quite a different picture" because in this case the plaintiffs, unlike the veterans, were subjected to "long term repeated exposure to a highly toxic substance." *Id.* Or, to paraphrase the district court's previous opinion approving the settlement, it is obvious that "Air Force personnel who generally have clean clothes and showers available at the end of their missions are in a far different situation from . . . [a Vietnamese national, soldier or civilian] . . . in the jungle who may be drinking contaminated water and living under primitive conditions in sprayed areas." *Id.* at 788.

Multiple health studies have been conducted which have concluded that a link exists between certain cancerous diseases, such as non-Hodgkins's lymphoma and soft-tissue sarcomas, and exposure to the chemical components found in Agent

Orange.[16] These and other scientific studies are collected and summarized in Admiral Zumwalt's Report to the Department of Veterans Affairs. A1835-37, A1852-57.[17]

[16]Hardell, L., and Sandstrom, A., "Case Control Study: Soft Tissue Sarcomas and Exposure to Phenoxyacetic Acids or Chlorophenols," 39 *Brit J. Cancer*, 711-717 (1979); Axelson and Sundell, "Herbicide Exposure, Mortality and Tumor Incidence: An Epidemiological Investigation of Swedish Railroad Workers," 11 *Work Env't Health 21-28* (1974). June 1979 *Congressional Hearings before House Commerce Committee: Subcommittee on Oversight and Investigation*, quoted in "human Disease Linked to Dioxin: Congress Calls for 2,4,5-T Bar After Dramatic Herbicide Hearings," 28 *Bioscience* 454 (August, 1979). See Blair, "Herbicides and Non-Hodgkin's Lymphoma: New Evidence From a Study of Saskatchewan Farmers," 82 *Journal of the National Cancer Institute* 575-582 (1990)

[17] *See also* Zack and Suskind, "The Mortality Experience of Workers Exposed to TCDD in a Tricholorophenol Process Accident," 22 *Journal of Medicine*, 11-14 (1980)(exposure of industrial workers to dioxin compounds resulted in excessive deaths from neoplasms of the lymphatic and hematopoietic tissues.); Executive Summary, The U.S. Interagency Workgroup to Study the Long-Term Effects of Phenoxy Herbicides and Contaminants (September 22, 1980) (correlation between exposure to phenoxy acid herbicides and an increased risk of developing soft-tissue tumors or malignant lymphomas).

Both the EPA and IARC have concluded that dioxin is a "probable human carcinogen." A1855-56 (Zumwalt Report at 44) The Report of the Agent Orange Scientific Task Force of the American Legion, Vietnam Veterans of America and the National Veterans Legal Services Project, after reviewing the scientific literature related to the potential human health effects associated with exposure to dioxins, concluded that "it is at least as likely as not that exposure to Agent Orange is linked to the following diseases: non-Hodgkins lymphoma, soft tissue sarcoma, skin disorders/chloracne, subclinical hepatotoxic effects, porphyria cutanea tarda, reproductive and developmental effects, neurological effects and Hodgkin's disease." A1856-57 Several epidemiological studies conducted in Vietnam by Vietnamese scientists have confirmed the incidence of increased birth defects among civilian populations exposed to Agent Orange.[18]

[18] *See, e.g.*, Phoung, et al., "An Estimate of Reproductive Abnormalities in Woman Inhabiting Herbicide Sprayed and Non-herbicide Sprayed Areas in the South of Vietnam," 152-1981, 18 *Chemosphere* 843-846 (1989) (significant statistical difference between hydatidiform mole and congenital malformations between populations potentially exposed and not exposed to TCDD).

Contrary to the district court's outdated view on the scientific evidence linking dioxin exposure to disease and illness is extensive and ever growing. Some measure of the extent to which contamination from dioxin has been linked to disease and injury can be seen from the fact that the United States government acknowledges the connection between exposure and disease in the way it treats the U.S. veterans who came into contact with dioxin during their stay in Viet Nam.[19] Some measure is also reflected in the amount of money that has been spent by both the defendants and the United States Government to compensate United States veterans who have justifiably alleged injuries and diseases which they believe were proximately caused by their exposure to dioxin. As this Court well knows, the defendants settled the first round of cases brought by the U,S. veterans for $180,000,000. *See In re Agent Orange Product Liability Litigation*, 597 F.Supp. 740 (E.D.N.Y. 1985), *aff'd*, 818 F.2d 145 (2nd Cir. 1987), *cert. denied sub nom*, 484 U.S. 1004 (1988). That amount grew to approximately $300,000,000 by the time payments were made to the veterans. At the time the first U.S. veterans case was approved, the district court estimated that

[19] The Veterans Administration recognizes that the following diseases and illnesses are related to Agent Orange exposure: Choracne; Porphyria cutanea tarda; Acute or subacute transient peripheral neuropathy; Type 2 diabetes; Cancers, including non-Hodgkin's lymphoma, chronic lymphocytic leukemia, soft-tissue sarcoma, Hodgkin's disease, multiple myeloma, prostate cancer, and respiratory cancers – including cancers of the lung, larynx, trachea and brochus; Spina bifada and other birth defects. *See* United States Government Accountability Office, *Agent Orange, Limited Information is Available on the Number of Civilians Exposed in Vietnam and Their Workers' Compensation Claims*, GAO-05-371 (April, 2005)(hereinafter cited

600,000 U.S. veterans were exposed to Agent Orange. *In re Agent Orange Product Liability Litigation*, 611 F.Supp. 1396, 1400 (E.D.N.Y. 1985).

---

as "GAO Report"), p. 6; *see also*, http://www.gao.gov/ new.items/d05371.pdf.

Even more extraordinary is the amount of money the United States Government, through its Veterans Administrations, has spent over the years to compensate U.S. veterans for 13 Agent Orange related diseases. A report from the Government Accounting Office in 2005 provides an indication of the massive amounts of money that have been spent compensating U.S. veterans. The report notes that 160,000 U.S. veterans are currently receiving disability compensation benefits for the four most common medical conditions associated with Agent Orange exposure. *See* GAO Report at 26.[20] The report also indicates that the average annual cost for the four most common medical conditions associated with exposure to dioxin is about $8,500 for disability compensation and $1,000 for medical expenses. *Id.* An additional $350 per year is spent for administrative costs for each claim processed. *Id.*

Simple math reveals the staggering sums that the VA now pays and has paid for many years for disability benefits related to exposure to dioxin which defendants continue to maintain causes no harm. The annual total costs for disability and medical expenses is approximately $1.52 billion dollars. Administrative costs are another $56 million annually. These are annual expenditures. Since the sea change by the VA in processing and recognizing Agent Orange related disability claims more than 14 years

[20] The GAO observed that dioxin has been a focus of research and has been "associated with a number of latent illnesses, including cancer and most recently diabetes, which have developed among people who have been exposed to the chemical." GAO Report at p. 5.

ago with the passage of the Agent Orange Act of 1991, the Veterans Administration has conservatively spent many billions of dollars compensating U.S. veterans for diseases as a result of the poisons which were contained in these defendants' deadly products. The extent to which the U.S. government now compensates U.S. veterans also belies the suggestion by the district court that the harm caused by exposure to dioxin was minimal or a collateral matter of little importance or that most would conclude that there is no connection between exposure to dioxin and disease and illness. As the GAO reported, "[o]ver time, the body of research on the health effects of dioxin exposure has grown, and in recent years, research organizations such as the IOM (National Academy of Sciences' Institute of Medicine) have learned more about positive associations between exposure and certain medical conditions." *Id.* at 6. Further, as the GAO reports, both the "National Institutes of Health and the Environmental Protection Agency consider dioxin a carcinogen on the basis of studies showing associations between exposure and medical conditions such as lung cancer." *Id.*

These staggering sums in no way are not meant to suggest that those U.S. veterans who have been harmed by their exposure to dioxin should not be justly compensated by the defendants. Nor do the plaintiffs herein subscribe to the district court's oft-repeated argument that the U.S. veterans have gotten enough by prior

settlements and compensation from the VA. Rather, we offer these figures to point out that those who were most harmed by the poisons produced by these defendants have not even received the limited relief given to the U.S. veterans to date.

