

WARNING: Don't Drink the Water: An Examination of Appropriate Solutions for Veterans Exposed to Contaminated Water at Marine Corps Base Camp Lejeune

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INTRODUCTION

Even in a partisan era, compensating and treating veterans who have suffered disabilities while serving the nation receives bipartisan support.² To receive medical benefits or disability compensation from the Department of Veterans Affairs (VA), veterans have the burden of proving that a disability or medical condition is service-connected, and may do so by referring to their military records which may document injuries or illnesses incurred while in service, as well as any resulting disability.³ However, in most cases, the burden of proving service connection may be a challenge to overcome when the fact and extent of exposure to a particular hazard during service is uncertain and when any relationship between a medical condition appearing after service and an in-service event is inconclusive.⁴

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² *Oversight on VA Disability Compensation: Presumptive Disability Decision-Making: Hearing Before the S. Comm. on Veterans' Affairs*, 111th Cong. 1 (2010) [hereinafter *VA Disability Compensation Hearing*] (statement of Sen. Daniel K. Akaka, Chairman, S. Comm. on Veterans' Affairs).

³ See *infra* Part II.B.

⁴ See *infra* Part II.B.ii. See, e.g., *Camp Lejeune: Contamination and Compensation, Looking Back, Moving Forward: Hearing Before the Subcomm. on Investigations & Oversight of the H. Comm. on Science & Technology*, 111th Cong. (2010) [hereinafter *Camp Lejeune Hearing*] (statement of Thomas J. Pamperin, Associate Deputy Under

In some instances, Congress and the VA presume that certain conditions began in service, or were connected with something that happened in service. These conditions are codified by statute or by VA regulation and allow for what is called “presumptive service connection.”⁵ Examples of diseases subject to presumptive service connection include diseases specific to former prisoners of war (POWs), radiation-exposed veterans, and veterans exposed to Agent Orange, a herbicide used in U.S. military operations during the Vietnam War.⁶

Medical conditions that may be related to soil and groundwater contamination at U.S. military installations, such as Marine Corps Base Camp Lejeune (Camp Lejeune),⁷ are currently not considered to be presumptively service connected by VA. This Article explores whether, and to what extent, these conditions should receive presumptive service connection by VA. Because scientific certainty linking contaminant exposure in military service cannot be achieved in a time frame necessary to address the health care needs of our veterans, Congress should require VA to operate similarly to the established statutory guidelines used in prior presumptive reviews and create presumptions of service connection for certain diseases shown to have a positive association with contaminants that were present in the water at Camp Lejeune.⁸

Secretary for Policy and Program Management, U.S. Department of Veterans Affairs); SIDATH VIRANGA PANANGALA ET AL., CONG. RESEARCH SERV., R41405, VETERANS AFFAIRS: PRESUMPTIVE SERVICE CONNECTION AND DISABILITY COMPENSATION 1 (2010). This test does not apply when a presumption exists, or where the injury was incurred while engaged in combat with the enemy. 38 U.S.C. § 1154(b) (2006).

⁵ 38 U.S.C. § 1112.

⁶ *Id.*; 38 C.F.R. §§ 3.307, 3.309 (2010); see PANANGALA ET AL., *supra* note 4, at 1. See *infra* Part II.B.ii. for further discussion of establishing service connection on a presumptive basis.

⁷ Marine Corps Base Camp Lejeune (Camp Lejeune) is home to over 180,000 Marines, Sailors, their families, and civilian employees. *About the Base*, MARINE CORPS BASE CAMP LEJEUNE, <http://www.lejeune.usmc.mil/about/> (last visited Sept. 2, 2011). Camp Lejeune’s mission is to “maintain combat-ready units for expeditionary deployment” and to help prepare the Armed Forces for combat and humanitarian missions abroad. *Id.*

⁸ See generally *infra* Part IV.

A positive association should not require evidence of a causal association but only credible evidence that exposure to the contaminants is associated with increased incurrence of the disease.⁹ To determine what diseases have a positive association, Congress should require VA to wait until the Agency for Toxic Substances and Disease Registry (ATSDR)¹⁰ completes its anticipated epidemiological studies on the Camp Lejeune population. After the studies are completed, VA should be required to review the subsequent reports and all other sound medical evidence to establish presumptive service connection for diseases found to be positively associated to the contaminant exposure. In addition, Congress must enact a presumption that veterans who were stationed at Camp Lejeune during the time the water was contaminated were exposed to such contamination. A presumption of exposure is appropriate because, although there is clear documentation of serious contamination, it is not feasible to determine whether and to what extent a particular individual was actually exposed due to data limitations.¹¹ With presumptions established, veterans would be relieved from the burden of proving service connection, and would be eligible for medical benefits and service-connected disability compensation from VA.

Part I of this Article provides a general history and description of environmental contamination at military bases, particularly Camp Lejeune and former Marine Corps Air Station El Toro (“El Toro”). This section also illustrates the scope of contamination and health effects associated with the toxins involved, and examines whether regulations or other forms of

⁹ 38 U.S.C. § 1116(b)(3) (indicating the use of a “positive association” standard for Agent Orange exposure claims).

¹⁰ The Agency for Toxic Substances and Disease Registry (ATSDR) is charged under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) to evaluate the presence and nature of health hazards at identified sites and to help reduce further exposures. *ATSDR Background and Congressional Mandates*, AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY, <http://www.atsdr.cdc.gov/about/congress.html> (last updated July 16, 2009).

¹¹ See *infra* Part IV.A.

notification were in place during the period of contamination. Part II explains the remedy available to veterans who claim disabilities associated with exposure to the contaminated water. Part III provides an overview of statutory presumptive service connection, and examines circumstances where Congress has found presumptive service connection appropriate, such as for herbicide exposure during the Vietnam War. Part IV discusses whether a presumption of exposure and service connection is appropriate for veterans of Camp Lejeune by comparing the situation to the circumstances Vietnam veterans faced after herbicide exposure. This section also examines whether existing and anticipated epidemiological studies will shed light on the appropriateness of a presumption process. Part V assesses pending legislation and discusses where each is lacking. Part VI concludes with a multi-faceted proposal for enacting legislation to comprehensively address the issue.

This Article proposes that Congress should enact legislation requiring the Secretary of the VA to review upcoming epidemiological reports on Camp Lejeune and use such information to prescribe regulations that establish a presumption of service connection for diseases found to have a positive association with exposure to the contaminants that were at Camp Lejeune. The Secretary should also use the information from the scientific studies to prescribe regulations establishing a presumption of exposure to all contaminants in the water system at Camp Lejeune for veterans who were stationed at Camp Lejeune during the period in which the water was contaminated. This Article further proposes that Congress require the ATSDR to commence similar epidemiological studies for other contaminated military bases, such as El Toro, assessing whether there is an association between exposure to the contaminants in the water and a particular disease. Also, Congress should direct VA and the Department of Defense (DOD) to work together in compiling a list of individuals who served at other contaminated military installations on the Environmental Protection Agency's

(EPA) Superfund list¹² and notify such individuals of potential exposure to the contamination and any health risks associated with such exposure.

I. BACKGROUND

A. History and Description of Contamination

Camp Lejeune and El Toro are two of the 130 military bases on the EPA's National Priorities List—a list of the nation's highest priority Superfund sites where hazardous substances or contaminants are located, possibly affecting ecosystems or people.¹³ Many listed military bases share the same contaminants of concern as Camp Lejeune and El Toro, such as tetrachloroethylene (PCE), trichloroethylene (TCE), dichloroethylene (DCE), benzene, and vinyl chloride.¹⁴ Contaminants such as PCE and TCE were used

¹² Superfund is the name of the environmental program that addresses abandoned hazardous waste sites and is the name for the fund established by CERCLA. *Superfund, Basic Information*, U.S. ENVTL. PROTECTION AGENCY, <http://www.epa.gov/superfund/about.htm> (last visited Sept. 2, 2011). CERCLA allows the Environmental Protection Agency (EPA) to clean up Superfund sites and to compel parties responsible for the pollution to perform cleanups or reimburse the government for cleanups that EPA undertakes.

¹³ Robert O'Dowd, *EPA Superfunds: Veterans at Risk*, VETERANS TODAY, May 16, 2009, <http://www.veteranstoday.com/2009/05/16/epa-superfunds-veterans-at-risk>; see *National Priorities List*, U.S. ENVTL. PROTECTION AGENCY, <http://www.epa.gov/superfund/sites/npl/index.htm> (last visited Sept. 2, 2011) (explaining the National Priorities List is used to guide the EPA in determining which contaminated Superfund sites warrant further investigation); see also *Superfund Sites Where You Live*, U.S. ENVTL. PROTECTION AGENCY, <http://www.epa.gov/superfund/sites/index.htm> (last visited Sept. 2, 2011) (providing maps for viewers to find local contaminated Superfund sites).

¹⁴ Contaminants of concern are the chemical substances found at a Superfund site that the EPA has determined pose an unacceptable risk to human health or the environment and are to be addressed by cleanup actions. *Superfund Information Systems, Glossary for the Superfund Site Progress Profile*, U.S. ENVTL. PROTECTION AGENCY, <http://cfpub.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=modules.glossary&id=403185#COC> (last visited Sept. 2, 2011). The process of identifying contaminants of concern begins with the EPA identifying people and ecosystems that could be exposed to contamination found at the site, determining the amount and type of contaminants present, and identifying the possible adverse health or ecological effects that could result from contact with the contaminants. See *Remedial Investigation/Feasibility Study*, U.S. ENVTL. PROTECTION AGENCY, <http://epa.gov/superfund/cleanup/rifs.htm> (last updated Aug. 9, 2011).

for degreasing military aircrafts and equipment, as well as for dry cleaning.¹⁵ At Camp Lejeune and El Toro, the groundwater was contaminated by multiple sources such as leaking underground storage tanks, industrial area spills, and waste disposal sites.¹⁶ According to the ATSDR, TCE, PCE, benzene, and vinyl chloride are linked to various cancers and are also attributing factors to other serious health problems when ingested in drinking water or when working with such contaminants.¹⁷ The ATSDR, an agency part of the U.S. Department of Health and Human Services, and the American Cancer Society classify the cancer effects of TCE

¹⁵ *Chemicals at Camp Lejeune (FAQs)*, AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY, http://www.atsdr.cdc.gov/sites/lejeune/faq_chemicals.html (last visited Sept. 2, 2011). Dichloroethylene (DCE) is a chemical compound used in making adhesives, synthetic fibers, refrigerants, food packaging, and coating resins. *Chronic Toxicity Summary: 1,1-Dichloroethylene, Determination of Noncancer Chronic Reference Exposure Levels* (Dec. 2000), http://oehna.ca.gov/air/chronic_rels/pdf/73354.pdf. Benzene is used for making plastics, rubber, resins, synthetic fabrics, and as a solvent for printing, paints, and dry cleaning. *Chemicals at Camp Lejeune (FAQs)*, *supra*. Vinyl chloride is used in manufacturing products in building construction, the automotive industry, electrical wire insulation and in cables, piping, and industrial equipment. *See id.*

¹⁶ *ATSDR Camp Lejeune Survey Executive Summary*, AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY, http://www.atsdr.cdc.gov/sites/lejeune/survey_full.html (last updated July 6, 2009) (providing a general background on what contaminants were found at each water well and what current and future studies are in progress); *Superfund Site Progress Profile: El Toro Marine Corps Air Station*, U.S. ENVTL. PROTECTION AGENCY, <http://cfpub.epa.gov/supercpad/cursites/csinfo.cfm?id=0902770> (last updated Sept. 2, 2011) (providing information on the contaminants involved at the site and cleanup activities). El Toro closed in 1999 due to soil and ground contamination caused by activities at the base that generated harmful waste. Robert O'Dowd, *El Toro's Most Toxic 200 Acres*, VETERANS TODAY, Sept. 29, 2010, <http://www.veteranstoday.com/2010/09/29/el-toros-toxic-brew-haunts-veterans> [hereinafter *Toxic 200 Acres*]; *see generally* Robert O'Dowd, *El Toro's Wells Still Suspect*, SALEM-NEWS, Oct. 22, 2008, http://salem-news.com/articles/october222008/el_toro_ro_10-22-08.php (summarizing approximately 70 years of water contamination history at El Toro). After the solvents were used to degrease parts, or after they were spilled or disposed on soil, the solvent seeped into the ground. Over the years, rainwater carried the solvent into the earth. *Groundwater Contamination*, ENVTL. PROTECTION AGENCY, <http://www.epa.gov/superfund/students/wastsite/grndwatr.htm> (last visited Sept. 2, 2011) (describing how groundwater can become contaminated, the effects of contaminated groundwater, and how it can be cleaned up).

