A Legislative Solution to Environmental Protection in Military Action Overseas

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INTRODUCTION

Mary wrote a personal story about her brother, Elijah James McDonald, on the Burn Pits Action Center website. After serving in Amara, Iraq from June 2008 until June of 2009, Elijah James's health began to deteriorate in May of 2010. Dental infections turned into skin infections on the face, which turned into gum infections, facial swelling, fatigue, bruising, and edema of the neck. In August of 2010, Elijah James was found unresponsive and was rushed to a hospital. At the hospital, multiple hemorrhages were found on his brain and his white blood cell count was seventy-two times the normal count. Elijah James was diagnosed with acute leukemia, and he died on August 22, 2010, at the age of twenty-one. Elijah’s story is just one of many that begins with deployment to Iraq or Afghanistan and comes to an abrupt end with bizarre symptoms and life-ending illness. Another veteran, Bethany Airel Bugay, served six months in Iraq in 2003 and frequently lit burn pits to dispose of waste. Bugay said she does not regret serving her country, but she is convinced that her exposure to the fumes, which contained benzene and other cancer-causing chemicals,
caused her cancer. . . . “It took 20 years for the military to admit that some of the warfare was dangerous to our soldiers and they were going to have long consequences years later,” Bugay said, citing Vietnam War veterans sickened by the defoliant Agent Orange. “I’m afraid that’s what’s going to happen to our Iraqi veterans and Afghanistan. It’ll take them forever to figure out that these (burn pits) are contributing factors to these illnesses.”

Since her deployment, Bugay has developed chronic myelomonocytic leukemia, a rare blood cancer. Chronic myelomonocytic leukemia is usually rare in young people: ninety percent of cases are diagnosed in people over sixty. The incidence of any of the chronic leukemias is about one per 100,000 people per year. What is causing these veterans to develop rare cancers and strange symptoms? There is evidence that the use of burn pits in Iraq and Afghanistan could be the answer.

Burn pits have been used extensively in Iraq and Afghanistan. Disposing of refuse is a logistical difficulty in war zones and many military officials claim that open pit burning is the only option; the pits are often close to soldiers’ living quarters. The burn pits are used to get rid of almost anything in the military area including “. . . [p]lastic tires, Humvee doors, vehicles, [and] medical waste.”

The human health problems associated with the use of burn pits are just being revealed and undoubtedly the environmental effects will

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9 Id.
10 Id.
14 U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-11-63, AFGHANISTAN AND IRAQ: DOJ SHOULD IMPROVE ADHERENCE TO ITS GUIDANCE ON OPEN PIT BURNING AND SOLID WASTE MANAGEMENT (2010), available at http://www.gao.gov/htext/d1163.html (“From the start of military operations in Afghanistan and Iraq, the U.S. military and its contractors have burned solid waste every day in open burn pits on or near military bases.”).
15 Glod, supra note 13 (“No trash-removal system existed; incinerators are expensive and take time to install; and the military lacked the time and space to build landfills on bases.”).
16 Id.
be just as devastating. Burn pits are a prime example of poor environmental protection in the Department of Defense (“DoD”) operations stemming from an inadequate environmental management policy. The harmful effects of commonplace military practices, such as burn pit waste disposal, do not seem to square with the DoD position that “America’s national interests are inextricably linked with the quality of the earth’s environment, and . . . threats to the environmental quality affect broad national economic and security interests, as well as the health and well-being of individual citizens.” It seems that military efforts and environmental concerns are always at odds when in reality the two should be considered together.

The DoD is aware of the global consequences that environmental degradation can have on health and safety. Through piecemeal efforts, the President, DoD, and Congress have attempted to create environmental standards for DoD operations. While each of these individual efforts is a step in the right direction, comprehensively, the current environmental policy for DoD operations overseas is inadequate.

This Note will focus on a legislative solution to the environmental degradation that occurs because of military action overseas. Executive orders and legal accountability of government contractors have been proposed, but both solutions are inadequate to cause needed changes.