And so with this context in mind as to the toxicity and dangers presented by the chemicals sprayed in Vietnam, much of which was known at the time, that we turn to the customary international law banning such dangerous substances.

E. Customary International Law That Pre-Dated the Viet Nam War Prohibited the Use of Dioxin Because It Was a Poison or Poisonous Weapon[21]

1. Introduction.

[21] Though plaintiffs relied on numerous international laws and treaties as the source for their claim for relief under the ATS, they restrict this appeal to the prohibitions against poison and wartime tactics causing unnecessary devastation not related to military necessity.

In addition to the government's own view of the matter, as expressed in the Cramer Opinion and the Buzhardt Opinion, there is other abundant authority supporting the conclusion that defendants' manufacturing and supplying a herbicide laced with poison violated the most fundamental norms of the laws of war. As plaintiffs' expert on international law succinctly stated: "There is no authority for the view that poisoning of crops or water is permissible in order to achieve military objectives." A1747 (Opinion of Professor George P. Fletcher, submitted with Plaintiffs' Opposition to Defendants' Motion to Dismiss ("Fletcher Opinion"))**.** Plaintiffs' other expert who offered his opinion to the district court was of the same view: "Use of poison by any means is a war crime under customary and treaty-based international law." See A1539 (Opinion of Professor Jordan Paust, ("Paust Opinion").[22]

One of plaintiffs' submissions to the district court on the motions to dismiss included a comprehensive historical analysis of the customary international law prohibition on the use of poisons. Memorandum of Law of Constantine Kokkoris in opposition to Motion to Dismiss for Lack of Jurisdiction and Failure to State a Claim.

[22] Pursuant to the wide discretion permitted district courts by Rule 44.1 of the Federal Rules of Civil Procedure, the district court properly considered the opinions of experts on international law offered to the court by both plaintiffs and defendants. As this Court has stated, "We find the norms of contemporary international law by 'consulting the works of jurists, writing professedly on public law; or by the general usage and practice of nations; or by judicial decisions recognizing and enforcing that law.'" *Kadic*, 70 F.3d at 238-39 (quoting *Filartiga*, 630

A21 (Docket Entry 77). Although the district court acknowledged it and compiled its own historical list to the same end, 373 F.Supp 2d at 99-104, it failed to consider this historical record. Space limitations prevent us from repeating in this brief the voluminous materials that we submitted below, which is part of the record on appeal, but some portions of the historical underpinnings of the rule banning poison or poison weapons bear repeating to emphasize how clearly understood it was at the time of the Viet Nam War that the use of poisons, like dioxin, violated customary international law.

2. History Of The Use Of Poison and Poisoned Weapons.

F.2d at 880 (quoting *United States v. Smith*, 18 U.S. (5 Wheat.) 153, 160-61 (1820).

The word "toxic" originates from the Ancient Greek word *toxikon*, which means "poison, originally poison in which arrows were dipped." Webster's New Twentieth Century Dictionary (2nd Ed. 1963). This may have originally referred to the Scythian archers from the Black Sea region who, according to Herodotus, employed arrows dipped in a poison made by mixing human blood and dung. Adrienne Mayor, *Dirty Tricks in Ancient Warfare*, Military History Quarterly, 10, 1 (2001) at 32-37.[23]

According to Thucydides, when a devastating epidemic broke out during the siege of Athens by the Spartans in the Peloponnesian War, "it was supposed that Peloponnesians had poisoned the reservoirs" because "the plague broke out directly after the Peloponnesian invasion." Thucydides, History of the Peloponnesian War 123, 127 (Rex Warner trans., Penguin Books 1954).

In 1155, at a battle in Tortona, Italy, Barbarossa was reported to have used the bodies of dead soldiers and animals to poison wells. The poisoning of wells was a battle tactic used in incidents that span the history of warfare, and was employed as late as 1863 during the Civil War of the United States by General Johnson, who used

[23] Mayor concludes that "a tragic myopia afflicts those who practice biological war, according to the stories of Heracles, Philocetes and numerous victims and perpetrations, real and legendary . . . Once created, the legends warn, virulent weapons take on an uncontrollable life of their own, even imperiling the makers and their descendants. Consider . . . the delayed afflictions of veterans who deployed the defoliant Agent Orange in Vietnam." Id. At 37.

the bodies of sheep and pigs to poison drinking water at Vicksburg. Christopher, G.W., Cieslak, T.J., Pavlin, J.A., Eitzen, E.M, Biological Warfare, A Historical Perspective. JAMA 1997, August 6; 278 (5) 412.

In the fourteenth century, the Tartar army used a combination of psychological warfare and biological warfare in its siege of the city of Kaffa near the Black Sea. The Tartar army had succumbed to the plague while besieging the city. In an attempt to foul the air and create panic within the city, the Tartars catapulted plague-infested corpses over the city walls. Although there is doubt as to whether the disease was spread from the Tartars to the inhabitants of Kaffa by use of the plague-infested cadavers or by fleas and rats, it is widely believed that the flight of infected defenders from Kaffa to Italy precipitated the four hundred year devastation of Europe by the bubonic plague. The Black Death (Rosemary Horrox, ed. and trans., Manchester University Press 1994) 14-26.

This method of warfare was used again in 1422 at the siege of Carolstein and by the Russian army during the siege of Reval, in Estonia in 1710. The success of the tactic was due, in part, to the panic and hysteria that the plague induced in people. McNeill, W. Plagues and Peoples (Anchor Press 1976).

3. Historical Attempts To Ban Poison and Poisoned Weapons.

The history of heinous acts of poisoning as a war-time tactic thus stretches back far indeed. Attempts to proscribe the use of poison and poisoned weapons in war can be traced back almost as far. A body of rules regulating land warfare found in the seventh book of the *Book of Manu* and dating back to India in the fourth century B.C.E. had this to say on poisoned weapons: "When (the king) fights with his foes in battle, let him not strike with weapons concealed (in wood), nor with (such as an) barbed, poisoned, or the points of which are blazing on fire."

Alberico Gentili provides further annotation of this customary international law principle in his work, *De Jure Belli* (On the Law of War), which was published in 1598 and represents one of the earliest works on international law. In it Gentili discussed the prohibition of poison and poisoned weapons, and listed 19 reasons justifying the prohibition, including the clandestine and malicious character of the use of poison.