¹⁷ *Reported Health Effects Linked with Trichloroethylene, Tetrachloroethylene, Benzene, and Vinyl Chloride Exposure*, AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY, http://www.atsdr.cdc.gov/sites/lejeune/tce_pce.html (last updated June 2, 2010) [hereinafter *Reported Health Effects*] (listing and summarizing reported health problems linked to exposure to the contaminants found at Camp Lejeune).

and PCE as “[r]easonably anticipated to be human carcinogens” and classify the cancer effects of benzene and vinyl chloride as toxic substances “[k]nown to be human carcinogens.”¹⁸ Despite the government’s awareness that almost every major military base has a Superfund site with toxic contamination, Camp Lejeune is the only base for which Congress has required identification and notification of individuals potentially exposed to such contamination.¹⁹

B. Scope of Contamination and Reported Health Effects

Richard Clapp, D.Sc, MPH, an epidemiologist who studied the Woburn, Massachusetts well water contamination made famous by the book and movie, *A Civil Action*, testified before the U.S. House of Representatives Committee on Science and Technology on September 16, 2010.²⁰ Dr. Clapp stated that the TCE concentration found in drinking water at Camp Lejeune “is more than five times the highest level found in well water in

¹⁸ *Known and Probable Human Carcinogens*, AM. CANCER SOC’Y, <http://www.cancer.org/Cancer/CancerCauses/OtherCarcinogens/GeneralInformationaboutCarcinogens/known-and-probable-human-carcinogens> (last updated June 29, 2011); see *Camp Lejeune Hearing*, *supra* note 4, at 5 (statement of Christopher Portier, Ph.D., Director, Agency for Toxic Substances and Disease Registry).

¹⁹ O’Dowd, *supra* note 13 (“Except for Camp Lejeune, there’s no legal requirement to notify veterans of the other 132 Superfund sites.”); see National Defense Authorization Act for Fiscal Year 2008, Pub. L. No. 110-181, § 315, 122 Stat. 3, 56-57; *Poisoned Patriots: Contaminated Drinking Water at Camp Lejeune: Hearing Before the Subcomm. on Oversight and Investigations of the H. Comm. on Energy & Commerce*, 110th Cong. 3 (2007) [hereinafter *Poisoned Patriots Hearing*] (statement of Hon. Bart Stupak, Chairman, Subcomm. on Oversight and Investigations) (questioning why the Marine Corps waited several years before notifying Camp Lejeune residents and why many residents still have not been notified and informed of the health risks; representatives of the military who were in attendance at the hearing did not provide answers); see also Robert O’Dowd, *Veterans’ Health at Risk to Contaminants*, VETERANS TODAY, Oct. 31, 2010, <http://www.veteranstoday.com/2010/10/31/veterans-health-at-risk-to-contaminants/> (asserting that thousands of veterans and their dependents who lived and worked on military installations that are now listed as EPA Superfund sites need to be informed of the contaminants they may have been exposed to and possible health effects from such exposure).

²⁰ *Camp Lejeune Hearing*, *supra* note 4 (statement of Richard Clapp, D.Sc, MPH, Professor Emeritus, Boston University School of Public Health).

Woburn, Massachusetts.”²¹ Dr. Clapp also testified that a member of a 2005 National Academy of Sciences panel assessing the scope of contamination issues at Camp Lejeune described it as the largest human exposure to TCE from drinking water in this nation’s history.²² For three decades, from 1957 to 1987, more than one million Marines, their dependents, and civilian workers may have been exposed to contaminated drinking water at Camp Lejeune.²³ The House Committee on Science and Technology emphasizes that “[i]t took the [U.S. Marine Corps] more than four years to shut down drinking water wells they knew to be contaminated with toxic chemicals and another 24 years and an act of Congress to force them to inform veterans about this contamination [and] potential health problems.”²⁴ The ATSDR lists health effects in people of all ages linked to drinking water contaminated with chemicals found at Camp Lejeune, such as aplastic anemia, bladder cancer, brain cancer, breast cancer, cervical cancer, esophageal cancer, non-Hodgkin’s lymphoma, leukemia, kidney cancer, and liver cancer.²⁵ Of particular interest are the estimated 65 cases of male breast cancer in men who served or lived at Camp Lejeune between 1957 and 1987.²⁶ Many of them were diagnosed in their 30s and 40s.²⁷ According to the National Cancer Institute, male

²¹ *Id.*; see William R. Levesque, *Camp Lejeune Vets Suffer from Drinking Water Contamination*, ST. PETERSBURG TIMES, May 31, 2009, <http://www.tampabay.com/news/military/veterans/article1005564.ece>.

²² *Camp Lejeune Hearing*, *supra* note 4 (statement of Richard Clapp, D.Sc, MPH, Professor Emeritus, Boston University School of Public Health).

²³ *VA/DOD Response to Certain Military Exposures: Hearing Before the S. Comm. on Veterans’ Affairs*, 111th Cong. (2010) (statement of Michael R. Peterson, DVM, MPH, DRPH, Chief Consultant, Office of Public Health & Environmental Hazards, Department of Veterans Affairs).

²⁴ STAFF OF SUBCOMM. ON INVESTIGATIONS & OVERSIGHT OF THE H. COMM. ON SCIENCE & TECHNOLOGY, 111TH CONG., HEARING CHARTER ON CAMP LEJEUNE: CONTAMINATION AND COMPENSATION, LOOKING BACK, MOVING FORWARD 1 (Comm. Print 2010) [hereinafter LEJEUNE HEARING CHARTER].

²⁵ *Chemicals at Camp Lejeune (FAQs)*, *supra* note 15.

²⁶ Barbara Barrett, *Former Lejeune Marines Pose for Breast Cancer Calendar*, STARS AND STRIPES, Oct. 29, 2010, available at <http://www.stripes.com/military-life/2.1643/former-lejeune-marines-pose-for-breast-cancer-calendar-1.123615>.

²⁷ See *id.*; see also Abbie Boudreau & Scott Bronstein, *Male Breast Cancer Patients Blame Water at Marine Base*, CNN HEALTH, Sept. 24, 2009, <http://www.cnn.com/2009/09/24/>

breast cancer makes up less than one percent of all breast cancer cases, and is usually found in men between 60 and 70 years of age.²⁸

II. LEGAL REMEDIES AVAILABLE FOR VETERANS

A. No Civil Legal Remedy Available for Veterans

Under our current legal system, veterans do not have the right to recover, through a civil legal claim, under the Federal Tort Claims Act (FTCA)²⁹ for injuries arising out of activity incident to service.³⁰ In 1950, the Supreme Court of the United States pronounced this broad rule in the case of *Feres v. United States*, which became known as the *Feres* doctrine.³¹ The bar against civil suits applies to any negligent acts of federal employees acting in the scope of his or her employment, including injuries resulting from medical malpractice in government medical facilities, physical examinations conducted prior to service for the purpose of entering military service, recreational activities on base, and arrest or confinement in a disciplinary facility by military police.³² For many decades, the *Feres* doctrine has often been criticized for

marines.breast.cancer/index.html?iref=allsearch; William R. Levesque, *Male Breast Cancer and Camp Lejeune: Pollution or Coincidence?*, ST. PETERSBURG TIMES, June 26, 2009, <http://www.tampabay.com/news/military/veterans/article1013675.ece>; Gary White, *Those Affected by Tainted Lejeune Water Still Searching for Answers, Resolution*, STARNEWS ONLINE, Dec. 11, 2010, <http://www.starnewsonline.com/article/20101211/ARTICLES/101219958>.

²⁸ *Male Breast Cancer Treatment*, NAT'L CANCER INST., <http://www.cancer.gov/cancertopics/pdq/treatment/malebreast/Patient> (last modified July 20, 2011).

²⁹ The Federal Tort Claims Act (FTCA) is the statute by which the United States waives sovereign immunity and authorizes tort suits to be brought against it. With exceptions, it makes the United States liable for injuries caused by the negligent or wrongful act or omission of any federal employee acting within the scope of his employment, in accordance with the law of the state where the act or omission occurred. Federal Tort Claims Act, 28 U.S.C. §§ 1346(b), 2671-2680 (2006).

³⁰ *Id.*; see, e.g., *Feres v. United States*, 340 U.S. 135, 146 (1950) (holding that the United States was not liable under the FTCA for in-service injuries sustained by petitioner service member due to the negligence of other service members). The *Feres* doctrine is one of three exceptions to the FTCA. 28 U.S.C. §§ 1346(b), 2671-2680.

³¹ *Feres*, 340 U.S. at 146; see Herbert B. Chermiside, Jr., *Serviceman's Right to Recover Under Federal Tort Claims Act*, 31 A.L.R. FED. 146, § 2 (2010).

³² Chermiside, *supra* note 31, § 2.

being too restrictive, but Congress has not seen fit to amend the FTCA and the courts have rejected suggestions to invalidate the *Feres* doctrine.³³ Reasons behind the *Feres* doctrine include that allowance of such suits would disrupt the maintenance of military discipline, and that Congress has provided a system of disability compensation and death benefits for veterans.³⁴

The bar also extends to actions brought by the survivors of service members based on the service member's death resulting from injuries sustained incident to military service, even when the survivors would otherwise have an action under local law for wrongful death.³⁵ Dependents of veterans, since they are civilians, may file their own tort claim against the United States for injuries they sustained themselves so long as they do not fall into the

³³ *Id.*; see *United States v. Lee*, 400 F.2d 558, 564 (9th Cir. 1968) (opining that the line of Circuit Court cases following *Feres*, and the fact that Congress has not corrected the *Feres* ruling by amending the FTCA, compelled the conclusion that the *Feres* doctrine was still controlling); see also *Schwager v. United States*, 326 F. Supp. 1081, 1084 (E.D. Pa. 1971) (concluding that the *Feres* doctrine was still viable because the Supreme Court of the United States (Supreme Court) never rejected it, and a large number of recent Court of Appeals and District Court cases had followed it). Two notable Supreme Court cases since *Feres* involving the right of a serviceman to sue the United States in tort include *United States v. Brown*, 348 U.S. 110, 113 (1954), and *United States v. Johnson*, 481 U.S. 681 (1987). In *Brown*, the Supreme Court adhered to the *Feres* doctrine and held that the plaintiff may recover under the FTCA because his injury did not arise out of or in the course of military service because it occurred long after his discharge from service. *Brown*, 384 U.S. at 113. In *Johnson*, the Supreme Court held that the *Feres* doctrine bars a FTCA suit on behalf of a service member killed during the course of an activity incident to the member's military service, even though negligence on the part of civilian employees of the Federal Government was alleged, instead of on the part of military personnel, and that the Coast Guard officer's death in this case arose directly out of an activity incident to the officer's military service. *Johnson*, 481 U.S. at 686-92.

³⁴ Chermiside, *supra* note 31, § 2; see *Johnson*, 481 U.S. at 684-85 (reaffirming the *Feres* doctrine on grounds that direct suits against the armed services could substantially implicate military discipline).

³⁵ Chermiside, *supra* note 31, § 2; see *Stencel Aero Eng'g Corp. v. United States*, 431 U.S. 666, 671 (1977) (finding that Congress did not intend to create a new cause of action dependent on local law for service-connected injuries or death due to negligence). Survivors of service members who die during active duty are eligible to receive death benefit compensation equal to six months pay, but the benefit cannot exceed \$3,000. *Citizens Nat'l Bank v. United States*, 594 F.2d 1154, 1157 n.7 (7th Cir. 1979); see 10 U.S.C. §§ 1475, 1478(a) (2006).

FTCA's discretionary function exception.³⁶ The discretionary function exception provides that the United States is not liable for any claim based upon an act or omission of a federal employee that involves discretionary policy decisions.³⁷

B. The Only Available Remedy for Veterans—A Disability Compensation Claim Based on Service Connection³⁸

Because the *Feres* Doctrine bars veterans from suing the federal government for injuries incurred in service,³⁹ veterans are prohibited from filing civil legal claims against the military, and are limited to benefits that they can obtain through military or veterans administrative procedures.⁴⁰ VA may grant service-connected disability compensation benefits to veterans who can support their

³⁶ 28 U.S.C. § 2680(a).

³⁷ *Id.*; *see, e.g.*, *Berkovitz v. United States*, 486 U.S. 531, 536 (1988) (finding that the discretionary function exception to the FTCA applies only where the act of a government employee or federal agency involves a “judgment or choice” and there is no “federal statute, regulation, or policy specifically prescrib[ing] a course of action for an employee to follow”); *United States v. Gaubert*, 499 U.S. 315, 324-25 (1991) (finding that the conduct of federal bank regulators in supervising a savings and loan association involved a discretionary policy decision due to an absence of regulations specifically prescribing a course of action for the bank regulators to follow). Dependents of Camp Lejeune veterans who resided on the base before any specific instructions were in place notifying military officials on how to address water contamination will fall under the discretionary function exception to the FTCA and will be unable to sue the government in federal court for monetary damages. *See Snyder v. United States*, 504 F. Supp. 2d 136, 143 (S.D. Miss. 2007) (holding that measures to address TCE and PCE contamination at Camp Lejeune in the early 1970s fell within the discretionary function exception to the FTCA because TCE and PCE were not regulated when the dependent resided at Camp Lejeune). *But see Jones v. United States*, 691 F. Supp. 2d 639, 642-43 (E.D.N.C. 2010) (finding that because specific instructions regarding the contaminants at issue existed during part of the dependent’s residence at Camp Lejeune, the Navy’s conduct with respect to such contamination does not fall within the discretionary function exception to the FTCA’s waiver of sovereign immunity).