In order to propose a solution to environmental degradation resulting from military action, Part I of this Note will examine an example of the degradation associated with military action overseas from burn pits. The use and effects of burn pits will be examined from a variety of sources. It has been suggested that burn pits will be the “new” Agent Orange of the wars in Iraq and Afghanistan, so this Note will next make an analogy to Agent Orange. The analogy to Agent Orange will show the possible track that the burn pit problem could take if it is not addressed immediately.

Part II will expand on Part I by examining various parts of the current environmental protection the DoD engages in. Part II will examine

17 Id.
19 Id.
20 Id.
21 Margot Laporte, Being All It Can Be: A Solution to Improve the Department of Defense’s Overseas Environmental Policy, 20 DUKE ENVT. L. & POL’Y F. 203, 205 (2010).
22 Id. at 205–06.
President Carter’s Executive Order 12,114, which was the initial call to action for protection of the environment during overseas military action. This Part will also examine the DoD’s interpretation of President Carter’s Executive Order through DoD Directive 6050.7. Substantive standards for DoD military bases will be presented through DoD Instruction 4715.5. DoD Instruction 4715.8 will be presented to show DoD remediation actions that apply retroactively to environmental harms. The 2010 Defense Authorization Act will show legislation, similar to that proposed in this Note, that attempted to stop the use of burn pits. Finally, federal statutes will be discussed as they seem like an easy solution to apply to military action overseas but have high standards to meet in order to be applied outside the United States.

Part III will discuss the solution proposed by this Note. First, the Executive Order and legal liability solutions will be examined to show their inherent flaws and suggest that they will not be effective in solving the problem. A legislative solution will be proposed and sample language will be suggested using the 2010 Defense Authorization Act and the National Environmental Policy Act as baselines. Finally, Part IV will serve as a call to action that stresses the importance of making changes to military regulation of environmental degradation overseas before it is too late.

I. CURRENT PROBLEM

A. Burn Pits

As of 2010, burn pits were the most prevalent waste disposal method in Iraq and Afghanistan; there were an estimated 251 burn pits in Afghanistan and twenty-two in Iraq.\textsuperscript{24} The mere use of burn pits is harmful enough, but it was discovered that on at least four bases in Iraq operators were not complying with restrictions on burning of items, such as plastics, that produce harmful emissions.\textsuperscript{25} In 2008, a burn pit at Joint Base Balad, the central logistics hub for United States forces in Iraq, was consuming 147 tons of waste per day.\textsuperscript{26} The population at Joint Base Balad was more than 25,000 in 2007.\textsuperscript{27} DoD is slowly moving from the use of

\textsuperscript{24} U.S. GOV’T ACCOUNTABILITY OFFICE, supra note 14.
\textsuperscript{25} Id.
\textsuperscript{26} Kelly Kennedy, Burn Pit at Balad Raises Health Concerns, ARMYTIMES (Oct. 27, 2008, 12:13 PM), http://www.armytimes.com/news/2008/10/military_burnpit_102708w/ [hereinafter Kennedy, Burn Pit].
\textsuperscript{27} Id.
burn pits to the use of solid waste incinerators, but the emissions from the existing burn pits are already having effects on human health and the environment.\footnote{28 U.S. GOV'T ACCOUNTABILITY OFFICE, supra note 14.}

The Balad burn pit has burned “Styrofoam, unexploded ordnance,\footnote{29 UXO Safety Homepage, DoD ENV'T, SAFETY, AND OCCUPATIONAL HEALTH NETWORK AND INFO. EXCH., http://www.denix.osd.mil/uxo/ (last visited Oct. 26, 2012) [hereinafter DENIX] ("[Unexploded ordnance] results from the military’s use of munitions during live-fire training or testing. UXO are considered the most dangerous category of military munitions. Although the conditions that define military munitions as UXO are specific, the public should consider any munitions . . . it encounters as UXO and as extremely dangerous."). See also Kennedy, Burn Pit, supra note 26.} petroleum products, plastics, rubber, dining facility trash, paint and solvents, and medical waste, including amputated limbs. . . .\footnote{30 Kennedy, Burn Pit, supra note 26.} Air Force Lt. Col. Darrin Curtis, a former bioenvironmental flight commander at Balad, wrote in a memorandum that contaminants from the burn pits that troops may have been exposed to could include benzene, arsenic, dichlorofluoromethane, carbon monoxide, ethylbenzene, formaldehyde, hydrogen cyanide, nitrogen dioxide, sulfuric acid, and xylene.\footnote{31 Id. Lt. Col. James Elliot stated that the burn pit at the Joint Base Balad was an “. . . acute and chronic health hazard to our troops and the local population” while Lt. Col. Darrin Curtis commented that “[i]t is amazing that the burn pit has been able to operate without restrictions over the past few years.” Id.}