On the Law of War and Peace, a three-volume work completed by Hugo Grotius in1625, represents the first comprehensive attempt to codify the law of nations governing the conduct of war. Many of his suggested restraints later became part of the Hague and Geneva Conventions. Leon Friedman, *The Law of War*, *A Documentary History – Volume I* at 14-15 (Random House 1972) ("Friedman").

Even in Grotius' time, it was understood that "[b]y the law of nations it is forbidden to kill any one by means of poison" in time of war. On this point, Grotius states that it is more noble to kill an enemy by the sword than by poison because it gives the enemy the chance to defend himself, and he cites to several authorities who concur on that point. One quote is from Valerius Maximus, who stated: "Wars ought to be waged with weapons, not poisons." After noting that the poisoning of javelins was specifically prohibited, Grotius went on to declare that "The poisoning of springs also, though the act either is not secret or does not long remain so, " was contrary to the law of nations.

In addition to written proscriptions on the use of poison in war, there have been occasions when belligerents were presented with opportunities to employ poisons or poisonous chemicals and have voluntary refrained, out of a sense of legal and/or moral obligation. For instance, in 1846 a British government committee rejected a proposal by Admiral Cochrane to use sulfur dioxide to flush out troops from fortified places on the grounds that it would violate the rules of war. The British War Department rejected a proposal to use shells containing cacodyl cyanide against Russian ships during the Crimean War on the ground that it would be similar to poisoning the enemy's water supply. During the American civil war, General Grant rejected the idea of chemical warfare as being uncivilized. Stockholm International Peace

Research Institute, The Problem of Chemical and Biological Warfare (Solna, 1975) (hereinafter "SIPRI"),Vol. III at 104.

4. Modern Codifications Of The Customary International Law Ban On Poison, Poisoned Weapons, and Means of War Causing Unnecessary Suffering Without Military Necessity.

The absolute ban on the use of poison or poisoned weapons in war has been codified in several important modern instruments concerning the laws and customs of war (in addition to the Cramer and Buzhardt Opinions already described). Long ago, the authoritative Lieber Code of 1863 recognized that customary international laws of war prohibited "the use of poison in any way," even in the face of claims of "military necessity" (Article 16), and that, "[t]he use of poison in any manner, be it to poison wells, or food, or arms, is wholly excluded from modern warfare. He that uses it puts himself out of the pale of the law and usages of war." Article 70. Instructions for the Government of Armies of the United States in the Field, General Orders No. 100 (April 24, 1863), arts. 16 and 70, reprinted in Paust, Bassiouni, et al., *International Criminal Law Documents Supplement,* 94, 97 (2000)(hereinafter cited as "ICL Documents"); *see also* A1541 (Paust Opinion at 14).

The "poisoning of wells" also appears in a list of customary war crimes recognized by the Commission on the Responsibility of the Authors of War and on Enforcement of Penalties that was presented to the Preliminary Peace Conference in

Paris following World War I. *See* List of War Crimes, No. 32 (29 March 1919), reprinted in *ICL Documents*, *supra* at 103. The United States was a member of the commission that created this list. A1541.

The Brussels Declaration of 1874 prohibited "the employment of arms, projectiles or material calculated to cause unnecessary suffering," as well as poison and poisoned weapons).[24] The Oxford Manual forbade the "use of poison, in any form whatever. . . To employ arms, projectiles, or materials of any kind calculated to cause superfluous suffering, or to aggravate wounds. . ."[25] Although neither the Brussels Declaration nor the Oxford Manual were treaties, none the less, the provisions of both formed the basis of the 1899 and 1907 Hague Conventions.[26]

---

[24] Reprinted in Dietrich Schindler and Jiri Toman, *The Laws of Armed Conflict: A Collection of Conventions, Resolutions and Other Documents*, vii (Martinus Nijhoff Publishers, 3rd Ed. 1988), p. 25-35.

[25] Institute of International Law, Manual of the Laws and Customs of War at Oxford in 1880, reprinted in Dietrich Schinlder and Jiri Toman, *The Laws of Armed Conflict: A Collection of Conventions, Resolutions and Other Documents*, vii (Martinus Nijhoff Publishers, 3rd Ed. 1988), p. 35-49.

[26] Adam Roberts and Richard Guelff, *Documents on the Laws of War* (Oxford University Press, 3rd Ed., 2000), p. 68.

The absolute ban on the use of poison was meant to encompass "the use of means calculated to spread contagious diseases." U.S. Army manual of 1914 and 1940; III SIPRI at 96 (proceedings of Brussels Conference). The prohibition on arms or materials "of a nature to cause superfluous injury" or "calculated to cause unnecessary suffering" was also meant to prevent indiscriminate targeting of civilians. United States Navy Manual, Law of Naval Warfare (1955) ("[T]o the extent that [toxic chemical agents] are used either directly upon the noncombatant population or in such circumstances as to cause unnecessary suffering, their employment must be considered unlawful.").

Customary international law reflected in the 1907 Hague Convention expressly affirms the *per se* prohibition of poison – that is, it may never be used under any circumstances, regardless of attempts at justification or claims of military necessity. See Hague Convention IV Convention Respecting the Laws and Customs of War on Land, Annex, Art. 23(a)("[I]t is especially forbidden – a. To employ poison or poisoned weapons"), done Oct. 18, 1907, 36 Stat. 2277, T.S. No. 539.[27] As plaintiffs' expert Professor Paust, this customary international law norm admits of no exceptions.

[27] Defendants' expert Professor Reisman agreed that each provision in the 1907 Hague Convention IV was also customary international law of universal application by the 1940s, well before this country's engagement in Viet Nam. *See*, A1145 (Opinion of W. Michael Reisman at 29 & n.56 (hereinafter cited as "Reisman Opinion")).

> It does not matter how poison is employed (e.g., by pellet, liquid or gas, dropped by hand or modern aircraft) and it does not matter against whom the poison is employed (e.g, solely against enemy combatants, against a mixture of enemy combatants and noncombatants, or in areas inhabited merely by noncombatants), since by the plain meaning of Article 23(a) it is prohibited "to employ" poison in any manner.

Paust Opinion at 13, A1540.

The treaty, signed and ratified by the United States, by its terms does not merely prohibit "poisoned weapons," but also prohibits the employment of "poison," i.e., one is prohibited "[t]o employ poison" of any sort in any manner. For these reasons, it is unimportant whether "herbicides" as such were expressly banned by the Hague Convention of 1907, as the Cramer Opinion recognized when he referred to "crop-destroying chemicals which can be sprayed by airplane." Similarly, it is not important whether all herbicides as such are banned *per se* (unless all are poison). The prohibition of any employment of poison was and is general, all-inclusive, and absolute, and the issue necessarily shifts to whether or not particular herbicides, or any other materials, were of a poisonous nature during the Viet Nam War, an analysis which the district court noticeably avoids.