³⁸ The term “service-connection” or “service-connected” means that a disability, or death resulting from a disability, was incurred or aggravated in the line of duty in the active military, naval, or air service. 38 U.S.C. § 101(16).

³⁹ *Feres v. United States*, 340 U.S. 135, 146 (1950).

⁴⁰ A veteran is a “person who served in the active military, naval, or air service, and who was discharged or released therefrom under conditions other than dishonorable.” 38 U.S.C. § 101(2); 38 C.F.R. § 3.1(d) (2010). This Article assumes that a claimant has already established that he or she is a veteran for purposes of Department of Veterans Affairs (VA) benefits.

claim by showing the existence of a present disability; in-service incurrence or aggravation of a disease or injury; and a causal relationship between the present disability and the disease or injury incurred or aggravated during service.⁴¹ Medical evidence is usually necessary to establish a diagnosis or an etiological link to service.⁴² The veteran has the burden of proving that his or her current disability or medical condition is service-connected—a burden that is usually established on a direct basis or presumptive basis.⁴³ These same benefits generally and typically do not extend to dependents or civilian government employees.⁴⁴

i. Establishing Service Connection on a Direct Basis

The most common way to qualify for service-connected disability benefits is on a “direct” basis where the veteran can prove that his or her current disabling condition has a direct causal

⁴¹ 38 C.F.R. § 3.303; *see* *Shedden v. Principi*, 381 F.3d 1163 (Fed. Cir. 2004). The decision to award compensation and benefits to veterans is made by a VA regional office, medical center, or other local VA office. If a veteran is not satisfied with the results of a claim for benefits, he or she can file an appeal to the Board of Veterans’ Appeals (BVA). The BVA reviews benefit claims determinations made by local VA offices and issues decisions on appeals. *See* 38 U.S.C. § 7104(a) (explaining BVA’s jurisdiction to make final decisions on appeals to the Secretary); *see also* *Board of Veterans’ Appeals*, U.S. DEP’T OF VETERANS AFFAIRS, <http://www.bva.va.gov/> (last updated July 7, 2011). If a veteran is not satisfied with the BVA’s decision, he or she can appeal to the United States Court of Appeals for Veterans Claims (CAVC), a federal court independent of the VA. *See* 38 U.S.C. § 7252(a) (stating that the CAVC has exclusive jurisdiction to provide judicial review of final decisions made by the BVA); UNITED STATES COURT OF APPEALS FOR VETERANS CLAIMS, <http://www.uscourts.cavc.gov/> (last visited Sept. 3, 2011). The United States Court of Appeals for the Federal Circuit (Federal Circuit) has limited jurisdiction over final decisions of the CAVC. 38 U.S.C. § 7292. Lastly, a veteran may appeal an adverse decision by the Federal Circuit to the Supreme Court of the United States.

⁴² *See* *Gutierrez v. Principi*, 19 Vet. App. 1, 5 (2004); *but see* *Jandreau v. Nicholson*, 492 F.3d 1372, 1377 (Fed. Cir. 2007).

⁴³ *See* *Brammer v. Derwinski*, 3 Vet. App. 223, 225 (1992); *see also* JAMES E. NICHOLS, CONG. RESEARCH SERV., R41454, LEGAL ISSUES RELATED TO PROVING “SERVICE CONNECTION” FOR VA DISABILITY COMPENSATION: STATUTORY PRESUMPTIONS 1 (2010).

⁴⁴ *See* 38 C.F.R. § 3.4. *Cf.* 38 U.S.C. § 1115 (providing that where a veteran is entitled to compensation based on a disability rated not less than thirty percent, his or her dependents are entitled to additional compensation).

link to an in-service event, injury, or disease.⁴⁵ The required medical evidence connecting a disability to an in-service event is usually established by a medical nexus statement written by a medical professional.⁴⁶ Without an opinion from a medical expert, it is this author's impression that a veteran's lay opinion on medical causation carries little weight with VA, and the veteran's claim will typically be denied.⁴⁷ Although it is not necessary that the condition be diagnosed or manifested during active military service in order to establish service connection, the evidence must still show some in-service incident caused the condition or aggravated a pre-existing condition.⁴⁸ Associating a condition diagnosed years after military service to in-service exposure to a particular environmental hazard can be very difficult to prove.⁴⁹ Often, environmental hazards are not documented in military records due to a lack of sampling data and records kept by military bases from the 1950s to 1980s.⁵⁰ For example, at El Toro there are

⁴⁵ 38 C.F.R. §§ 3.303, 3.304; *see* 38 U.S.C. §§ 1110, 1131 (providing compensation for wartime disability and peacetime disability).

⁴⁶ *Epps v. Gober*, 126 F.3d 1464, 1468 (Fed. Cir. 1997); *see Camp Lejeune Hearing*, *supra* note 4 (statement of Thomas J. Pamperin, Associate Deputy Under Secretary for Policy and Program Management, U.S. Department of Veterans Affairs).

⁴⁷ *See, e.g., Grivois v. Brown*, 6 Vet. App. 136, 140 (1994) (finding that a veteran's own conclusion that his or her present disability is service related is not competent evidence as to the issue of medical causation); *Grottveit v. Brown*, 5 Vet. App. 91, 92-93 (1993) (asserting that for some factual issues, competent lay evidence may be sufficient, but where the claim involves issues of medical fact, such as medical causation, competent medical evidence is required); *Espiritu v. Derwinski*, 2 Vet. App. 492, 495 (1992) (asserting that the opinions of inexperienced persons regarding matters that require specialized medical knowledge are inadmissible in evidence).

⁴⁸ *See generally Velez v. West*, 11 Vet. App. 148, 152 (1998) (stating that service connection can still be established even when a condition is diagnosed long after service, so long as there is evidence supporting that the condition was incurred during the veteran's service or evidence showing that a presumptive period applies); *Cosman v. Principi*, 3 Vet. App. 503 (1992).

⁴⁹ *Combee v. Brown*, 34 F.3d 1039, 1042 (Fed. Cir. 1994) ("Actual causation carries a very difficult burden of proof.").

⁵⁰ Robert J. O'Dowd, *Marines in 'Catch 22' with Government*, SALEM-NEWS, Feb. 1, 2009, http://www.salem-news.com/articles/february012009/catch_22_eltoro_2-2-09.php (emphasizing the difficulty in proving service connection and advocating for congressional support in establishing presumptive disability entitlement to veterans with illnesses linked to environmental hazard exposure).

“no TCE vapor samples from hangars used to degrease aircraft parts for several decades.”⁵¹ At Camp Lejeune, reports to military officials on tests of the water supply did not begin until October 1980.⁵² Furthermore, illnesses such as cancer usually have a long latency period of 15 to 20 years, or longer.⁵³ Therefore, many veterans exposed to contaminants in-service may not exhibit cancer or other illnesses until years after exposure and separation from the military.⁵⁴

The standard of proof to satisfy the last element of a service connection claim is that the medical evidence must demonstrate that it is “as likely as not” that there is a nexus between an in-service event and the veteran’s current disability.⁵⁵ This means that the medical evidence must show that there is at least a fifty percent chance the current disability is connected to an in-service event.⁵⁶ Federal law requires that where evidence for and against

⁵¹ *Id.* Possible exposure pathways for chemicals in groundwater to have reached Marines who worked in the hangars where the solvents were used to degrease equipment include not only ingestion of the water, but also inhalation of vapors and direct contact with skin. U.S. ENVTL. PROTECTION AGENCY, FINAL INTERIM RECORD OF DECISION, OPERABLE UNIT 2B LANDFILL SITES 2 AND 17: MARINE CORPS AIR STATION, EL TORO, CALIFORNIA 6-1 (2000). Vapor intrusion is the movement of volatile chemicals and gases from soil and groundwater into indoor air of structures located on a contaminated site. *Vapor Intrusion*, U.S. ENVTL. PROTECTION AGENCY, <http://www.epa.gov/oswer/vaporintrusion> (last updated July 12, 2011); see *ToxFAQs for Trichloroethylene (TCE)*, AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY (July 2003), <http://www.atsdr.cdc.gov/tfacts19.pdf> (indicating that drinking or breathing high levels of TCE over a long period of time can cause nerve, liver, and lung damage); see also O’Dowd, *supra* note 19 (detailing the contamination at each site on the El Toro base and noting that El Toro veterans may not know that they were exposed to carcinogenic chemicals and may not think to connect their illnesses to such exposure).

⁵² See *Jones v. United States*, 691 F. Supp. 2d 639, 642 (E.D.N.C. 2010).

⁵³ *Occupational Cancer*, CENTERS FOR DISEASE CONTROL AND PREVENTION, <http://www.cdc.gov/niosh/topics/cancer/> (last updated Aug. 25, 2011).

⁵⁴ See *id.*; O’Dowd, *supra* note 19.

⁵⁵ See 38 U.S.C. § 5107(b) (2006); 38 C.F.R. § 3.102 (2010); see also *Ortiz v. Principi*, 274 F.3d 1361, 1364 (Fed. Cir. 2001) (interpreting the codified “benefit of the doubt rule” to mean that “when the positive and negative evidence relating to a veteran’s claim for benefits are in ‘approximate balance’, thereby creating a ‘reasonable doubt’ as to the merits of his or her claim, the veteran must prevail”).

⁵⁶ See 38 U.S.C. § 5107(b). VA’s Compensation & Pension Clinician Guide advises clinicians that when they are asked to give an opinion as to whether a condition is related to a specific incident during military service, the opinion should be expressed as follows: “is due to” (100% sure), “more likely than not” (greater than 50% probability),

service connection is approximately equivalent, the benefit of doubt is given to the veteran and service connection is granted.⁵⁷ Despite this, out of the 15 or 16 disability claims VA has reviewed from the 200 Camp Lejeune exposure claims they have received, the VA, on a direct basis, granted claims to 5 or 6 veterans whose illnesses are “*more likely than not*” linked to contaminant exposure in Camp Lejeune’s drinking water.⁵⁸ These facts beg the question of whether Camp Lejeune veterans are being held to a higher standard, but no definitive answers have been provided.

ii. Establishing Service Connection on a Presumptive Basis

Another way to establish service connection is on a “presumptive” basis, which entails a legal presumption of service connection that can substitute the showing of evidence linking a current disability to in-service exposure.⁵⁹ Congress and VA, the only entities with authority to establish presumptions, have established presumptions in circumstances when it is difficult to link a medical condition manifesting after military service to a particular hazard encountered during such service, even if the veteran does not have enough evidence to support direct service

“at least as likely as not” (50% probability), “not at least as likely as not” (less than 50% probability), or “is not due to” (0% probability) an in-service event. U.S. DEP’T OF VETERANS AFFAIRS, C&P CLINICIAN GUIDE 1.16 (2001), available at <http://www.ds.jf.org/VA%20Files/Clinician%20Guide%20v2.pdf> [hereinafter C&P GUIDE] (providing clinicians with guidance for conducting VA Compensation and Pension examinations). The guide’s purpose is to aid clinicians in evaluating injuries or diseases for which compensation or pension benefits have been claimed. See *id.* at 1.1-1.4. It does not govern disability evaluation examinations because it is not a regulatory or statutory provision. See *Allin v. Brown*, 6 Vet. App. 207, 214 (1994) (describing that the VA Clinician Guide provides “generalized direction for the proper conduct of disability examinations” and “leaves latitude for the examining doctor to exercise his discretion in conducting a proper examination of each individual case”).

⁵⁷ 38 U.S.C. § 5107(b); see *Camp Lejeune Hearing*, *supra* note 4 (statement of Thomas J. Pamperin, Associate Deputy Under Secretary for Policy and Program Management, U.S. Department of Veterans Affairs).

⁵⁸ LEJEUNE HEARING CHARTER, *supra* note 24, at 2 (emphasis added).