Exposure to these toxins can affect human health and have negative effects on the “skin, eyes, respiration, kidneys, liver, nervous system, cardiovascular system, reproductive system, peripheral nervous system, and gastrointestinal tract.”\footnote{32 Burn Pits, U.S. DEP’T OF VETERANS AFFAIRS, http://www.publichealth.va.gov/exposures/burnpits/index.asp (last updated June 7, 2012).}

Ethylbenzene and benzene are very toxic for aquatic life and can shorten lifespans, increase reproductive problems, lower fertility, and change appearances of aquatic life.\footnote{33 Benzene: Environmental Effects, DEP’T OF SUSTAINABILITY, ENV’T, WATER, POPULATION & COMMUNITIES, http://www.npi.gov.au/substances/benzene/environmental.html (last visited Oct. 26, 2012).} Benzene can evaporate and continue to contaminate the air and ground by attaching to rain or snow.\footnote{34 Id.} Formaldehyde has long-term effects on animals and humans such as cancer and chronic illness.\footnote{35 Formaldehyde (Methyl Aldehyde): Environmental Effects, DEP’T OF SUSTAINABILITY, ENV’T, WATER, POPULATION & COMMUNITIES, http://www.npi.gov.au/substances/formaldehyde/environmental.html (last visited Oct. 26, 2012).}
0.8 milligrams per kilogram of body weight to 11.1 milligrams per kilogram of body weight of cyanide, death resulted within 15 to 30 minutes.36 Sulfuric acid is very harmful to plant life because of its corrosive nature.37 Sulfuric acid can also burn plants and animals when it mixes with water droplets in the atmosphere and falls to earth as acid rain.38 Exposing humans and the environment to such dangerous substances will have effects that the DoD is familiar with.

B. Analogy to Agent Orange

During the Vietnam War, as part of operation Ranch Hand (1962–1971), the military used various defoliants to remove tree cover, destroy crops, and clear areas around bases.39 Agent Orange was one of these defoliants.40 One of the primary chemicals used in Agent Orange, 2,4,5-T, was found to contain dioxin, and it was discovered that the chemical could cause birth defects in lab animals.41 The use of 2,4,5-T stopped, but in the 1970s veterans began to develop rashes, cancers, psychological symptoms, and birth defects in their children.42 The developing problems led to studies on the effect of Agent Orange on the exposed veterans.43

In 1979, a class action suit was filed against herbicide manufacturers and ended with the establishment of the Agent Orange Settlement Fund.44 It was not until 1991 that President George H.W. Bush signed into law H.R. 556, the “Agent Orange Act of 1991.”45 More than twenty years after the United States sprayed the toxic pesticide, it created legislation to retroactively solve the problems—or rather, to pay for the life-changing effect it had on veterans.46 The Agent Orange Act of 1991 codified

38 Id.
40 Id.
41 Id.
42 Id.
43 Id.
44 Id.
46 Id.
the presumptions for certain diseases associated with exposure, established a regulatory mechanism for adding or deleting presumptions, extended priority medical treatment for Vietnam veterans with conditions related to Agent Orange, and provided for research.\footnote{Id.}

The Agent Orange Act of 1991 did nothing for the environment in Vietnam or the Vietnamese people affected by Agent Orange, but The Victims of Agent Orange Relief Act of 2011 that was introduced in July of 2011 would do just that.\footnote{Id.} The bill would, among other things, require the Secretary of State to provide medical care and assistance to descendants of the Vietnam War era.\footnote{Id.} The bill has been in the Subcommittee on Asia and the Pacific since October 25, 2011.\footnote{Bill Summary & Status 112th Congress (2011–2012) H.R. 2634, LIBRARY OF CONGRESS, http://thomas.loc.gov/cgi-bin/bdquery/z?d112:HR02634:@@@L&summ2=m& (last visited Oct. 26, 2012).}