In addition, the "limited means" provision of Article 22 of the Hague convention as well as the "unnecessary suffering" language of Article 23(e) should prohibit a combatant party from employing chemical weapons or any similar substances. *Id.* Article 23(e) sets forth the customary international law prohibition on the use of "material of such a nature as to cause unnecessary suffering." This prohibition provides an independent basis for liability in this case as it reaches any use of any material of such a nature as to cause unnecessary suffering. Once again, as Professor Paust has observed, "[t]he test concerning unlawful use is objective and hinges on whether the material is of a nature to cause unnecessary suffering, i.e., whether it is foreseeably of such a nature and not whether there was an intent to cause such suffering." A1555. Moreover, like the prohibition on the use of poison or poisoned weapons, the customary international law prohibition of the use of any material of a nature to cause unnecessary suffering applies whether or not use is solely against enemy combatants, noncombatants, or a mixture of such persons. As General Counsel Buzhardt recognized in 1971, the tests regarding permissibility of chemicals for defoliation include the test that the use must not "cause ... unnecessary human suffering." A1486. Major General Cramer also recognized this test in 1945, stating that crop-destroying chemicals that caused unnecessary suffering are prohibited. A1489-91.

Separate and apart from the specific prohibitions of the Hague Regulations, the preamble to the Hague Conventions (known as the Martens Clause) declared the continuing vitality of the laws and customs of war especially with respect to situations not explicitly covered, stating that "in cases not included in the Regulations adopted by them, the inhabitants and the belligerents remain under the protection and the rule of the principles of the law of nations." Dietrich Schindler and Jiri Toman, *The Laws of Armed Conflicts: A Collection of Conventions, Resolutions and Other Documents,* vii (Martinus Nijhoff Publishers, 3rd ed. 1988)at 63-100.

The 1907 Hague Convention is thus of extraordinary relevance, for two separate but inextricably intertwined reasons. First, it is in and of itself a separate source of the international law prohibition on poison and poisoned weapons. The United States is bound by the treaty; it is a part of our law just like all of the laws of nations binding the U.S.; and it explicitly and unambiguously bans poison and poisoned weapons. Second, the Hague Convention, like the other treaties and conventions cited herein, simultaneously evidences and contributes to the customary international law norm banning such weapons and other tactics designed to cause unnecessary suffering and devastation. Its twofold relevance is made starkly evident by the Martens Clause, which explicitly recognizes the existence of other sources of international law norms outside the Hague Convention, which principally consists of customary international

law principles. When considered in this light, it becomes once again obvious that the district court could not have possibly ruled against plaintiffs without recasting plaintiffs' claims as involving a herbicide only. This is precisely how the district court dismissed plaintiffs' arguments under the Hague Convention.

Thus, prior to the adoption of the 1925 Geneva Protocol, the use of poison as well as deleterious and asphyxiating gases had already been recognized as *per se* violations of the customary international laws of war. The 1925 Geneva Protocol, signed by many countries in the wake of the mustard gas horrors of World War I, also serves as evidence of this ancient customary international law principle. The Protocol was drawn up and signed at a 1925 conference on international trade in arms and munitions organized by the League of Nations as the culmination of instruments promulgated in response to the widespread use of chemical weapons during World War I. I SIPRI at 246.[28]

[28] In United States v. Alfried Krupp, et al., the U.S. military tribunal at Nuremberg would later point out, with disapproval, the German resort to semantics to deny violations of the laws of war in initiating the use of poison gas:

> This brings to mind the German practices in the First World War in the use of poison gas. By the Hague Convention of 1907 [sic] . . . it was agreed that the signatories would not use "projectiles," the sole object of which is diffusing of noxious gas. The Germans sought to justify their use of gas by the insistence that in view of the explicit stipulation that "projectiles" are prohibited, the use of gas from "cylinders" was legal and this notwithstanding the effect upon the victim

was much worse.

Reprinted in Leon Friedman, *The Law of War, A Documentary History – Volume I* at 4 (Random House 1972).

The Preamble to the1925 Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare reflected the fact that the prohibition against the of poisons as an instrument of war was already a universal norm:

> The undersigned Plenipotentiaries, in the name of their respective governments: Whereas the use in war of asphyxiating, poisonous or other gases and of all analogous liquids, materials or devices has been justly condemned by the general opinion of the civilized world . . . . To that end this prohibition shall be universally accepted as a part of International Law, binding alike the conscience and practice of nations…

Protocol for the Prohibition of the Use of War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, 17 June 1925, 94 L.N.T.S. 65, No. 2318 (1929)(signed at Geneva)(emphasis added).

Consistent with the language of the Geneva Protocol, a majority of the delegates to the 1925 conference believed that the Protocol actually codified an existing customary prohibition on chemical and biological weapons. International law scholars including Lauterpacht, Schwarzenberger, Stone, and Blix hold the view that the Protocol was a mere declaration of existing customary international law." Wil D. Verwey, Riot Control Agents and Herbicides in War, 264 A.W. Sijthoff: Netherlands (1977), citing L. Openheim/Hersch Lauterpacht, *International Law*, 344 Vol. II, McKay (1955); Georg Schwarzenberger, *The Legality of Nuclear Weapons*, 38, London, Stevens (1958); Julius Stone, *Legal Controls of International Conflict*, 556,

London, Stevens (1959); and H. Blix, *Memorandum on a General Assembly Declaration Concerning the Prohibition of Biological and Chemical Warfare*, 12-13 (on stencil, Stockholm, 14 Nov. 1969)(Blix holds that "it is impossible to read the proceedings which led to the adoption of the 1925 Protocol without gaining the impression that the majority of delegates felt that they were largely confirming an existing prohibition, formulated most lately in the Washington Treaty." Verwey at 264.

When the drafters of the 1925 Protocol affirmed that use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices, has been just condemned by the general opinion of the civilized world, the drafters and signators were simply affirming a general *opinio juris* that was then extant and reflected also in treaties. This *opinio juris* was also reflected in the Cramer Opinion of 1945. As we have discussed in more detail, *supra*, Cramer was addressing "certain crop-destroying chemicals which can be sprayed by airplane." A1489. The opinion recognized that "a customary rule of international law has developed by which poisonous gases and those causing unnecessary suffering are prohibited," including poisonous and deleterious gases. Cramer concluded that customary international law requires that "chemicals do not produce poisonous effects upon enemy personnel, either from direct contact, or indirectly from ingestion of plants and vegetables which

have been exposed thereto," adding that "[w]hether ... agents ... are toxic ... is a question of fact which should definitely be ascertained." A1490-91.

In view of the express recognition by the U.S. and others in 1919 that use of poison and use of "deleterious and asphyxiating gases" were a violation of customary international law, in view of Cramer's recognition in 1945 that "toxic" and "poisonous and deleterious gases" and "chemicals" and "agents" were proscribed, and in view of the portions of the 1925 Geneve Protocol noted above, it is clear that the prohibitions reflected in the Protocol has become customary international law.