⁵⁹ 38 U.S.C. §§ 1110, 1112; 38 C.F.R. §§ 3.303(a), 3.307(a); see PANANGALA ET AL., *supra* note 4, at 4.

connection.⁶⁰ It relieves veterans of the burden of submitting medical evidence to meet the “as likely as not” standard of proof, which is difficult to meet when the illness manifests well after service and the applicable scientific principles regarding exposure to environmental hazards is not well-known.⁶¹ A presumption of service connection ensures that similar claims are given similar treatment and veterans are provided with swift and uniform compensation.⁶² Also, it enables claims to be processed quicker by relying upon medical principles that need not be independently established in each case. And most importantly, it addresses the health care needs of our veterans by allowing them to receive prompt medical care for their service-connected illnesses.

In order to establish service connection by legal presumption, the veteran must show that the disabling condition manifested itself to at least a ten percent disability level within the presumptive period established by statute for the particular disease.⁶³ The onset of the disease or disability may be proven “by medical evidence, competent lay evidence or both.”⁶⁴ As long as it is shown that the veteran had the medical condition or its manifestations to a degree of ten percent within the presumptive period, a presumption that the condition is service-connected applies.⁶⁵

Congress first established a presumption of service connection in 1921 for psychosis occurring within two years of

⁶⁰ 38 C.F.R. §§ 3.303(d), 3.307(a), 3.309(a).

⁶¹ See *Ramey v. Gober*, 120 F.3d 1239, 1241-44 (Fed. Cir. 1997) (illustrating the difficulty of showing that a veteran’s cancer is at least as likely as not linked to exposure to hazardous radiation during service without a presumption); see also *VA Disability Compensation Hearing*, *supra* note 2 (statement of Hon. Eric K. Shinseki, Secretary, U.S. Department of Veterans Affairs) (discussing the importance of presumptions in the veterans’ benefits system).

⁶² *Combee v. Brown*, 34 F.3d 1039, 1043 (Fed. Cir. 1994).

⁶³ 38 U.S.C. § 1112; 38 C.F.R. § 3.307(a).

⁶⁴ 38 C.F.R. § 3.307(b).

⁶⁵ See 38 C.F.R. § 3.307(c); see also *Caldwell v. Derwinski*, 1 Vet. App. 466, 469 (1991) (asserting that a chronic disease does not need to be diagnosed in the presumptive period, but if it is not, there must be evidence proving manifestations of the disease to at least a degree of ten percent).

separation from active duty military service, and has continued to establish presumption programs for atomic veterans, former prisoners of war, Vietnam veterans, and recently, Gulf War veterans, to include veterans who served in Iraq, Afghanistan and any other part of Southwest Asia.⁶⁶ Since 1921, nearly 150 health outcomes have been service connected on a presumptive basis.⁶⁷

III. OVERVIEW OF STATUTORY AND REGULATORY PRESUMPTIVE SERVICE CONNECTION

A. Presumptive Service Connection for Vietnam Veterans

The establishment of a presumption of service connection for Vietnam veterans exposed to Agent Orange did not happen overnight.⁶⁸ Since the late 1970s, Congress and VA have held many hearings and enacted various laws attempting to

⁶⁶ PANANGALA ET AL., *supra* note 4, at 5-7; *see, e.g., Gulf War Veterans' Illnesses: Infectious Diseases*, U.S. DEP'T OF VETERANS AFFAIRS, http://www.publichealth.va.gov/exposures/gulfwar/infectious_diseases.asp#what (last updated May 23, 2011) (describing infectious disease presumptions for Gulf War veterans).

⁶⁷ *VA Disability Compensation Hearing*, *supra* note 2 (statement of Jonathan M. Samet, M.D., M.S., Chairman of the Comm. on Evaluation of the Presumptive Disability Decision-Making Process for Veterans, Institute of Medicine).

⁶⁸ *See* COMM. TO REVIEW THE HEALTH EFFECTS IN VIETNAM VETERANS OF EXPOSURE TO HERBICIDES, INST. OF MED., *VETERANS AND AGENT ORANGE: HEALTH EFFECTS OF HERBICIDES USED IN VIETNAM 45-51* (Nat'l Acad. Press, 1994) [hereinafter *VETERANS AND AGENT ORANGE*]. Agent Orange is the name given to a herbicide compound used during the Vietnam War to remove foliage providing cover for the enemy. *Agent Orange: Exposure During Military Service*, U.S. DEP'T OF VETERANS AFFAIRS, <http://www.publichealth.va.gov/exposures/agentorange/militaryexposure.asp> (last updated Aug. 19, 2011). Agent Orange was the most widely used herbicide during the Vietnam War, and over 19 million gallons of various herbicide combinations were used. *Id.* During the Vietnam War, exposure to Agent Orange could have occurred inside Vietnam, on ships that operated on the inland waterways of Vietnam, or on open sea ships off the shore of Vietnam if a veteran set foot on the land of Vietnam. *Id.*; *Agent Orange: Blue Water Veterans*, U.S. DEP'T OF VETERANS AFFAIRS, <http://www.publichealth.va.gov/exposures/agentorange/bluewater veterans.asp> (last updated Sept. 2, 2011). Exposure could have also occurred in the demilitarized zone in Korea from April 1, 1968 through August 31, 1971, on Thailand military bases between February 28, 1961 and May 7, 1975, and also during herbicide tests and storage at military bases in the United States and other countries. *Agent Orange: Exposure During Military Service*, *supra*.

address issues of health care, scientific research, and disability compensation related to Agent Orange exposure.⁶⁹ Before a presumption of service connection was established, VA denied thousands of claims for disabilities and deaths related to Agent Orange exposure.⁷⁰

Due to rising concerns among veterans about potential adverse health effects from Agent Orange exposure in Vietnam, President Jimmy Carter established the Interagency Working Group on the Long-Term Health Effects of Phenoxyherbicides and Contaminants in December 1979.⁷¹ The group's main functions consisted of gathering information from government scientists and identifying areas where scientific study was needed, and reporting the results to Congress and the public.⁷² In August 1981, President Ronald Reagan renamed the working group the Agent Orange Working Group (AOWG) and expanded the scope of its work.⁷³ The AOWG was tasked with evaluating the government's scientific research on Agent Orange and related issues and providing scientific peer review of protocols and subsequent studies.⁷⁴

Beginning in 1978, Congress raised questions regarding health concerns of veterans exposed to Agent Orange in Vietnam.⁷⁵ Over the next 20 years, congressional committees held hearings, introduced bills, and passed several laws on the issue of Agent Orange.⁷⁶ The first piece of legislation regarding this issue directed the Secretary of Defense to contract with the National Academy of Sciences (NAS) to conduct a comprehensive study of the ecological and physiological dangers inherent in the use of Agent

⁶⁹ VETERANS AND AGENT ORANGE, *supra* note 68, at 47-51.

⁷⁰ NAT'L VETERANS LEGAL SERVS. PROGRAM, VETERANS BENEFITS MANUAL 158 (Barton F. Stichman et al. eds., 2002).

⁷¹ VETERANS AND AGENT ORANGE, *supra* note 68, at 45-46.

⁷² *Id.* at 46.

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Id.* at 47-51.

Orange in Vietnam.⁷⁷ The legislation focused on three particular areas: 1) access to VA health care for veterans exposed to Agent Orange,⁷⁸ 2) appropriation of funds for scientific research on the human health effects from Agent Orange exposure and how to address the needs of those exposed,⁷⁹ and 3) compensation for disabilities arising from exposure to Agent Orange.⁸⁰

Congress enacted the Agent Orange Act of 1991 (“Agent Orange Act”), which serves as a model for establishing applicable presumptive conditions.⁸¹ For Vietnam veterans who have one of the diseases recognized by VA as connected to Agent Orange exposure, the Agent Orange Act presumes that such disease is service-connected.⁸² The Agent Orange Act allows veterans’ disabilities to be presumed service-connected to address the

⁷⁷ *Id.* at 47; see Pub. L. No. 91-441, § 506, 84 Stat. 905, 912-13 (1970).

⁷⁸ Veterans’ Health Care, Training, and Small Business Loan Act of 1981, Pub. L. No. 97-72, §§ 101-102, 95 Stat. 1047, 1047-48. On November 3, 1981, Congress enacted Public Law Number 97-72 to expand eligibility for health care services to include Vietnam veterans exposed to Agent Orange. See VETERANS AND AGENT ORANGE, *supra* note 68, at 50. A veteran did not need to demonstrate any link with Agent Orange in order to receive health care services. *Id.* Health care was provided unless the condition was shown to be due to something other than Agent Orange exposure. *Id.*

⁷⁹ Veterans’ Health Programs Extension and Improvement Act of 1979, Pub. L. No. 96-151, § 307, 93 Stat. 1092, 1097-98. On December 20, 1979, Congress enacted Public Law Number 96-151 to direct VA to conduct an epidemiologic study on the potential health effects in Vietnam veterans from exposure to dioxin in the herbicides used in Vietnam. See VETERANS AND AGENT ORANGE, *supra* note 68, at 50.

⁸⁰ Veterans’ Dioxin and Radiation Exposure Compensation Standards Act, Pub. L. No. 98-542, 98 Stat. 2725 (1984); see VETERANS AND AGENT ORANGE, *supra* note 68, at 46-47. On October 24, 1984, Congress enacted Public Law Number 98-542, the Veterans’ Dioxin and Radiation Exposure Compensation Standards Act to provide payment of disability and death benefits for Vietnam veterans with chloracne and porphyria cutanea tarda that manifested within one year after service in Vietnam. VETERANS AND AGENT ORANGE, *supra* note 68, at 50. The law also presented a method for VA to issue standards for determining claims for compensation based on exposure to Agent Orange. *Id.* at 50-51. Further, the law required VA to establish the Veterans Advisory Committee on Environmental Hazards, which provided advice and recommendations on completed research on other administrative and legislative initiatives. *Id.* at 51.

⁸¹ Agent Orange Act of 1991, Pub. L. No. 102-04, 105 Stat. 11 (codified at 38 U.S.C. § 1116 (2006)); see *VA Disability Compensation Hearing*, *supra* note 2 (statement of Sen. Daniel K. Akaka, Chairman, S. Comm. on Veterans’ Affairs).

⁸² See 38 U.S.C. § 1116(a); 38 C.F.R. §§ 3.307(a)(6), 3.309(e) (2010).

uncertain degree of exposure to herbicides among Vietnam veterans and the difficulty of connecting such exposure to a disease that manifests at a time remote from service.⁸³ The Agent Orange Act establishes a presumption for service connection for certain diseases by reason of presumed exposure to Agent Orange.⁸⁴ First, the Agent Orange Act provides a presumption of exposure to dioxin, the carcinogen in Agent Orange, to veterans who served in the Republic of Vietnam between January 9, 1962, and May 7, 1975, if the veteran stepped foot within the land borders of Vietnam or served on a vessel that traversed its inland waterways.⁸⁵ Second, the Agent Orange Act provides a presumption of a nexus between exposure to dioxin and medical conditions associated with such exposure, such as: chloracne, Hodgkin's disease, multiple myeloma, respiratory cancers, prostate cancer, type 2 diabetes, and non-Hodgkin's lymphoma.⁸⁶ The Agent Orange Act requires VA to contract with the NAS to conduct a scientific evaluation of evidence linking certain medical conditions to herbicide exposure every two years.⁸⁷ The Secretary of VA is directed to examine and use the evidence in the NAS reports, as well as all other sound medical and scientific evidence, to establish presumptions of service connection for diseases that are shown to have a "positive association" between Agent Orange exposure and the occurrence

⁸³ See *VA Disability Compensation Hearing*, *supra* note 2 (statement of Sen. Daniel K. Akaka, Chairman, S. Comm. on Veterans' Affairs).

⁸⁴ 38 U.S.C. § 1116(a)(1), (a)(2). Based on the numerous reports received from the National Academy of Sciences since 1991, VA has established presumptions of service connection for fourteen categories of diseases associated with herbicide exposure. See *Agent Orange: Diseases Related to Agent Orange Exposure*, U.S. DEP'T OF VETERANS AFFAIRS, <http://www.publichealth.va.gov/exposures/agentorange/diseases.asp> (last updated Aug. 31, 2011); see also Secretary Eric K. Shinseki, *Agent Orange and Veterans: A 40-Year Wait*, THE WHITE HOUSE BLOG (Aug. 30, 2010, 4:59 PM), <http://www.whitehouse.gov/blog/2010/08/30/agent-orange-and-veterans-a-40-year-wait>.

⁸⁵ 38 U.S.C. § 1116(a)(1); see 38 C.F.R. §§ 3.307, 3.309; see also Kristine Cordier Karnezis, Annotation, *Construction and Application of Agent Orange Act of 1991*, *Pub. L. No. 102-4, 105 Stat. 11 and Regulations Promulgated Thereunder*, 48 A.L.R. FED. 2d 439 (2010) (providing an in-depth analysis of the interpretation and application of the Agent Orange Act of 1991).

⁸⁶ 38 U.S.C. § 1116(a)(2); 38 C.F.R. § 3.309(e); see *Agent Orange: Diseases Related to Agent Orange Exposure*, *supra* note 84.