While the Agent Orange Act of 1991 created presumptions and medical benefits for United States veterans exposed to Agent Orange, the United States’ official policy is that there is no conclusive evidence that the substance created any health problems in the Vietnamese people exposed to it.\footnote{Martha Ann Overland, Agent Orange Poisons New Generations in Vietnam, TIME (Dec. 19, 2009), http://www.time.com/time/world/article/0,8599,1948084-1,00.html.} In the late 1990s, a study that tested soil, pond water, fish and duck tissue, and human blood samples, found dioxin levels that were thirteen times higher than average in soil and twenty times higher than average in human fat tissue.\footnote{The Legacy of Agent Orange, BBC NEWS (Apr. 29, 2005), http://news.bbc.co.uk/2/hi/asia-pacific/4494347.stm.} The former president of the Vietnamese Red Cross believes the use of Agent Orange was a “war crime.”\footnote{Id.} Campaigners sued the chemical companies that produced Agent Orange but a Federal District Judge dismissed the case stating that the defoliant did not violate international law at the time.\footnote{Id.}

Veterans have expressed concern that the burn pits could become the next Agent Orange.\footnote{Zlatos, supra note 8.} The legislation and public outrage over Agent Orange was predominantly concerned with human health effects,\footnote{Dep’t of Veterans Affairs, supra note 45.} but burn pits will have far reaching effects on not only human health, but
also on the environment. The United States has yet to admit that Agent Orange caused any problems for the Vietnamese people. The Victims of Agent Orange Relief Act of 2011 could be a step towards justice for Agent Orange victims in Vietnam—only thirty years later.

II. CURRENT GOVERNMENT DIRECTION

The current environmental protection plan for military efforts overseas has allowed burn pits to continue to cause health and environmental problems. Through an Executive Order, President Carter first emphasized the importance of government actors considering the environmental effects of proposed actions, but the DoD interpreted the key parts of the Executive Order and created the environmental protection plan it currently follows. Allowing the DoD to essentially create their own regulatory regime is contrary to environmental interests and poses a classic “fox guarding the hen house” problem.

A. Executive Order 12,114

President Carter issued Executive Order 12,114—Environmental Effects Abroad of Major Federal Actions (“Executive Order 12,114”) on January 4, 1979. Executive Order 12,114 required officials of Federal Agencies to examine environmental effects of proposed actions and consider these effects in making decisions about actions. The Executive Order mandated an information exchange between the Department of State, the Council on Environmental Quality, and any other interested agency or nation to provide information to decisionmakers through the use of environmental impact statements, bilateral or multilateral environmental studies, or concise reviews of environmental issues.

The Executive Order sought to further the goals of the National Environmental Policy Act (“NEPA”) which required environmental

57 See supra Part I.A.
58 Overland, supra note 51.
59 See AMERICAN CANCER SOCIETY, supra note 39; H.R. 2634, supra note 48.
62 Exec. Order No. 12,114, supra note 60.
63 Id. § 1.
64 Id. §§ 2.2, 2.4.
65 Id. § 1.
assessment for governmental actions having environmental effects within the United States. Executive Order 12,114 forced federal agencies to consider the environmental effect of their actions abroad, but it provided no substantive requirements or procedure for ensuring that protocol was followed.

The Executive Order was a start down the long road of a comprehensive environmental protection plan for the United States military, yet it was hardly a binding plan for the military to live by. Because President Carter’s Executive Order lacked any substantial guidance but still mandated the military to consider the environmental effects of proposed actions, the DoD was left to interpret what the Executive Order required of it.