As Professor Paust convincingly demonstrates in the expert opinion he provided to the district court, A1544-47, the 1925 Geneva Protocol was meant to clarify and expand existing law. This clarification and expansion was not directed at the then-existing customary international law proscription on the use of poison. To the extent that there was opposition to the 1925 Geneva Protocols from the United States, it was directed at something quite different from the customary international law prohibition on the use of poison. U.S. opposition was directed at an interpretation of the Protocol that included "other gases." As Paust points out, and it's a point on which defendants' expert Reisman concurs, "[t]he point of the United States was that 'other gases' should be viewed in the context of the types of gases prohibited per se (e.g.,

poisonous, toxic, deleterious, asphyxiating) and not to the extend to gases such as mere riot control agents that are used domestically in many countries." A1544-45.[29]

The unprecedented number of civilian casualties during World War II led to the promulgation of the Geneva Convention (IV) Relative to the Protection of Civilian Persons in Time of War (August 12, 1949) ("Geneva Convention"). Articles 146 and

[29] The district court discounted the impact of the 1925 Geneva Protocols because the United States, although a signatory to the treaty, did not ratify it until 1975. 373 F.Supp. 2d at 121. However, the district court reads too much into this cynical failure to ratify the Protocol until after the end of the Viet Nam War. In fact, as this Court has pointed out, "[t]he ongoing effect of treaties under customary international law is not governed by the same rule governing the ongoing effect of statutes under the common law." *Fujitsu Limited v. Federal Express Corp.*, 247 F.3d 423, 433 (2nd Cir. 2001). Under fundamental principles of international law involving treaties, the failure of a nation to ratify a treaty it signed does not give that nation license to violate the terms of that treaty. As this Court stated in *Fujitsu*, "customary international law governing the effect of treaties . . . provides that a treaty in force is "binding upon the parties to it and must be performed by them in good faith" unless the treaty has been affirmatively terminated or suspended.'" *Id.* at 433 (citing Vienna Convention on the Law of Treaties, May 23,1969, 1155 U.N.T.S. 331 ("Vienna Convention"), Art. 26). This principle, known as the doctrine of *pacta sunt servanda* "lies at the core of the law of international agreements and is perhaps the most important principle of international law." *Id.* at 433 (quoting 1 Restatement (Third) of Foreign Relations Law of the United States Sec. 321 & cmt. a, at 190).

147 of the Geneva Convention require the state parties to enact legislation to prosecute "grave breaches" of certain provisions of the Convention in their national courts, including "extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly" if committed against protected persons or property. In order to carry out the international obligations of the United States under the Geneva Conventions to provide criminal penalties for certain war crimes, Congress enacted the War Crimes Act of 1996, 18 U.S.C. § 2441. PL 104-192 (HR 3680). This statute provides for criminal penalties against United States national who commit "grave breaches" of the 1949 Geneva Convention or who violate certain provisions of the Hague Regulations of 1907, including Article 23.

The Nuremberg Charter (1945) and Nuremberg Principles (1951) likewise prohibit the use of poisons as a violation of customary law.[30] The Charter, Art 6(b), states: "War Crimes: namely, violations of the laws and customs of war. Such violations shall include, *but not be limited to, murder, ill-treatment* or deportation to slave labor or for any other purpose *of civilian population* of or in occupied territory, murder or ill-treatment of prisoners of war or persons on the seas, killing of hostages, plunder of public or private property, wanton destruction of cities, towns or villages,

[30] The Charter was signed by the U.S., and 22 other nations, including France, Great Britain, USSR and Australia. Machteld Boot, *Genocide, Crimes Against Humanity, War Crimes* 185, Transnational Publishers/Intersentia (2002).

or devastation not justified by military necessity." (Emphasis added). Article 6(b) was specifically "…based on Hague Convention IV on land warfare of 1907 and the Geneva Conventions of 1929," and thus incorporates the prohibition on poisons articulated in those conventions. Machteld Boot, *Genocide, Crimes Against Humanity, War Crimes: Nullum Crimen Sine Lege and the Subject Matter Jurisdiction of the International Criminal Court* p. 187 (2002). The Nuremberg Tribunal noted that the crimes defined by Art. 6(b) of the Charter were already recognized as war crimes under international law, as covered by the Hague Convention of 1907. "That violations of these provisions constituted crimes for which the guilty individuals were punishable is too well settled to admit of argument." 22 IMT Trials at 497; *c.f.*, Steven R. Ratner & Jason S. Abrams, *Accountability for Human Rights Atrocities in International Law* 89 *(*Oxford University Press 2001) (noting that the international military tribunal found these rules so well settled that they even applied to WWII belligerents not parties to the 1907 Hague Convention).

The Geneva Conventions of 1949, Article 50, list among the grave breaches "*willfully causing great suffering or serious injury to body or health*." According to scholars Abrams and Ratner: "Although the Convention does not define the […] terms [of the list of grave breaches], the official commentary and scholars have elaborated

on the scope of these crimes based on general principles of law among states. The grave breaches provisions serve to criminalize a core set of violations by mandating [under Art. 146] that states enact penal legislation and then extradite or prosecute offenders." *See* Ratner & Abrams at 85-86. According to the official commentary on the Geneva Conventions: "Grave breaches . . . shall be those involving any of the following acts, *if committed against persons or property protected by the Convention*: willful killing, torture or inhuman treatment, including biological experiments, willfully causing great suffering or serious injury to body or health, and extensive destructions and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly." Jean S. Pictet, Commentary for The Geneva Conventions of 12 August 1940, 370 ICRC: Geneva (1952) (emphasis added).

As further evidence of customary international law prior to the commencement of our government's involvement in Viet Nam, the U.S. Army instructed its soldiers that the use of poison as a weapon of war violated international law and constituted a war crime. The 1940 *Rules of Land Warfare* of the United States Army, A2273-82, flatly contradicts the position put forth by the defendants, and accepted by the district court below, that the use of dioxin against the civilian population in Viet Nam was sanctioned by and consistent with then existing U.S. policy. Section II (25) of the 1940 Manual, citing to the Hague Convention of 1907, sets forth an absolute, specific

and definite prohibition on the use of poison: "It does not admit of the use of poison in any way, nor of the wanton destruction of a district." It also sets forth the exception that this "prohibition against the use of poison (is) not applicable to the use of toxic gases." This dichotomy explains why the United States did not ratify the 1925 General Accord on toxic gases until 1975. Section II (28) further provides that "[i]n addition to the prohibitions provided by special conventions, it is especially forbidden * * * to employ poison or poisoned weapons," and cites the article 23(a) of the 1907 Hague Convention as the authority. It is plaintiffs' contention in this case, regardless of whether the conduct of the defendants can be described as the use of a poison or as merely the use of a poisoned weapon, that it violated the absolute ban prohibited by conventions and customary international law, and enshrined in the United States Government's very own manual on the law of land warfare.

The 1956 Manual on the *Law of Land Warfare*, *See*, U.S. Dept. of the Army, Field Manual 27-10, *The Law of Land Warfare* at 18 (July 1956), A2294, provides additional support for plaintiffs' contention, central to this case, that conventions, treaties and customary international law at the time of the Viet Nam War prohibited the use of poison or poisoned weapons. The 1956 Manual repeats much of what the 1940 manual says about the written and unwritten rules of warfare.

And finally, the historical record of codifications of these principles would be incomplete without reference, again, to the Cramer and Buzhardt Opinions, described above, which are in accord with these other sources of customary international law and are perhaps the most "on point" contemporaneous authorities we could cite.

5. Modern Examples Of Enforcement Of The Customary International Law Norms Banning Poison, Poisoned Weapons, and Means of War Causing Unnecessary Suffering Unrelated To Military Necessity.