⁸⁷ Agent Orange Act of 1991 § 3, 105 Stat. at 13-14.

of the disease in humans.⁸⁸ The Agent Orange Act indicates that a positive association exists “if the credible evidence for the association is equal to or outweighs the credible evidence against the association.”⁸⁹ An examination of the language of the Agent Orange Act clearly shows that evidence of a causal relationship is not necessary.⁹⁰ Only credible evidence showing that Agent Orange exposure is statistically associated with an increased incurrence of a disease must be shown to establish a presumption of service-connection.⁹¹ The Agent Orange Act provides that if the credible evidence for an association between Agent Orange exposure and a disease is equal-to or outweighs the credible evidence against, then VA’s Secretary must establish presumptive service connection for that disease.⁹² The current Secretary, the Honorable Eric Shinseki, emphasized that “[t]he Agent Orange Act was a compromise between the desire for scientific certainty and the need to address the legitimate health concerns of Veterans exposed to herbicides in service.”⁹³

B. Recently Created Presumptions for Vietnam, Gulf War, and Atomic Veterans

VA has recently used the presumptive disability process to create new presumptive conditions. On July 24, 2009, the NAS’s Institute of Medicine released the *Veterans and Agent Orange: Update 2008* report, finding limited or suggestive evidence that exposure to Agent Orange and other herbicides used during the

⁸⁸ 38 U.S.C. § 1116(b)(1), (b)(2). These provisions make clear that whenever the Secretary of VA determines that a positive association exists between the exposure event and a disease, he or she must prescribe regulations providing that a presumption of service connection is warranted for that disease. *Id.*

⁸⁹ 38 U.S.C. § 1116(b)(3). When compared to the VA’s Compensation & Pension Clinician Guide, this standard would be equivalent to a medical nexus statement that a medical condition is “at least as likely as not” related to an in-service event. C&P GUIDE, *supra* note 56, at 1.16; *see* 38 U.S.C. § 5107(b).

⁹⁰ *See* Agent Orange Act of 1991 § 3, 105 Stat. at 13-14.

⁹¹ *Id.*

⁹² *Id.*

⁹³ *VA Disability Compensation Hearing*, *supra* note 2 (statement of Hon. Eric K. Shinseki, Secretary, U.S. Department of Veterans Affairs).

Vietnam War is associated with an increased chance of developing ischemic heart disease and Parkinson's disease.⁹⁴ The report also found that there is sufficient evidence to conclude that there is a positive association between exposure to Agent Orange and other herbicides used in the Vietnam War and developing chronic B-cell leukemia.⁹⁵ On August 31, 2010, relying on this report, VA established three new presumptive diseases related to Agent Orange exposure—all chronic B-cell leukemias, Parkinson's disease, and ischemic heart disease.⁹⁶

Like the Agent Orange Act, the Veterans Programs Enhancement Act of 1998 required the Secretary to determine, based on NAS reports, whether particular medical conditions warranted a presumption of service connection for veterans who were exposed to toxins during the Persian Gulf War, and to establish presumptive conditions for those diseases found to be positively associated with such exposure.⁹⁷ On September 29, 2010, VA established nine presumptive infectious diseases as “related to military service in Southwest Asia during the first Gulf War starting August 2, 1990, through the conflict in Iraq and on or after September 19, 2001, in Afghanistan.”⁹⁸ VA's decision relied on a 2006 NAS report describing the long-term health effects of veterans' exposure to toxic agents during the Persian Gulf War.⁹⁹

⁹⁴ COMM. TO REVIEW THE HEALTH EFFECTS IN VIETNAM VETERANS OF EXPOSURE TO HERBICIDES, INST. OF MED., VETERANS AND AGENT ORANGE: UPDATE 2008, at 652 (Nat'l Acads. Press, 2009).

⁹⁵ *Id.*

⁹⁶ 75 Fed. Reg. 53,202 (Aug. 31, 2010) (to be codified at 38 C.F.R. pt. 3); see *Agent Orange: Diseases Related to Agent Orange Exposure*, *supra* note 84.

⁹⁷ Veterans Programs Enhancement Act of 1998, Pub. L. No. 105-368, § 101, 112 Stat. 3315, 3321.

⁹⁸ *Gulf War Veterans' Illnesses: Infectious Diseases*, *supra* note 66; see 75 Fed. Reg. 59,968 (Sept. 29, 2010) (to be codified at 38 C.F.R. pt. 3).

⁹⁹ VA Recognizes 'Presumptive' Illnesses in Iraq, Afghanistan, U.S. ARMY, Mar. 24, 2010, <http://www.army.mil/-news/2010/03/24/36272-va-recognizes-presumptive-illnesses-in-iraq-afghanistan/> (explaining that “[b]ecause the Persian Gulf War has not officially been declared ended, veterans serving in Operation Iraqi Freedom are eligible for the VA's new presumptions” for infectious diseases and that Afghanistan veterans were included in these presumptions because the National Academy of Sciences found that the nine diseases are prevalent in that country).

Atomic veterans, defined as those exposed to ionizing radiation while in service, are entitled to presumptive service connection if they are diagnosed with diseases such as: all forms of leukemia; cancers of the thyroid, breast, stomach, and liver; and lymphomas.¹⁰⁰ Senator Daniel K. Akaka, former Chairman of the U.S. Senate Committee on Veterans' Affairs, acknowledges that “we are just beginning to hear about the consequences of exposures to potential toxins in connection with the wars in Iraq and Afghanistan and exposures at military installations—such as Camp Lejeune and the Atsugi Naval Air Facility.”¹⁰¹ However, no effort has been taken on the part of VA to establish presumptive diseases from exposure to toxins at these installations or at any of the other 130 contaminated military installations.

IV. WHETHER A PRESUMPTION PROCESS IS APPROPRIATE FOR VETERANS OF CAMP LEJEUNE

A. The Circumstances Surrounding Contamination at Camp Lejeune, Like Those Involving Agent Orange, Warrant Establishment of a Presumption Process

Presumptions of contaminant exposure and service connection for veterans of Camp Lejeune are appropriate because it is not possible to determine the extent of contaminant exposure for each individual, and definitive medical evidence is not yet available to directly link such exposure to an illness manifesting after military service. The circumstances warranting establishment of a presumption process for Vietnam veterans are analogous to the circumstances surrounding Camp Lejeune veterans. Therefore, in an effort to timely address their health care needs, VA should operate under the established statutory guidelines used in prior

¹⁰⁰ 38 U.S.C. § 1112(c) (2006); 38 C.F.R. § 3.309(d) (2010); see “Presumptive” Disability Benefits for Certain Groups of Veterans, U.S. DEP’T OF VETERANS AFFAIRS (Dec. 2008), <http://www.vba.va.gov/VBA/benefits/factsheets/serviceconnected/presumptive.doc>.

¹⁰¹ VA Disability Compensation Hearing, *supra* note 2 (statement of Sen. Daniel K. Akaka, Chairman, S. Comm. on Veterans’ Affairs).

presumptive reviews¹⁰² and adopt presumptive conditions that are found to be positively associated to exposure to the contaminants present in Camp Lejeune's water supply during the years the water was contaminated. Before the Agent Orange Act was enacted, it was difficult for troops returning from Vietnam to establish a relationship between their exposure to Agent Orange and health problems they experienced due to a lack of specific medical evidence linking the two.¹⁰³ Similarly, veterans experiencing health problems years after living and working at Camp Lejeune face a similar obstacle. Fortunately, science has established that contaminants in the water at Camp Lejeune are known to be carcinogenic or are reasonably anticipated to be carcinogenic, much like dioxin, the potent carcinogen in Agent Orange.¹⁰⁴

A presumption of exposure to a particular hazard during service is used when such exposure is difficult to document or when there is insufficient data on the extent of exposure.¹⁰⁵ The widespread use of Agent Orange during the Vietnam War was "well-documented, but it is not feasible to determine whether, and to what extent, a particular Vietnam Veteran was actually exposed."¹⁰⁶ Bradley Flohr, Assistant Director of VA's Policy, Compensation, and Pension Service, stated that part of the reason why presumptive exposure to Agent Orange was established was because the DOD did not provide the information needed to determine exactly where Agent Orange was sprayed, possibly because they did not know or did not keep adequate records.¹⁰⁷ Likewise, there is documentation

¹⁰² For examples of the VA operating under the established statutory guidelines used in prior presumptive reviews, see *supra* Part III.

¹⁰³ See *supra* Part III.A; see also *VA Disability Compensation Hearing*, *supra* note 2 (statement of Hon. Eric K. Shinseki, Secretary, U.S. Department of Veterans Affairs).

¹⁰⁴ *Known and Probable Human Carcinogens*, *supra* note 18.

¹⁰⁵ *Camp Lejeune Hearing*, *supra* note 4 (statement of Thomas J. Pamperin, Associate Deputy Under Secretary for Policy and Program Management, U.S. Department of Veterans Affairs).

¹⁰⁶ *Id.*

¹⁰⁷ AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY, CAMP LEJEUNE COMMUNITY ASSISTANCE PANEL (CAP) MEETING 11, 121-22 (2010), http://www.atsdr.cdc.gov/sites/lejeune/docs/CAPtranscript_4_10.pdf [hereinafter CAMP LEJEUNE CAP MEETING].

on how the use of toxic chemicals at Camp Lejeune caused groundwater contamination, but it is not feasible to determine the extent a particular Camp Lejeune veteran, dependent, or civilian worker was actually exposed to toxic chemicals, due to insufficient documentation.¹⁰⁸ In ATSDR's efforts to conduct epidemiological studies, it experienced some difficulty obtaining information from military and DOD officials necessary to identify persons who were at Camp Lejeune during the period of water contamination.¹⁰⁹ When this information was eventually obtained, it was discovered that the databases did not contain the necessary information to identify where service members were stationed until June 1975, or where civilian workers began service until December 1972.¹¹⁰ Due to an absence of data necessary to determine the extent of exposure suffered by an individual at Camp Lejeune, a presumption of

¹⁰⁸ See *Camp Lejeune, North Carolina: Background*, AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY, <http://www.atsdr.cdc.gov/sites/lejeune/background.html> (last updated July 6, 2009); see also FRANK J. BOSCH ET AL., AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY, AN ASSESSMENT OF THE FEASIBILITY OF CONDUCTING FUTURE EPIDEMIOLOGICAL STUDIES AT USMC BASE CAMP LEJEUNE 9 (2008), http://www.atsdr.cdc.gov/sites/lejeune/docs/feasibility_assessment_Lejeune.pdf [hereinafter LEJEUNE FEASIBILITY ASSESSMENT].

¹⁰⁹ U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-07-933T, DEFENSE HEALTH CARE: ISSUES RELATED TO PAST DRINKING WATER CONTAMINATION AT MARINE CORPS BASE CAMP LEJEUNE 28 (2007). Examples of problems the ATSDR encountered include obtaining access to DOD records, receiving inadequate responses and no supporting documentation to requests for information, and learning that a substantial number of relevant documents were not previously provided to them by Camp Lejeune officials. *Id.* at 28-30. In 2005, the EPA conducted a criminal investigation on civilian Navy employees in response to these problems. *Poisoned Patriots Hearing*, *supra* note 19, at 27 (statement of Jerome M. Ensminger). The investigators considered charging the Navy employees with obstruction of justice. See *id.* The Navy resisted funding any health impact studies for Camp Lejeune despite a statutory requirement in the National Defense Authorization Act for Fiscal Year 2008. According to the investigator, the Navy employees appeared coached, were not forthcoming with details, and failed to produce documents he requested. *Id.* at 3, 27, 74; see LEJEUNE HEARING CHARTER, *supra* note 24, at 6.

¹¹⁰ The water contamination began around 1953. LEJEUNE FEASIBILITY ASSESSMENT, *supra* note 108, at 3. Furthermore, during a House Committee hearing, Thomas Pamperin recognized that the National Academy of Sciences' 2009 report on Camp Lejeune "underscores the difficulty involved with determining which part of the water supply was contaminated, who may have been exposed to contamination, and to what extent any exposure may have occurred." *Camp Lejeune Hearing*, *supra* note 4 (statement of Thomas J. Pamperin, Associate Deputy Under Secretary for Policy and Program Management, U.S. Department of Veterans Affairs).

exposure is warranted for veterans stationed at Camp Lejeune during the period of water contamination.¹¹¹ Establishing a presumption of service connection is also appropriate for Camp Lejeune veterans because they face the same obstacle as Vietnam veterans—linking their in-service exposure to an illness manifesting remote from service when scientific certainty cannot be attained soon enough to address their health care needs.