**B. Department of Defense Directive 6050.7**

The DoD issued Directive 6050.7 soon after President Carter issued Executive Order 12,114 to define key terms of Executive Order 12,114 and elaborate as to what the DoD must consider when approving “major actions.” Because Executive Order 12,114 was not specific, the DoD granted ample discretion to commanders reviewing proposed actions. The DoD interpreted “major action” to mean actions “of considerable importance involving substantial expenditures of time, money, and resources, that affect[] the environment on a large geographic scale or has substantial environmental effects on a more limited geographical area,” and it sought to establish procedures for review of these actions. Beyond establishing what is meant by “major action,” the DoD does not define any other standard for determining when an environmental assessment is necessary. There is no definition of “substantial expenditures” or an elaboration on the geographic area requirements.

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67 Exec. Order No. 12,114, supra note 60.

68 DEPT OF DEF., DIRECTIVE NO. 6050.7, supra note 61, § 3.

69 Id.

70 Id. § 3.5.

71 See id.
The DoD also defined exceptions. Included in the list of exceptions are actions taken by the President, actions taken at the direction of the President or a cabinet officer in the course of armed conflict or when a national security risk is involved, activities of intelligence components, actions of the Office of the Assistant Secretary of Defense or the Defense Security Assistance Agency, and actions relating to nuclear activities and nuclear material except actions providing to a foreign nation a nuclear production or utilization facility.72

The DoD’s interpretation of what is required from President Carter’s Executive Order weighs in the favor of the DoD. The amount of discretion given to reviewing officers allows an officer to decide that a project does not require an environmental review simply by finding that it is not a major action, which, according to DoD’s interpretation of a “major action,” would be easy for an officer to find.73

C. Department of Defense Instruction 4715.5

Substantive standards for Department of Defense overseas military bases are set forth in Instruction 4715.5—Management of Environmental Compliance at Overseas Installations (“Instruction 4715.5”).74 Because Instruction 4715.5 set forth substantive requirements and excluded “environmental analyses conducted under [Executive Order] 12,114,” the procedural and substantive requirements for DoD’s environmental management are wholly separate.75 If a commander satisfies the substantive standards set forth in Instruction 4715.5, he would not need to base his conduct on an assessment completed as required by Executive Order 12,114.76

Under Instruction 4715.5, pollution prevention is the “preferred means for attaining compliance, where economically advantageous and consistent with mission requirements.”77 Instruction 4715.5 created the Overseas Environmental Baseline Guidance Document (“OEBGD”) which specified minimum standards.78 The military installations overseas are required to compare the OEBGD and local environmental standards to

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72 Id. § E2.3.3.
73 Id. § E1.1.
74 DEP’T OF DEF., INSTRUCTION NO. 4715.5: MANAGEMENT OF ENVIRONMENTAL COMPLIANCE AT OVERSEAS INSTALLATIONS § 6.2 (1996) [hereinafter Instruction 4715.5].
75 Id. § 2.1.7.
76 Id.
77 Id. § 4.3.
78 Id. § 6.2.1.
determine the standards that the military will adhere to in a given area.\textsuperscript{79} The combination of the OEBGD and local rules is known as the Final Governing Standards (“FGS”).\textsuperscript{80} It appears that there is substantial control over military operations; however, Instruction 4715.5 excludes many parts of daily operations.\textsuperscript{81}

The OEBGD states that “[o]pen burning will not be the regular method of solid waste disposal.”\textsuperscript{82} The environmental and health effects of open burning have been recognized in Army reports which provide that burn pits should not be used for regular waste disposal.\textsuperscript{83} Army reports also conclude that “[t]he use of improper . . . burning methods can lead to significant environmental exposures to deployed troops.”\textsuperscript{84} The DoD relied on the permission to use open burning in “emergency situations until approved incinerators can be obtained” given in Technical Bulletin MED 593 to operate numerous open-air burn pits in Iraq and Afghanistan and to transition to solid waste incinerators.\textsuperscript{85}

\textbf{D. Department of Defense Instruction 4715.8}

Department of Defense Instruction 4715.8—Environmental Remediation for DoD Activities Overseas (“DoD Instruction 4715.8”) sets forth policy for remediation of environmental harms on DoD installations outside the United States.\textsuperscript{86} DoD Instruction 4715.8 does not apply to substantive requirements set forth in DoD Instruction 4715.5.\textsuperscript{87} Instruction 4715.8 states that the Head of DoD Components has the responsibility of remedying “known environmental contamination” according to country-specific policy.\textsuperscript{88} The country-specific policy must define the appropriate level of remediation and establish procedures for determining remedial