In the aftermath of World War II, Article 23 (a) of the Hague Regulations was applied to Japanese biological warfare attacks on Chinese cities in which food and water supplies were contaminated with cholera, anthrax, salmonella and the plague, by means of dropping or spraying cultures from aircraft. Erhard Geisslr, et al. eds., Biological and Toxin Weapons: Research, Development and Use from the Middle Ages to 1945, 136-147, 143-44 (Oxford University Press 1999). Although the directors of the Japanese biological weapons program (entitled Unit 731) appear to have been granted immunity from war crimes in exchange for divulging their knowledge of biological agents, the list of charges filed before the International Military Tribunal of Tokyo and the indictment before the Tokyo War Crimes Tribunal included violations of Article 23 (a) of the Hague Regulations. III SIPRI at 118, 141.

World War II also provided instances in which conduct constituting wanton

devastation without military necessity was indicted, prosecuted, or otherwise declared to violate the principle of proportionality. In *United States v. List, et al.*, 11 Trials of War Criminals 757 (1948); also reprinted in reprinted in *Friedman*, supra, at 1305, the United States military tribunal tried defendants charged with, among other things, being principals or accessories to the wanton destruction of cities, towns, and villages, frequently together with the murder of the inhabitants thereof, and the commission of other acts of devastation not warranted by military necessity in the occupied territories of Greece, Yugoslavia, Albania, and Norway. *Id.*, in Friedman, *supra*, at 1305.

The defendant military commanders in *List* invoked the principle of military necessity as justifying the killing of members of the civilian population and the destruction of villages and towns in occupied territory in fighting a guerilla war against Greek partisans. The defendants claimed that they were entitled to take harsh action against civilians and combatants in suppressing the resistance and guaranteeing the safety of their armed forces.

The tribunal rejected the defendants' arguments and borrowed language from Article 16 of the Lieber Code, acknowledging that military necessity permits “the destruction of life of armed enemies and other persons whose destruction is

incidentally unavoidable by the armed conflicts of the war." *List*, in Friedman, at 1318. However, the tribunal went on to state:

> The destruction of property to be lawful must be imperatively demanded by the necessities of war. Destruction as an end in itself is a violation of international law. There must be some reasonable connection between the destruction of property and the overcoming of the enemy forces. It is lawful to destroy railway, lines of communication, or any other property that might be utilized by the enemy. Private homes and churches even may be destroyed if necessary for military operations. It does not admit the wanton devastation of a district or the willful infliction of suffering upon its inhabitants for the sake of suffering alone.

List, in Friedman, at 1318-20.

In rejecting military necessity as a defense, the tribunal also held that "Military necessity or expediency do not justify a violation of positive rules," citing the defendants' violations of Articles 46, 47 and 50 of the Hague Regulations. The tribunal also noted that the cited provisions "make no such exceptions to its enforcement." *Id.*

In a similar vein, Japanese military officials were prosecuted at the Tokyo war crimes tribunal for "willful and unreasonable destruction of tillable soil and farmlands

in China. . . [which] caused starvation." International Military Tribunal for the Far East, trial of Japanese war criminals. III SIPRI at 70 (citing IMT for the Far East, Indictment No. 1, Appendix D. Washington: Government Printing Office, 1946, at 96).

Although the conduct of the victorious Allies was not prosecuted by any of the military tribunals after World War II, the first (and only) use of the atomic bomb by the United States was the subject of judicial opinions and commentary regarding military necessity and proportionality. For instance, the U.S. Army Pamphlet on International Law discussed the three principle effects of atomic weapons: blast, fire and radiation. After commenting that the radiation aspect of atomic weapons may violate Article 23 (a) if used to poison the air or water supply, the Pamphlet discusses the application of the principle of proportionality to the blast effect:

> Because the blast effect is similar to normal bombings, [Field Manual] 27-10 offers some guidance in its adoption of the rule of proportionality in bombardments:
>
> > …loss of life and damage to property must not be out of proportion to the military advantage to be gained.
> >
> > This norm of proportionality would apply equally well to the radiation side effects of the blast. If the radiation is cumulative, then the continued use of nuclear weapons might tend to make such use disproportionate despite the fact that the blast effects are confined to important military objectives.

United States Navy Manual, Law of Naval Warfare (1955) quoted in Department of the Army Pamphlet, 27-161-2, International Law, Volume II (October 1962) at 44.

In *Ryuichi Shimoda, et al. v. The State*, 355 Hanrei Jiho 17, translated into English at 8 Japanese Ann. Int'l L. 212 (1964); also reprinted in Friedman, *supra*, at 1688-1702, a Japanese court passed upon the legality of the use of the atomic bomb in Hiroshima and Nagasaki. The Shimoda court found that the aerial bombardment with atomic bombs of Hiroshima and Nagasaki violated customary international law because it was comparable to an indiscriminate aerial bombardment of undefended cities. The court noted that, notwithstanding the presence of legitimate military targets such armed forces and munitions factories, some 330,000 civilians lived in Hiroshima and some 270,000 civilians lived in Nagasaki at the time. *Id.* Even if the bombing was directed at military objectives only, the massive damage and radiation poisoning that resulted from the atomic blast was comparable to the devastation inflicted by a blind aerial bombardment.

The International Court of Justice ("ICJ") issued an advisory opinion on the legality of nuclear weapons in 1996 which was largely consistent with the analysis of that issue in Shimoda. The ICJ concluded that, although there is no specific

treaty banning the use of nuclear weapons, customary international law regarding unnecessary suffering and civilian targets, as voiced in such instruments as the Hague Regulations, operate to make certain uses of nuclear weapons illegal. Case Concerning the Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion of 8 July 1996, General List No. 95, 1996 I.C.J. 226 (Available at http://www.icj-cij.org/icjwww/idecisions.htm).[31]

6. Conclusion About Customary International Law

[31] Indeed, nuclear weapons were invented after most of the principles and rules of humanitarian law applicable in armed conflict had already come into existence; the Conferences of 1949 and 1974-1977 left these weapons aside, and there is a qualitative as well as quantitative difference between nuclear weapons and all conventional arms. However, it cannot be concluded from this that the established principles and rules of humanitarian law applicable in armed conflict did not apply to nuclear weapons. Such a conclusion would be incompatible with the intrinsically humanitarian character of the legal principles in questions which permeates the entire law of armed conflict and applies to all forms of warfare and to all kinds of weapons, those of the past, those of the present and those of the future. In this respect it seems significant that the thesis that the rules of humanitarian law do not apply to the new weaponry, because of the newness of the latter, has not been advocated in the present proceedings. On the contrary, the newness of nuclear weapons has been expressly rejected as an argument against the application to them of international humanitarian law. Id. ¶ 86.

Taken together, the practice of states during WWII, the public statements of U.S. officials, the internal guidelines of the U.S. military and the long-established norms of international law fully support plaintiffs' argument in this case, improperly rejected by the district court below, that state practice at the time of the Viet Nam War supported the universal ban on the use of poison as a weapon of combat. The district court's judgment should be reversed.

II. THE DISTRICT COURT ERRED IN GRANTING SUMMARY JUDGMENT ON THE PLAINTIFFS' STATE LAW CLAIMS BASED ON THE GOVERNMENT CONTRACTOR DEFENSE.