B. Previous Studies May Show Why Establishing a VA Service-Connected Presumption for Veterans with Prior Military Service at Camp Lejeune is Inappropriate

VA currently exercises a case-by-case direct service connection method rather than a presumptive service connection method for Camp Lejeune veterans, because the available scientific evidence regarding long-term health effects of individuals exposed to contaminated water at Camp Lejeune is inconclusive.¹¹² In June 2009, a report was issued by the National Research Council (NRC), an organization operating under the NAS pursuant to a congressional mandate.¹¹³ This report may support an assertion that establishing presumptive diseases is premature for Camp Lejeune veterans. Similar to the Agent Orange Act, the mandate required the Department of the Navy to contract with the NAS to conduct a comprehensive review of available scientific and

¹¹¹ Mr. Bradley Flohr, Assistant Director of VA's Policy, Compensation and Pension Service, acknowledged this relationship during an ATSDR meeting on April 29, 2010, when he stated that "any Camp Lejeune veteran who files a claim now is presumed to have been exposed to the contaminated drinking water." CAMP LEJEUNE CAP MEETING, *supra* note 107, at 121-22. However, for this statement to have any effect, Congress and the Secretary of VA need to memorialize it in legislation. *See id.*

¹¹² *Camp Lejeune Hearing*, *supra* note 4 (statement of Thomas J. Pamperin, Associate Deputy Under Secretary for Policy and Program Management, U.S. Department of Veterans Affairs).

¹¹³ COMM. ON CONTAMINATED DRINKING WATER AT CAMP LEJEUNE, NATIONAL RESEARCH COUNCIL, NAT'L ACADS., CONTAMINATED WATER SUPPLIES AT CAMP LEJEUNE: ASSESSING POTENTIAL HEALTH EFFECTS 119-20, 132-33, 164 (Nat'l Acads. Press 2009) [hereinafter NAT'L RESEARCH COUNCIL]; John Warner National Defense Authorization Act for Fiscal Year 2007, Pub. L. No. 109-364, § 318, 120 Stat. 2083, 2143-44 (2006) (authorizing appropriations for various military and defense activities for fiscal year 2007).

medical evidence and address associations between human exposure to drinking water contaminated with TCE and PCE at Camp Lejeune and any adverse health effects.¹¹⁴ Congress's mandate only required the NAS to assess the contaminants TCE and PCE; it did not ask for an assessment of other contaminants found at Camp Lejeune that are known to be carcinogenic, such as benzene and vinyl chloride.¹¹⁵ The resulting study does not provide an assessment in regard to an association between benzene and vinyl chloride exposure and adverse health outcomes.¹¹⁶

After reviewing available scientific information, the NRC concluded that it was not possible to establish, with sufficient certainty, whether certain medical conditions experienced by persons who served or lived at Camp Lejeune were linked to TCE and PCE exposure in the water supply.¹¹⁷ The study asserts that this is due to inadequate data and methodological limitations that cannot be overcome with additional study.¹¹⁸ The main reasons for this conclusion was that it was not possible to reliably estimate the past exposures experienced by those who served or lived on base, and that it would be difficult to detect any increases in the rate of disease in the study population.¹¹⁹ The NRC emphasized that most of the diseases and disorders are relatively rare, which means that a large population is needed to detect increases.¹²⁰ Although approximately one million people have been exposed to the contaminated water at Camp Lejeune, the population is unlikely to be large enough to detect the rare diseases and disorders of concern.¹²¹ Another factor is that the population was relatively young, thus most of those who would be studied are at an age

¹¹⁴ Pub. L. No. 109-364, § 318.

¹¹⁵ *Id.*

¹¹⁶ NAT'L RESEARCH COUNCIL, *supra* note 113.

¹¹⁷ *Id.* at 13.

¹¹⁸ *Id.*

¹¹⁹ *Id.* at 12.

¹²⁰ *Id.*

¹²¹ *Id.*

where chronic diseases are rare.¹²² People also tend to live on military bases for short periods of time. This results in a small increase in the risk of disease, making relevant the possible impact of other risk factors that could have contributed to disease.¹²³

The study emphasized there were divergent views among the NRC committee members conducting the study regarding the probability of health disorders occurring due to exposure to TCE and PCE at Camp Lejeune, but there was a consensus that additional scientific research would be unable to provide more definitive answers.¹²⁴ Accordingly, the NRC report recommends that new studies should be undertaken only if the feasibility of providing substantially improved knowledge on this issue is established in advance.¹²⁵

C. Future Studies May Show that a Presumption Process is Appropriate

i. Flaws and Disagreements with Previous Studies

Certain flaws and omissions show that previous epidemiological studies should not be taken as the final word and future studies should be undertaken because it is possible they will provide scientifically useful information on the affected Camp Lejeune population. A group of epidemiologists, who advised the ATSDR on how to move forward with health studies, issued a statement expressing their disappointment with the 2009 NRC report.¹²⁶ The group asserts that the NRC report is an anomaly and reached confusing and erroneous conclusions.¹²⁷ They specifically

¹²² *Id.*

¹²³ *Id.* The average tour length for Marines is three years; however, many at Camp Lejeune had shorter tours. LEJEUNE FEASIBILITY ASSESSMENT, *supra* note 108, at 23.

¹²⁴ NAT'L RESEARCH COUNCIL, *supra* note 113, at 12.

¹²⁵ *Id.* at 197.

¹²⁶ Ann Aschengrau et al., Statement in Response to National Research Council Report on Camp Lejeune (2009), http://veterans.senate.gov/upload/Burr1_PHS_2009.pdf.

¹²⁷ *Id.*

disagree with the report's assessment of the risk caused by exposure to TCE and PCE, emphasizing that TCE and PCE are characterized as "reasonably anticipated" to be carcinogens, and rejecting the characterization as "limited/suggestive."¹²⁸ They acknowledge "[t]here may be uncertainties about specific levels of exposure for individual households or people," but stress that these can be described in the study results.¹²⁹ The group also disagrees with the report's conclusion that any future epidemiological studies on Camp Lejeune will not likely provide meaningful or definitive answers.¹³⁰ The group asserts that a "definitive" standard is "too high—no one study can provide definitive answers, and all studies must be considered in the light of other scientific evidence."¹³¹ The epidemiologists insist that scientifically informative studies are possible and encourage the ATSDR to consider the 2009 NRC report in the context of recommendations from other experts.¹³²

Congress failed to require that other contaminants at Camp Lejeune be included in the 2009 NRC report, such as vinyl chloride and benzene, which differ from TCE and PCE in that they are *known* carcinogens, and are linked to different cancers and chronic diseases.¹³³ Assessments on each distinct contaminant are important because each chemical's carcinogenicity is different and each is associated with different diseases.¹³⁴ The omission of these critical contaminants decreases the overall confidence in the 2009 NRC report. No drinking water studies have evaluated the relationship, if any, between exposure to benzene and vinyl chloride and chronic diseases.¹³⁵

¹²⁸ *Id.*

¹²⁹ *Id.*

¹³⁰ *Id.*; see NAT'L RESEARCH COUNCIL, *supra* note 113, at 12-13.

¹³¹ Aschengrau et al., *supra* note 126.

¹³² *Id.*

¹³³ See John Warner National Defense Authorization Act for Fiscal Year 2007, Pub. L. No. 109-364, § 318, 120 Stat. 2083, 2143-44 (2006); *Known and Probable Human Carcinogens*, *supra* note 18; *Reported Health Effects*, *supra* note 17.

¹³⁴ *Reported Health Effects*, *supra* note 17 (describing the different health effects linked to each contaminant).

¹³⁵ LEJEUNE FEASIBILITY ASSESSMENT, *supra* note 108, at 22.

In 2009, the ATSDR withdrew its 1997 Public Health Assessment which used inaccurate data to conclude that exposure to the contaminants in the water at Camp Lejeune would not pose a health hazard for adults.¹³⁶ The assessment was misleading because the ATSDR omitted an assessment of benzene, despite the fact that it had significant records from 1984 showing its presence in the water supply.¹³⁷ In 2005, the ATSDR stumbled upon records not previously provided by the Navy that estimated that between 1988 and 1991, 1.1 million gallons of gasoline floated on top of the groundwater table at Camp Lejeune.¹³⁸ Benzene is a major component of gasoline.¹³⁹ The ATSDR's feasibility assessment evaluates the literature on benzene and vinyl chloride and lists the health outcomes associated with them.¹⁴⁰ The ATSDR did this assessment to show that it will be evaluating these two contaminants as well as TCE, PCE, and DCE in all of its Camp Lejeune epidemiological studies.¹⁴¹ Because the ATSDR does not explicitly state that benzene and vinyl chloride will be included, to ensure reliability, Congress should codify a requirement for the ATSDR to include an assessment of benzene and vinyl chloride

¹³⁶ *January 1, 2011, Update to the 1997 Camp Lejeune Public Health Assessment*, AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY (Jan. 1, 2011), <http://www.atsdr.cdc.gov/hac/pha/pha.asp?docid=1082&pg=0> [hereinafter *January 2011 Update*]; see Press Release, H. Comm. on Science and Technology, ATSDR Withdraws Scientifically Flawed Public Health Document (Apr. 28, 2009), available at <http://archives democrats.science.house.gov/press/PRArticle.aspx?NewsID=2448>. For a summary of the main points of the press release, see *ATSDR Withdraws Scientifically Flawed Public Health Document*, SALEM-NEWS, Apr. 28, 2009, http://www.salem-news.com/articles/april282009/astdr_release_4-28-09.php.

¹³⁷ *January 2011 Update*, *supra* note 136; see LEJEUNE HEARING CHARTER, *supra* note 24, at 2, 4-5.

¹³⁸ LEJEUNE HEARING CHARTER, *supra* note 24, at 6.

¹³⁹ *Id.*; *Mobile Source Emissions – Past, Present and Future: Glossary*, U.S. ENVTL. PROTECTION AGENCY, <http://www.epa.gov/oms/inventory/overview/definitions.htm> (last updated July 9, 2007).

¹⁴⁰ LEJEUNE FEASIBILITY ASSESSMENT, *supra* note 108, at 22-23.

¹⁴¹ See *id.*; E-mail from Frank J. Bove, Sc.D, Senior Epidemiologist, Agency for Toxic Substances and Disease Registry, to Allison Lin, Staff Editor, Chapman Law Review (Dec. 27, 2010, 07:48 PST) (on file with author) (indicating that the agency's evaluation of a particular contaminant in the feasibility assessment signifies that such contaminant will be included in future studies).

in future studies. With this requirement, future epidemiological studies can provide more accurate and informative scientific evidence that can be used by VA to create presumptions for Camp Lejeune veterans.

ii. Scientifically Informative Future Studies Are Feasible

Future feasible studies determining whether there is an association between particular diseases and the contaminated water at Camp Lejeune may be a reliable source for decision makers when creating presumptions of service connection. Given the high contamination levels of solvents found in the water at Camp Lejeune, necessary and feasible studies assessing medical conditions associated with exposure to such contamination are being conducted by the ATSDR.¹⁴² As indicated in the Introduction of this Article, the ATSDR is charged under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to evaluate “the presence and nature of health hazards at specific Superfund sites” and to help reduce further exposures.¹⁴³ In anticipation of conducting future studies of mortality, cancer incidence, and noncancerous diseases, the ATSDR conducted a feasibility assessment in June 2008 to determine whether there was adequate data to conduct such studies.¹⁴⁴ The ATSDR has taken the recommendations of the NRC into consideration and altered its approach in conducting its studies in order to ensure that the studies will provide

¹⁴² LEJEUNE FEASIBILITY ASSESSMENT, *supra* note 108, at 30-31.

¹⁴³ *ATSDR Background and Congressional Mandates*, *supra* note 10 (describing generally the agency’s responsibilities under CERCLA, the Resource Conservation and Recovery Act of 1976, and the Superfund Amendments and Reauthorization Act of 1986).

¹⁴⁴ LEJEUNE FEASIBILITY ASSESSMENT, *supra* note 108, at iii-iv. The all-causes mortality study would evaluate all causes of death occurring in the cohort of military personnel who were stationed at Camp Lejeune and civilian employees who worked at Camp Lejeune anytime during the period of water contamination. *Id.* at iv-v. The cancer incidence study was proposed to evaluate all confirmed cancers that were diagnosed from the date of first residence or employment at Camp Lejeune to the date of death or December 31, 2007, which is the most recent date when complete data are available from government cancer registries. *Id.* at v.

substantially improved knowledge on health effects related to exposure to contaminants in the Camp Lejeune water system.¹⁴⁵ The ATSDR confirmed that it had sufficient information to accurately evaluate monthly drinking water exposure at Camp Lejeune and adequate personnel data to establish a large enough group of individuals that can be identified and included in the studies.¹⁴⁶ Furthermore, the ATSDR developed methods to reduce the likelihood of selection bias, enhance participation in the health survey, and confirm self-reported diseases.¹⁴⁷

The ATSDR began sending out the health survey in June 2011, and groups of health surveys continued to be mailed out every three weeks through December 2011.¹⁴⁸ The health survey was specifically mandated by the 2008 National Defense Authorization Act,¹⁴⁹ and asks questions about over twenty different cancers and other diseases that are thought to be related to exposure to the chemicals found in the drinking water at Camp Lejeune.¹⁵⁰ The survey also provides for space where people can report other disease not mentioned in the survey.¹⁵¹

The ATSDR expected that it would mail more than 300,000 surveys to former active duty marines and sailors who were stationed at Camp Lejeune at any time between June 1975

¹⁴⁵ AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY, CONTAMINATED DRINKING WATER AND HEALTH EFFECTS AT MARINE BASE CAMP LEJEUNE: FINAL PLANS OF THE AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY 3, 12-21 (Aug. 2009), http://www.atsdr.cdc.gov/sites/lejeune/docs/Final_Plans_of_ATSDR_for_Marine_Base_Camp_Lejeune_FINAL_08_10_09.pdf.