\textsuperscript{80} DEPT OF DEF., INSTRUCTION NO. 4715.5, supra note 74, § 6.3.3.1.
\textsuperscript{81} Id. § 2.1.
\textsuperscript{82} DEPT OF DEF., GUIDE 4715.05-G: OVERSEAS ENVIRONMENTAL BASELINE GUIDANCE DOCUMENT C7.3.13 (2007).
\textsuperscript{84} Id.
\textsuperscript{85} Id.
\textsuperscript{86} DEPT OF DEF., INSTRUCTION NO. 4715.8: ENVIRONMENTAL REMEDIATION FOR DOV ACTIVITIES OVERSEAS § 1.1 (1998).
\textsuperscript{87} See id. § 2.2.1.
\textsuperscript{88} See id. § 4.2.1.
measures with the foreign country. Procedures set forth for remediation depend on whether the facility in question is “designated for return.” However, “prompt action” must be taken “to remedy known imminent and substantial endangerments to human health and safety due to environmental contamination . . . caused by DoD operations . . .” in both situations.

The process of moving out of Iraq that began in late 2011 is a prime example of how environmental remediation operates after a military operation. In transitioning out of Iraq, operation locations are required to meet standards of environmental regulation set out by United States Forces–Iraq (“USF–I”). The USF–I works to ‘mitigate,’ not ‘remediate’ environmental issues in Iraq,” and the mitigation is not completed in accordance with United States environmental regulations, mainly because of practicality and cost. The transition out of a country such as Iraq can be difficult because the military is caught between strict United States environmental laws and loose Iraqi environmental regulation. USF–I aims to be a good steward of the environment, but there are economic factors to consider when deciding what level of mitigation is appropriate in a country with less stringent environmental regulation.


Congress requested a report on burn pit operations in war zones as part of the 2010 Defense Authorization Act. The bill as introduced by Rep. Tim Bishop of New York was much more impressive than the

89 See id. § 4.2.3.1.
90 See id. § 5.1.
91 Id. There are obvious problems with this instruction for environmental remediation. By requiring action for “known” contamination there is motivation for the military to ignore many problems or not look into the effects of environmental contamination. Additionally, in many cases of environmental contamination there is no way to know the source, so by requiring prompt action only for problems caused by current DoD operation, the military has an out.
94 Id.
95 Id.
96 Id.
legislation that was eventually passed. The Defense Authorization Act banned the use of open-air burn pits during contingency operations “except in circumstances in which the Secretary determines that no alternative disposal method is feasible.” The Act also set forth the requirements for reporting reasoning and methodology if it determined that there is no alternative disposal method.100 If burn pits must be used, the Act also requires that health and environmental standards for military operations be followed and assessments on the environmental, health, and operational impacts of the burn pits be performed.101 Additionally, the Act required the DoD to conduct studies on existing medical surveillance, and the effects of burning plastics.102 The bill as originally introduced would have required the identification of all troops who may have been exposed to the pits and inform them of possible symptoms.103 An identification and notification provision did not make it into the 2010 Defense Authorization Act, but Representative Tim Bishop introduced another bill, the Military Personnel Toxic Exposure Registry Act, which would ensure that those exposed to burn pits receive medical care by creating a registry and benefits.104 Unfortunately, the Military Personnel Toxic Exposure Registry Act never became law.105

F. Federal Statutes

Most federal statutes are not applicable to DoD operations because of the extraterritorial standard established in Foley Brothers v. Filardo.106 In Foley Brothers, the Court faced the issue of whether an employment law applied to a contract between the United States and a private contractor for work in a foreign country.107 The Supreme Court of the United States