Although the district court correctly held that the government contractor defense had no application to plaintiffs' international law claims, it did dismiss, on motion for summary judgment, plaintiffs' state law claims. The court ruled, as it did in the remaining U.S. veterans cases, that the government contractor defense afforded these chemical manufacturers an absolute defense for any harm caused by their poisonous products. 373 F.Supp.2d at 44-45. Plaintiffs also appeal from this decision applying the government contractor brief to bar their state law claims and rely on, and incorporate by reference herein, the factual pleadings and arguments of the United States veterans on this issue.

There is one issue on which the district court granted summary judgment which is troubling and unique to this case and bears mention. In their reply papers on the motions before the district court, the defendants moved for summary judgment with respect to claims made by the plaintiffs concerning another toxic herbicide used by the defendants, Agent White. The defendants had failed to move initially to dismiss plaintiffs' Agent White related claims. The same was true with respect to Agent Blue. As stated in the Melez declaration, A1690, "[t]he defendants have not stated facts in their Rule 56.1 statement with respect to either Phytar (Cacodylic Acid) or Tordon/Picloram . . ." Phytar was the commercial version of Agent Blue and Tordon was the commercial version of Agent White. It is inconceivable that the defendants could have assumed that the plaintiffs had somehow abandoned claims with respect to Agent White and Agent Blue. The First Amended Complaint in this case specifically referred to Agent White, picloram, and hexcholorobenzene, a contaminant of picloram, as toxic substances which caused the plaintiffs harm. A49, A52-53, A98 (FAC ¶¶61-63, 77, 314-15). Moreover, after the case was filed the plaintiff did seek discovery on Agent White. A271-282.

It was clear error for the district court to have granted summary judgment with respect to these claims when no discovery had ever been done as to these

claims. “Though a district court may enter summary judgment sua sponte at, or in consequence of, a pretrial conference, the court must ensure that the targeted party has an adequate opportunity to dodge the bullet. To this end, we have placed two conditions on unbesought summary judgment.. First, the district court ordinarily may order summary judgment on it own initiative only when discovery is sufficiently advanced that the parties have enjoyed a reasonable opportunity to glean the material facts.... Second, the court may enter summary judgment sua sponte only if it first gives the targeted party appropriate notice and a chance to present its evidence on the essential elements of the claim or defense.” *Berkovitz v. Home Box Office, Inc.*, 99 F.3d 24, 29 (1st Cir. 1996) (citations omitted).

Neither of these conditions are satisfied in the present case. Discovery originally was restricted to a six months perusal of the court records of the previous Agent Orange litigation by American veterans with a cut off date of 1984. Although plaintiffs gained an additional four months with the court’s reconsideration of its initial ruling on Isaacson and Stephenson, all of plaintiff’s *substantive* discovery requests were rejected by Magistrate Judge Azrack A547-551. Plaintiffs made a diligent search of the available records, in itself voluminous and often unreadable, however these records provided scant information on the

knowledge of Picloram, hexachlorobenzene and arsenic toxicity, the poisons contained in Agent White and Agent Blue. A1690.

These claims had been abandoned by the U.S. veterans in the earlier proceedings in this litigation, which would explain the paucity of data on these toxins in the MDL-381 file. Moreover, these particular chemicals were targeted at crop destruction rather than defoliation, which would have made them of secondary interest to the U.S. veterans in the earlier litigation. However, the exposure of the Vietnamese plaintiffs was fundamentally different, through ingested poisoned foodstuff and water and therefore the inquiry into the health effects should be different. Dow tacitly admitted the importance of new data for their defense by submitting their 1995 EPA submission on Picloram. The document itself quote 141 references *both unpublished and originated after 1984,* the MDL discovery cutoff date (emphasis added). None of these documents were provided to plaintiffs or the court.

In response to Dow's belated suggestion of sua sponte dismissal, plaintiff responded in a letter form to Judge Weinstein on February 18, 2005, A30 (Docket Entry 137), objecting to "sua sponte" dismissal and submitted exhibits of Dow's warning labels showing that these products were poisonous. The court neither ordered defendants to comply with outstanding discovery requests on Agent White

and Blue, nor provided an evidentiary hearing as to the sufficiency of discovery and evidence. The dismissal contravened black letter law with respect to summary judgment and should be reversed.

III. THE DISTRICT COURT IMPROPERLY DISMISSED THE PLAINTIFFS' CLAIMS FOR INJUNCTIVE RELIEF.

Having found that VAVAO had standing to assert injunctive claims to clean up the environmental disaster caused by the defendants' conduct during the Viet Nam War, the district court than went on to dismiss the injunctive claims on the theory, essentially, that because the alleged harm was and is so extensive, it would be too difficult for the district court to supervise any injunctive relief that it ordered. The district court should not have dismissed the plaintiffs' injunctive claims, particularly at this state of the litigation.

"The basis for injunctive relief in the federal courts has always been irreparable injury and the inadequacy of legal remedies." *Weinberger v. Romero-Barcelo,* 456 U.S. 305, 312 (1982); *accord Ticor Title Ins. Co. v. Cohen,* 173 F.3d 63, 68 (2d Cir. 1999). Here, defendants do not and could not dispute that the complaint adequately alleges both of these prerequisites for an injunction. Specifically, the complaint makes clear that the devastating environmental and health consequences caused by the spraying of defendants' product continue to this

day. *See, e.g.*, A54, A82, A83-84, A94, A98-99 (FAC, ¶¶ 83, 241, 246, 291, 314-18, 326-27). Such a risk to plaintiffs' well-being clearly constitutes irreparable harm that no legal remedy can adequately redress. *See, e.g, Henrietta D. v. Giuliani*, 119 F. Supp. 2d 181, 214 (E.D.N.Y. 2000) (threat to "health, safety, and lives" warrants injunctive relief). Moreover, it is well established that a district court may order parties over whom it has jurisdiction to act or refrain from acting in areas outside its jurisdiction. *See Steele v. Bulova Watch Co.*, 344 U.S. 280, 289 (1952). Indeed, the Second Circuit has explicitly recognized the appropriateness in certain situations of the very type of relief sought in this case. *See Bano v. Union Carbide Corp.*, 361 F.3d 696, 716 (2d Cir. 2004) ("There may be circumstances in which it is appropriate for a court to grant injunctive relief with respect to remediation of an environmental problem in a foreign country.") (citing *Jota v. Texaco, Inc.*, 157 F.3d 153, 155, 158 (2d Cir. 1998)).

Defendants did not contest these points. Instead, they focused entirely on prudential and discretionary reasons why plaintiffs' injunctive claims should be dismissed, allegedly "for failure to state a claim." Defendants asserted that the plaintiffs' prayer for injunctive relief should be dismissed "because it is wholly impracticable and could compromise Viet Nam's sovereignty." Memorandum of Law in Support of Defendants' Motion to Dismiss the Claims for Injunctive Relief

in Plaintiffs' Amended Class Complaint for Failure to State a Claim upon Which Relief May Be Granted. ("Def. Inj. Mem.") at 1. Neither argument is well-founded, and both are premature.