¹⁴⁶ *Id.* at 13-14, 18.

¹⁴⁷ *Id.* at 20-21.

¹⁴⁸ See *ATSDR Health Survey of Marine Corps Personnel and Civilians*, AGENCY FOR TOXIC SUBSTANCES & DISEASE REGISTRY, http://www.atsdr.cdc.gov/sites/lejeune/health_survey.html (last updated Aug. 17, 2011); Lena H. Sun, *Survey Seeks Data on Camp Lejeune Illnesses*, THE WASH. POST, June 26, 2011, available at http://www.washingtonpost.com/politics/agency-surveys-tainted-water-at-marine-base/2011/06/23/AG4aRQmH_story.html.

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

and December 1985, civilian employees who worked at the base anytime between December 1972 and December 1985, and persons who requested a health survey with the United States Marine Corps.¹⁵² Additionally, the ATSDR planned to mail the survey to about 53,000 marines who lived and worked at Camp Pendleton, California before 1986, to represent a military base where active duty service members and civilians were not exposed to chemicals in drinking water.¹⁵³ This will allow the ATSDR to compare the health experiences between the two groups and assess if chemical exposures impacted people's health.¹⁵⁴

The ongoing ATSDR survey and other potential future studies will not only address possible long-term health effects for individuals exposed to contaminants at Camp Lejeune, but also will be generalizable to other populations exposed to similar levels of contamination for comparable durations.¹⁵⁵ Because the ATSDR has adequately shown that future studies will provide substantially improved knowledge on the Camp Lejeune population, it is important for Congress to ensure that such studies are undertaken.

V. ASSESSMENT OF PAST AND PENDING LEGISLATION

A. House Bill 4555 & House Bill 1742 (Janey Ensminger Act)

Legislation has been introduced by the 111th and 112th sessions of Congress that attempts to address the population potentially affected by environmental hazards on military installations. Each piece of legislation, however, fails to comprehensively address the issue. U.S. Representative Brad Miller of North Carolina introduced House Bill 4555 (Janey Ensminger Act) on February 2, 2010, in the 111th session of

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ *See id.*

¹⁵⁵ LEJEUNE FEASIBILITY ASSESSMENT, *supra* note 108, at 24.

Congress.¹⁵⁶ The bill was named after Janey Ensminger, daughter of 24-year Marine Corps veteran Jerry Ensminger.¹⁵⁷ In 1985, Janey died at the age of nine from childhood leukemia after being exposed to the water at Camp Lejeune while in utero.¹⁵⁸ The bill purported to amend 38 U.S.C. § 1710(e)(1) by adding a subparagraph at the end of that section directing that a veteran who was *stationed* at Camp Lejeune during the period the water was contaminated is eligible for hospital care, medical services, and nursing home care through the VA “for *any* illness, notwithstanding that there is insufficient medical evidence to conclude that such illness is attributable to such contamination.”¹⁵⁹ The bill extended this same coverage to family members of veterans who resided at Camp Lejeune during the period of contamination, including a fetus in utero while the mother resided at Camp Lejeune, but the family members of such veterans must prove an “association” between their medical condition and their exposure to Camp Lejeune’s contaminated water before the VA will provide the care or treatment.¹⁶⁰ Although the bill provided that veterans who were *stationed* at Camp Lejeune when the water was contaminated are eligible for medical care for *any* illness regardless of medical causation or association,¹⁶¹ the bill contained stricter standards for veteran eligibility for a presumption of service connection for illnesses associated with the contaminants in the water at Camp Lejeune and for a presumption of exposure to such contaminants.¹⁶² Specifically, the bill provided that a veteran must have been on *active duty* at Camp Lejeune during the period that the water was contaminated to be eligible for a presumption of service connection and for a presumption of exposure, which is similar

¹⁵⁶ Janey Ensminger Act, H.R. 4555, 111th Cong. (2010).

¹⁵⁷ *U.S. Rep. Brad Miller Introduces Janey Ensminger Act*, SALEM-NEWS, Feb. 2, 2010, http://www.salem-news.com/articles/february022010/janey_bill.php.

¹⁵⁸ *Id.*

¹⁵⁹ H.R. 4555 § 2 (emphasis added).

¹⁶⁰ *Id.*

¹⁶¹ *Id.*

¹⁶² *Id.* § 3.

to the presumptive scheme of the Agent Orange Act.¹⁶³ The bill required the VA Secretary to work in consultation with the ATSDR to determine which diseases warrant a presumption of service connection by reason of having a positive association with exposure to the contaminants in Camp Lejeune's water supply.¹⁶⁴ If a positive association is found, the Secretary must prescribe regulations providing that a presumption of service connection is warranted for that disease.¹⁶⁵ In making determinations, the Secretary must take into account all other sound medical evidence available.¹⁶⁶

House Bill 4555 was quite comprehensive, but the presumption of service connection and the presumption of exposure should be applicable to any veteran who was stationed at Camp Lejeune; it should not be required that the veteran served on active duty at Camp Lejeune. A service member who was stationed at Camp Lejeune, regardless of whether he or she was active duty, reserve, or national guard, should be eligible for a presumption of service connection and exposure. Furthermore, House Bill 4555 failed to specify a time frame in which reports from the ATSDR must be provided to VA. A time frame is necessary to ensure accountability and that the needs of our veterans will be addressed in a timely manner. Also, House Bill 4555 failed to provide a requirement for notification of potential exposure to toxins found at other contaminated military installations and failed to require the ATSDR or the NAS to commence epidemiological studies on other contaminated military bases.

The Janey Ensminger Act was reintroduced in the 112th session of Congress as House Bill 1742.¹⁶⁷ Interestingly, House Bill 1742 leaves out the amendment to 38 U.S.C. § 1710(e)(1) providing for hospital care, medical services, and nursing home

¹⁶³ *Id.*

¹⁶⁴ *Id.* § 3.

¹⁶⁵ *Id.*

¹⁶⁶ *Id.*

¹⁶⁷ Janey Ensminger Act, H.R. 1742, 112th Cong. (2011).

care for veterans who were stationed at Camp Lejeune while the water was contaminated “notwithstanding that there is insufficient medical evidence to conclude that such illness is attributable to such contamination”—a critical section that existed in the version introduced in the 111th session of Congress.¹⁶⁸ The rest of House Bill 1742 remains the same as House Bill 4555—providing for a presumption of service connection for illnesses associated with contaminants in the water supply at Camp Lejeune, as well as a presumption of exposure for veterans who served on active duty at Camp Lejeune during the period the water was contaminated.¹⁶⁹

B. Senate Bill 277

House Bill 1742’s companion bill¹⁷⁰ in the Senate, Senate Bill 277, proposes amendments identical to House Bill 4555 from the 111th session of Congress, except that Senate Bill 277 omits an amendment providing for a presumption of service connection and exposure for veterans who were stationed at Camp Lejeune while the water was contaminated.¹⁷¹ In essence, Senate Bill 277 only provides for hospital care, medical services, and nursing home care to veterans who were stationed at Camp Lejeune and the family members who resided with such veterans during the period of contamination.¹⁷² Senate Bill 277 was approved by the Senate Committee on Veterans’ Affairs on June 29, 2011, but still must be approved by the Senate as a whole, the House as a whole, and the President.¹⁷³ The President has not taken a position on the bill, and the DOD and VA both oppose it.¹⁷⁴

¹⁶⁸ *Id.*; cf. H.R. 4555 § 2.

¹⁶⁹ H.R. 1742, § 2.

¹⁷⁰ See *Glossary*, U.S. SEN., http://www.senate.gov/reference/glossary_term/companion_bill.htm (last visited Sept. 4, 2011) (defining companion bill as similar legislation introduced in the House and Senate so each congressional body can simultaneously consider the bill).

¹⁷¹ S. 277, 112th Cong. (2011).

¹⁷² *Id.*

¹⁷³ S. 277: *Caring for Camp Lejeune Veterans Act of 2011*, GOVTRACK.US, <http://www.govtrack.us/congress/bill.xpd?bill=s112-277> (last visited Sept. 4, 2011).

¹⁷⁴ Barbara Barrett, *Health Care for Camp Lejeune Veterans Clears Senate Hurdle*, STARS

Although House Bill 1742 and Senate Bill 277 are considered companion bills, they are inconsistent.¹⁷⁵ It is questionable why the amendment providing medical care for Camp Lejeune veterans in the 2010 version of the Janey Ensminger Act (H.R. 4555) was eliminated from the current version of the Janey Ensminger Act (H.R. 1742). It is even more puzzling when Senate Bill 277 contains this particular amendment providing medical care to those veterans but then fails to provide for presumptions of service connection and exposure for these veterans, which is provided for in the current version of the Janey Ensminger Act (H.R. 1742).¹⁷⁶

The only consistent amendment in the two companion bills introduced in the 112th session of Congress is the requirement that VA provide medical care to family members of veterans stationed at Camp Lejeune while the water was contaminated.¹⁷⁷ The problem with that amendment is that it requires the family member to prove that his or her medical condition is “associated” with exposure to the contaminants at Camp Lejeune. Proving an “association” is and will be a tough hurdle to overcome, particularly when scientific causation has not been established¹⁷⁸ and the bills fail to define “associated.”¹⁷⁹ Like House Bill 4555 and Senate Bill 277’s amendment providing veterans who were stationed at Camp Lejeune while the water was contaminated with medical care “notwithstanding that there is insufficient medical evidence to conclude that such illness is attributable to such contamination,” family members of these veterans should also be eligible for medical care without having to prove association or causation.¹⁸⁰

AND STRIPES, June 30, 2011, *available at* <http://www.stripes.com/news/us/health-care-for-camp-lejeune-veterans-clears-senate-hurdle-1.147888>.

¹⁷⁵ See Press Release, Rep. Brad Miller, Representatives Miller and Dingell, Senators Burr and Hagan to Host Capitol Hill Screening of *Semper Fi: Always Faithful* (June 20, 2011), *available at* http://bradmilller.house.gov/index.php?option=com_content&task=view&id=3027&Itemid=500055.

¹⁷⁶ Compare S. 277 § 2, with H.R. 1742 § 2.

¹⁷⁷ H.R. 1742 § 3; S. 277 § 2(b).

¹⁷⁸ See *supra* Part IV.B, Part IV.C.

¹⁷⁹ Compare H.R. 1742, with S. 277.

¹⁸⁰ See H.R. 4555; S. 277.

C. House Bill 1657

U.S. Representative Kurt Schrader introduced House Bill 1657 on March 19, 2009, in the 111th session of Congress.¹⁸¹ The bill appropriately provided for notification outside of Camp Lejeune but did only that. It directed the Secretary of Defense to notify service members who were exposed to potentially harmful materials and contaminants and advise the member of such exposure and any health risks associated with exposure to such contaminants.¹⁸²

D. Senate Bill 3378

Senator Daniel Akaka, then Chairman of the U.S. Senate Committee on Veterans' Affairs, introduced Senate Bill 3378 on May 17, 2010, in the 111th session of Congress.¹⁸³ The bill required the Secretary of Defense and the Secretary of VA to jointly establish an Advisory Board on Military Exposures in order to provide expert advice to the DOD and VA on matters relating to exposures of current and former members of the Armed Forces and their dependents to environmental hazards on military installations.¹⁸⁴ The Advisory Board must consist of seven members, appointed by the President in consultation with the Secretary of Defense and the Secretary of VA. Two members must be members of the military or veteran service organizations, two members must be officials of federal agencies other than the DOD or VA with experience in environmental exposure or other relevant fields, and three members must be scientists with backgrounds in relevant fields who are not employees of the federal government. The executive director of the Advisory Board must be a civilian employee of the DOD.¹⁸⁵

¹⁸¹ H.R. 1657, 111th Cong. (2009).

¹⁸² *Id.*

¹⁸³ S. 3378, 111th Cong. (2010).