99 H.R. 2647, supra note 97.
100 Id.
101 Id.
102 Id.
103 Kennedy, 2010 Spending Bill, supra note 98.
107 Id. at 282.
answered the question by examining the legislation using three factors.\textsuperscript{108} First, “unless a contrary intent appears, [the legislation] is meant to apply only within the territorial jurisdiction of the United States.”\textsuperscript{109} Second, the Court examined the legislative history and found that there was nothing in the legislative history indicating that Congress intended the legislation to apply extraterritorially.\textsuperscript{110} Third, the Court found that “[t]he administrative interpretations of the [law] in its various phases of development afford no touchstone by which its geographic scope can be determined.”\textsuperscript{111}

In \textit{Amlon Metals, Inc. v. FMC Corp.}, the court reviewed the Research Conservation and Recovery Act (“RCRA”) and determined that it did not apply extraterritorially.\textsuperscript{112} The court considered the legislative history, structure, and language of RCRA to determine if the statute applied extraterritorially, but the court did not find convincing evidence to support the claim.\textsuperscript{113} If RCRA had been found to have extraterritorial applicability it would have solved many of the issues presented by DoD burn pit practices overseas because RCRA prohibits open dumping and burning of solid waste within the United States.\textsuperscript{114}

For a statute similar to RCRA to be applicable to United States actions outside of the United States, the statute has to overcome the extraterritorial standard. If Congress wants to overcome that standard, they need to provide adequate proof that their intent was for the statute to apply outside the United States.\textsuperscript{115} The reviewing court will look to legislative history, wording, and administrative interpretations to determine Congress’s intent. If the proponent of the legislation can establish evidence that the legislation is intended to extend beyond United States borders, the statute will be applicable to DoD actions overseas and will have an effect unlike any other attempt at an environmental management plan for military operations outside our borders.

Courts that have affirmed the presumption against extraterritoriality that was first established in \textit{American Banana Co. v. United Fruit Co.} have based their reasoning on considerations of territorial sovereignty.\textsuperscript{116} In \textit{Equal Employment Opportunity Commission v. Arabian

\textsuperscript{108} \textit{Id.} at 281.
\textsuperscript{109} \textit{Id.} at 285.
\textsuperscript{110} \textit{Id.} at 288.
\textsuperscript{111} \textit{Id.} at 287.
\textsuperscript{113} \textit{Id.} at 676.
\textsuperscript{114} Protection of Environment, 40 C.F.R. § 257.3-7(a) (2011).
\textsuperscript{116} 213 U.S. 347, 356 (1909).
American Oil Co., the court reasoned that the presumption was justified because “[i]t serves to protect against unintended clashes between our laws and those of other nations. . . .”\textsuperscript{117}

If the current environmental regulations that apply within United States borders were able to overcome the extraterritorial standard, many environmental problems associated with overseas military action would be solved. Legislation that would apply outside the United States would work proactively to stop environmental harm before it started rather than retroactively to correct past harms, as was necessary for the problems associated with Agent Orange.\textsuperscript{118}

III. Solution

A. Executive Orders

It has been suggested that the solution to the inadequate DoD environmental regulation is an executive order.\textsuperscript{119} Executive orders have been proposed because of the power of the executive branch and its ability to produce change.\textsuperscript{120} Laporte points to President Carter’s executive order as a successful way to promote NEPA’s ideals overseas and cites DoD action prompted by President Carter’s executive order as an indication that the executive order was successful.\textsuperscript{121} Although Laporte acknowledges the downfalls of the DoD’s response to President Carter’s executive order, she attributes the response to “exemptions or ambiguities in the Order itself,” rather than the DoD’s response to the Order.\textsuperscript{122}

Executive orders, however, are not the best answer. It is true that executive orders can affect the extraterritorial application of environmental principles as President Carter’s executive order furthered the goals of NEPA,\textsuperscript{123} but this benefit is limited.\textsuperscript{124} President Carter’s executive order’s purpose was to further the goals of NEPA,\textsuperscript{125} but it did not have the power to override the presumption that NEPA could not apply extraterritorially.\textsuperscript{126} The executive order may be able to capture general