Defendants argued that because the environmental contamination caused by Agent Orange is so pervasive and widespread, it would be impracticable, and thus inequitable, to order injunctive relief. In essence, defendants sought to avoid answering in equity for the harms they created because of the very magnitude of those harms. This argument, of course, turns the concept of equity on its head. It is precisely because of the severity of the ongoing harms caused by dioxin contamination that equitable relief is necessary and appropriate. Further, the claim of difficulty of enforcement is entirely premature. Only after the issue of liability is fully ventilated will the court be in a position to fashion relief. At that time, the evidence developed in the case, rather than defendants' unsubstantiated speculation on a motion to dismiss, will serve as appropriate guideposts and limits to any equitable decree. *See Nat'l Congress for Puerto Rican Rights v. City of New York*, 75 F. Supp. 2d 154, 163-64 (S.D.N.Y. 1999) ("Given the early stage of this litigation, I decline to put the proverbial cart before the horse and prematurely foreclose the granting of any equitable relief whatsoever.").

Defendants' arguments about the potential invasion to Vietnamese sovereignty are similarly ill-founded. Indeed, defendants' bare speculation that the environmental cleanup requested would interfere with the sovereignty of the Vietnamese government is simply wrong. The statement of support submitted by the Vietnamese government, belies defendants' expressions of concerns for its sovereignty. This statement, which expresses the Vietnamese Government's support of the lawsuit seeking justice for victims of Agent Orange, distinguishes this case from *Bano*, the cornerstone of defendants' argument. A2061. In *Bano,* the Second Circuit held that the District Court had not abused its discretion in denying injunctive relief where neither "the record contains no communication from [the State of] Madhya Pradesh or Indian government indicating its receptivity to an order of a United States court compelling work on the property." *Bano,* 361 F.3d at 696. Here, the record contains just such a communication. In response to an inquiry from the *Tuoi Tre* newspaper in Viet Nam, seeking the position of the government of Viet Nam regarding the lawsuit of the Vietnamese victims of Agent Orange /dioxin against the U.S. chemical companies, the Ministry of Foreign Affairs of the Socialist Republic of Viet Nam endorsed the suit, finding it a "legitimate action by the Vietnamese victims." A2061. The statement also suggests quite strongly that the government of Viet Nam would not object to any

remediaton efforts which might possibly be ordered by the district court should plaintiffs prevail on their injunctive claims, since it expresses appreciation of the cooperation and assistance Viet Nam has received from outside the country for the study of and the relief from the effects of Agent Orange:

> Viet Nam highly commends the profound empathy and warm support that the international community has shown to the victims. Viet Nam is also deeply appreciative of the cooperation and assistance from the world's scientists – including American scientists— organizations and countries in the study and relief of the effects of the Agent Orange/dioxin used by the U.S. Armed Forces during the Viet Nam War.
> A2061.

In light of this statement, the suggestion that permitting the plaintiffs' injunctive claims to go forward would somehow "compromise Viet Nam's sovereignty," is wholly speculative and without merit.

Furthermore, while the Second Circuit in *Bano* affirmed the district court's opinion denying injunctive relief, the Court of Appeals did not suggest that the District Court's denial of injunctive relief was compelled. Indeed, the Court expressly authorized the district court to "revisit its dismissal of the claim for plant-site remediation in the event that the Indian government or the State of Madhya Pradesh seeks to intervene in the action or otherwise urges the court to order such relief." *Bano,* 361 F.3d at 717. As defendants recognized below, the

grant of injunctive relief is discretionary, and the opinion of the district court in *Bano* is neither binding on this Court nor apt to the circumstances in this case.

This case is also clearly distinguishable from *Vanity Fair Mills, Inc. v. T. Eaton Co.*, 234 F.2d 633, 647 (2d Cir. 1956), also relied on by defendants. In *Vanity Fair Mills*, the plaintiff, an American corporation, sought to enjoin the use in Canada by defendant, a Canadian corporation, of a trademark duly registered by defendant under Canadian law. *See id.* at 645-46. Rejecting this invitation for international discord, the Court cited two principles: (1) "courts of one state are reluctant to impose liability upon a person who acts pursuant to a privilege conferred by the law of the place where the acts occurred," and (2) "it is well-established that the courts of one state will not determine the validity of the acts of a foreign sovereign done within its borders." *Id.* at 646. In the instant case, defendants' actions, of course, neither were authorized under Vietnamese law nor do they constitute acts of the Vietnamese government. Nor, as the Vietnamese government's submission makes clear, would the grant of injunctive relief conflict with any such Vietnamese laws, official acts, or policy.

Finally, as described, the district court will be in a far better position after the conclusion of proceedings determining liability to assess the propriety and

feasability of injunctive relief and for that reason this Court should reverse the district court's dismissal of the plaintiffs' injunctive claims.

CONCLUSION

Contrary to the district court's faulty factual assumptions, the harm caused by the presence of dioxin in Agent Orange, as well as the toxic poisons in the other herbicides manufactured by the defendants and used during the Viet Nam War, was neither unintended nor collateral. The defendants knew that dioxin was a poison. They knew it was in their product in amounts far in excess of what was safe. They knew how their product was going to be used in Viet Nam. Perhaps most troubling of all these facts, they knew how to keep the poisons out of their product but chose, because of their greed, not to do so. It is this conduct upon which plaintiffs have sued these defendants and it is this conduct which is actionable under the ATS as a violation of international law.

For all the above stated reasons, and because equal justice demands that those who were the intended victims of this poisonous campaign should be compensated just as those who administered the poisons have been, this Court

must reverse the decision of the district court granting the defendants motion to dismiss and allow the plaintiffs' international law claims to go forward.

Likewise, this Court should reverse the grant of summary judgment as to the plaintiffs' state law claims against the defendants.

Dated: New York, New York
September 30, 2005

MOORE & GOODMAN, LLP

By: _____

JONATHAN C. MOORE
WILLIAM H. GOODMAN
DAVID MILTON
99 Park Avenue - Suite 1600
New York, New York 10016
(212) 353-9587

FRANK DAVIS
JOHN E. NORRIS
DAVIS & NORRIS, LLP
2151 Highland Avenue, Suite 100
Birmingham, AL 35205
(205) 453-0094

CONSTANTINE P. KOKKORIS
225 Broadway, Suite 612
New York, NY 10007
(212) 349-9340

JONATHAN CARTEE
R. STAN MORRIS
CARTEE & MORRIS, LLC
1232 Blue Ridge Boulevard

Birmingham, AL 35226
(205) 263-0333

KATHLEEN MELEZ
13101 Washington Blvd., Suite 463
Los Angeles, CA 90066
(310) 566-7452

Attorneys for the Plaintiffs-Appellants

CERTIFICATE OF COMPLIANCE
PURSUANT TO F.R.A.P. 32(a)(7)(B) & (C)

I hereby certify that the foregoing Brief for Plaintiffs-Appellants contains no more than 28,000 words pursuant to this Court's order dated July 13, 2005, permitting the parties to file briefs no longer than 28,000 words.

The number of words in this brief is 26,721.

I further certify that the foregoing Brief is set entirely in 14-point Times New Roman typeface.

Dated: New York, New York
September 30, 2005

_____
Jonathan C. Moore