¹⁸⁴ *Id.* § 3.

¹⁸⁵ *Id.*

In consideration of military exposure claims, the Advisory Board determines whether or not the claimant was exposed to “sufficient amounts of environmental hazards to warrant health care or compensation.”¹⁸⁶ If it determines that the extent of exposure is insufficient, it must make such recommendation to the Secretary of Defense and the Secretary of VA.¹⁸⁷ If the Advisory Board is unsure, it is to convene a Science Advisory Panel consisting of seven scientists with backgrounds in the field who are not employees of the federal government.¹⁸⁸ The panel is to assist the Advisory Board in consideration of an exposure claim by providing a report on whether the extent of exposure is sufficient to warrant compensation or health care.¹⁸⁹ If the Advisory Board determines that a claimant was exposed to sufficient amounts of environmental hazards to warrant compensation or health care, it must make a recommendation on what the claimant should receive.¹⁹⁰ Current and former service members are only allowed to receive either medical treatment specifically for the exposure through the DOD, health care through VA, or compensation through VA.¹⁹¹ Dependents are allowed to receive health care through the DOD, financial compensation, or both.¹⁹² The bill gives authorization only to the Secretary of Defense to provide such benefits or compensation, but it does not require him to do so.¹⁹³ The Advisory Board and Science Advisory Panel have subpoena authority.¹⁹⁴ This power will be very useful in requiring witnesses to testify and produce pertinent documents regarding environmental hazards on military installations.

¹⁸⁶ *Id.* § 4.

¹⁸⁷ *Id.*

¹⁸⁸ *Id.*

¹⁸⁹ *Id.*

¹⁹⁰ *Id.*

¹⁹¹ *Id.*

¹⁹² *Id.*

¹⁹³ *Id.* § 5.

¹⁹⁴ *Id.* § 4.

The bill contains a provision specifically addressing Camp Lejeune.¹⁹⁵ It directs the Secretary of Defense, in coordination with the Secretary of VA and after consultation with the ATSDR, to compile a list of individuals exposed to environmental hazards at Camp Lejeune during the period in which the water was contaminated.¹⁹⁶ The list of individuals, including those who may have been fetuses in utero, will be immediately eligible for health care benefits for medical conditions associated with exposure to contaminants in the water at Camp Lejeune.¹⁹⁷ Camp Lejeune veterans are only eligible for either health care through the DOD or VA but not for compensation.¹⁹⁸ Dependents of Camp Lejeune veterans are eligible for health care benefits through the DOD only and are not eligible for compensation.¹⁹⁹ The same provisions are repeated for individuals at Atsugi Naval Air Facility.²⁰⁰

The provisions in Senate Bill 3378 give rise to numerous concerns. This bill intends for an Advisory Board to assess environmental exposure of a specific cohort of people at a military installation rather than adjudicate individual claims of exposure.²⁰¹ The goal is for the Advisory Board to provide a non-political, consistent scientific analysis on exposure at a given military base so as to help frame any subsequent action on individual claims.²⁰² Although this approach may be better at taking care of our veterans and their families than the current piecemeal case-by-case direct basis, a presumption of service connection will still be more beneficial. This bill does not provide for a monthly compensation award for Camp Lejeune and Atsugi veterans, only VA health care.²⁰³ To receive disability compensation for conditions related to contaminant exposure, Camp Lejeune and Atsugi veterans

¹⁹⁵ *Id.* § 6.

¹⁹⁶ *Id.*

¹⁹⁷ *Id.*

¹⁹⁸ *Id.*

¹⁹⁹ *Id.*

²⁰⁰ *Id.* § 7.

²⁰¹ H.R. REP. NO. 111-189, at 8 (2010).

²⁰² *Id.*

²⁰³ *Id.* at 2.

would still have to file a VA disability compensation claim. To receive VA disability compensation under the current system, each veteran would still encounter the obstacles of proving service connection on a case-by-case direct basis.²⁰⁴

When thorough scientific research is needed to assess environmental hazards at each military installation, it is questionable how an Advisory Board with only three scientists will be able to produce “expert advice” regarding how much exposure is “sufficient” to warrant health care or compensation.²⁰⁵ The bill does not attempt to assist with the Advisory Board’s determination by requiring the DOD to provide all documentation related to environmental hazards on military bases, although it gives the Advisory Board subpoena authority.²⁰⁶ The bill does not provide that this process is to be done after the conclusion of scientific studies regarding exposure to environmental hazards and related health effects. The bill does not even require the Advisory Board to refer to sound medical evidence, and only requires that it report the criteria used to determine whether an individual was exposed to a contaminant and the rationale for using such criteria.²⁰⁷

Being that the DOD and VA are involved in the selection of the members, including the scientists, it is questionable whether or not the Advisory Board members will be independent from influence from the DOD and VA. The DOD’s past reluctance to produce relevant documents to scientific researchers demonstrates that similar problems will likely arise if the department is given such great influence in the selection of members and in the appointment of an executive director.²⁰⁸

²⁰⁴ The process proposed in the bill is not expected to replace VA’s current process of adjudicating individual claims for benefits alleging that service connection for a disability is warranted. *See id.* at 8; 38 C.F.R. § 3.303 (2010) (indicating that proving service connection entails presenting evidence establishing that an illness or disability was incurred in-service).

²⁰⁵ S. 3378 § 3.

²⁰⁶ *Id.* § 4.

²⁰⁷ *Id.* §§ 6-7.

²⁰⁸ *Id.* § 3; *see Poisoned Patriots Hearing, supra* note 19, at 3, 27, 74.

The bill appropriately allows dependents to receive compensation for illnesses or disabilities resulting from exposure to contaminants on military bases.²⁰⁹ Unfortunately, there is no provision in the bill requiring a compilation of those individuals who may have been exposed to environmental hazards at military bases other than Camp Lejeune or Atsugi Naval Air Station and seems to assume that current and former service members and their dependents are aware of such exposure and are able to connect a disease they have to such exposure. A compilation of lists of individuals who may have been exposed to contaminants at other military bases and notification to such individuals is crucial to execute a faithful effort in caring for our veterans who were exposed to such hazards.

E. National Defense Authorization Act for 2011

U.S. Senators Kay Hagan and Richard Burr co-sponsored an amendment to the National Defense Authorization Act for 2011 in the 111th session of Congress.²¹⁰ The amendment directs the Secretary of the Navy to ensure that ATSDR has full access to all existing documents and data related to the water contamination and will receive access to any newly generated information.²¹¹ The amendment further provides that the Navy may not adjudicate any administrative claims filed regarding water contamination at Camp Lejeune until pending scientific studies are completed.²¹² Considering the ATSDR's prior problems with obtaining records from the Navy, the amendment justifiably addresses the need for

²⁰⁹ S. 3378 §§ 6-7. Because dependents who resided on military bases when no regulations existed to prescribe conduct in handling chemicals at such bases will not be able to overcome the FTCA's waiver of sovereign immunity, it is important that dependents be able to obtain compensation in another manner. *See supra* note 37 and accompanying text.

²¹⁰ Press Release, Senator Kay Hagan, Hagan, Burr Camp Lejeune Amendment Included in Senate-Approved Defense Spending Bill (Oct. 7, 2009), *available at* http://hagan.senate.gov/?p=press_release&id=339.

²¹¹ National Defense Authorization Act for Fiscal Year 2011, H.R. 5136, 111th Cong. § 316 (2010).

²¹² *Id.*

the Navy to provide the ATSDR with all the information they need to generate accurate scientific conclusions. Preventing adjudication of relevant administrative claims will allow the ATSDR to finish their epidemiological studies on Camp Lejeune that may shed light on how the claims should be decided.²¹³ Although the amendment addresses claims filed by civilians injured by the contaminated water, it fails to address disability compensation claims by veterans injured by such contamination.

VI. PROPOSAL

Groundwater contamination at U.S. military installations such as Camp Lejeune presents circumstances that warrant the use of a presumptive review process. Because scientific certainty linking contaminant exposure to military service cannot be achieved in a time frame necessary to address the health care needs of our veterans, Congress should require VA to operate in a manner consistent with the established statutory guidelines used in prior presumptive reviews and to create presumptions of service connection and disability compensation for certain diseases, thereby relieving Camp Lejeune veterans of the burden of proving that their exposure is connected to their disability. Congress should enact legislation requiring the Secretary of VA to review future epidemiological reports on Camp Lejeune by the ATSDR and all other sound medical evidence and to use such information to prescribe regulations establishing a presumption of service connection for diseases found to have

²¹³ If the claims were quickly adjudicated before accurate scientific conclusions are provided, any claimants denied only have six months to file a lawsuit against the United States in federal court. See 28 C.F.R. § 14.2(b)(4) (2010). A few days before the bill was approved, some staff members of the House and Senate Armed Services Committee altered the amendment without advising Senator Hagan or Senator Burr. Barbara Barrett, *Burr, Hagan Play Hardball on Lejeune Water Claims*, NEWS & OBSERVER, Dec. 23, 2010, available at <http://www.newsobserver.com/2010/12/23/877691/burr-hagan-play-hardball-on-lejeune.html>. Because it was too late to change the bill, Senator Carl Levin, Chairman of the Senate Armed Services Committee, obtained a letter from acting Secretary of the Navy, Robert O. Work agreeing to refrain from adjudicating any claims until the ATSDR completes their studies regarding the contamination. *Id.*

a positive association with exposure to contaminants at Camp Lejeune.²¹⁴ This Article emphasizes that Congress should require the Secretary of VA to wait until the ATSDR completes its anticipated epidemiological studies on Camp Lejeune before making any decisions on service connection.

The Secretary should also use the information from the scientific studies to prescribe regulations establishing a presumption of *exposure* to all contaminants in the water system at Camp Lejeune for veterans who were stationed at Camp Lejeune during the period in which the water was contaminated. A presumption of exposure must be codified because, while there is sound evidence of drinking water contamination, it is not feasible to determine whether and to what extent an individual was actually exposed to that contamination due to data limitations.²¹⁵

To create a presumption of service connection for certain diseases, Congress should require the Secretary of VA to operate in a similar fashion as established statutory guidelines used in prior presumptive reviews, such as for Vietnam, Gulf War, and Atomic veterans. When the ATSDR's scientific studies on Camp Lejeune are completed, Congress must require the Secretary to examine such studies, as well as all other sound medical evidence, to determine whether a disease is shown to have a positive association with contaminant exposure. If a positive association is shown, the Secretary must prescribe regulations providing that a presumption of service connection is warranted for that disease. A positive association should only require credible evidence that exposure to the contaminants is associated with increased incurrence of the disease rather than evidence of a causal association between exposure to contaminants and the onset of a disease.²¹⁶ With presumptions established, veterans

²¹⁴ See *supra* Part IV.

²¹⁵ See *supra* Part IV.A.

²¹⁶ See 38 U.S.C. § 1116(b)(3) (2006) (indicating use of a "positive association" standard for Agent Orange exposure claims).

would be relieved from the burden of proving service connection and would be eligible for both medical benefits and disability compensation.²¹⁷

Also, Congress must have VA contract with the ATSDR to conduct, every two years, epidemiological studies assessing whether there is an association between exposure to the contaminants in the water and a particular disease. Congress must require the ATSDR to include in their future studies an evaluation of *all* contaminants that were present in the water system, including benzene and vinyl chloride. This way, a presumption process can be established based on accurate and comprehensive scientific evidence.

To comprehensively address the issue of exposures to environmental hazards during military service, Congress should also require the ATSDR to conduct a similar scientific review of other contaminated military bases, such as former Marine Corps Air Station El Toro, assessing whether there is an association between exposure to the contaminants in the water and a particular disease. Additionally, Congress should direct VA and the DOD to work together in compiling a list of individuals who served at other contaminated military installations on the EPA's Superfund list and notify such individuals of potential exposure to the contamination and any health risks associated with such exposure.

CONCLUSION

The government must continue to recognize the sacrifices made by those who have worn the nation's uniform by providing medical benefits and compensation to those who suffer illnesses incurred during military service, whether or not they were incurred during a time of war. This is not the time to turn our backs on veterans who have been always faithful, giving years of their

²¹⁷ See *supra* Part II.B.

lives to proudly serve our country.²¹⁸ Establishing a presumption process for Camp Lejeune veterans and, eventually, for all veterans who were exposed to environmental hazards during military service fulfills our responsibility to care for and compensate veterans for service-connected diseases and disabilities.

²¹⁸ The Marine Corps proclaims that their motto, *Semper Fidelis*, is a way of life—it is a brotherhood that lasts for life. It guides Marines to remain faithful to their mission, to each other, to the Corps, and to the country. See *Semper Fidelis*, U.S. MARINE CORPS, http://www.marines.com/main/index/making_marines/culture/traditions/semper_fidelis (last visited Sept. 4, 2011).