\begin{itemize}
  \item \textsuperscript{117} 499 U.S. 244, 248 (1991).
  \item \textsuperscript{118} See supra Part I.B.
  \item \textsuperscript{119} Laporte, supra note 21, at 205.
  \item \textsuperscript{120} See id. at 241.
  \item \textsuperscript{121} See id. at 208–09, 241.
  \item \textsuperscript{122} Id. at 239.
  \item \textsuperscript{123} Exec. Order No. 12,114, supra note 60.
  \item \textsuperscript{124} See Laporte, supra note 21, at 239.
  \item \textsuperscript{125} Exec. Order No. 12,114, supra note 60.
  \item \textsuperscript{126} See Foley Bros. v. Filardo, 336 U.S. 281, 285 (1949).
\end{itemize}
ideals or priorities of the executive, but President Carter’s executive order illustrated that those ideals and priorities can be implemented very differently after the DoD interprets the meaning of the executive order.\textsuperscript{127} Laporte assumes that the executive branch has the expertise and time to draft an executive order that has the perfect amount of specificity, flexibility, and practicality,\textsuperscript{128} but this is not realistic. Creating standards for the DoD in the way that Laporte describes the ideal executive order\textsuperscript{129} is not a job for the executive branch.

B. \textit{Legal Accountability}

Another suggested strategy to combat the poor environmental decisions of the DoD is through litigation in the judicial branch.\textsuperscript{130} The outcome of the KBR Burn Pit Litigation will determine if legal liability for DoD contractors is a possible solution to the burn pit problems.\textsuperscript{131} In the KBR case, plaintiffs contend that KBR, Inc. and fellow DoD contractors Kellogg, Brown & Root LLC and Halliburton Co., breached DoD contracts with guidelines for the management of the burn pits.\textsuperscript{132} “DoD officials say [the burned materials] contained items now prohibited pursuant to revised guidelines.”\textsuperscript{133} These defendants have contracts with DoD to provide the bulk of contingency base operation services, which include waste disposal services.\textsuperscript{134} The plaintiffs, led by Joshua Eller who served as a computer technician in Iraq, filed suit against the defendants for negligently exposing soldiers, contractor employees, and civilians to dangerous conditions as a result of the poorly managed waste disposal systems.\textsuperscript{135}

Even if legal accountability proves to be a possibility, it is not the best solution to the lack of regulation for DoD environmental protection. There are too many obstacles for plaintiffs trying to bring challenges to military action such as burn pits in foreign countries.\textsuperscript{136} Plaintiffs will have to overcome the “application of the government contractor defense and other theories of derivative sovereign immunity.”\textsuperscript{137}

\begin{footnotes}
\footnote{127}{See supra Part II.B.}
\footnote{128}{See Laporte, supra note 21, at 239.}
\footnote{129}{Id.}
\footnote{130}{Id. at 288.}
\footnote{131}{Id. at 289.}
\footnote{132}{Kurera, supra note 23, at 289.}
\footnote{133}{Id. at 290.}
\footnote{134}{Id. at 289.}
\footnote{135}{Id. at 298.}
\footnote{136}{Id. at 301.}
\end{footnotes}
The Federal Tort Claims Act ("FTCA") allows government employees to sue the government in situations where a private individual would be liable under state tort law.\(^{138}\) Essentially, this means that if the government employee's injury was caused by the act of another employee of the government acting within the scope of his employment, and under the state law where the act occurred a private person acting as the government did would be liable to the plaintiff, the government will be liable to the plaintiff.\(^{139}\) 

_Feres v. United States_ interpreted the FTCA to mean that the government is not liable for injuries arising from the course of activity incident to military service.\(^{140}\) Generally, however, government contractors are excluded from FTCA protection.\(^{141}\)

The Court in _Boyle v. United Technologies Corp._ delineated a test to determine if a government contractor defense should apply.\(^{142}\) Under the test, liability is imposed “for design defects in military equipment . . . [when] (1) the United States approved reasonably precise specifications; (2) the equipment conformed to those specifications; and (3) the supplier warned the United States about [the] dangers in the use of the equipment [that were] known to the supplier but not to the United States.”\(^{143}\) As the litigation progresses and more facts about the relationship between government contractors and the government become clear, it will be more apparent whether the government contractor defense should apply.

More facts from the Burn Pit Litigation are needed before we will know if the government contractor defense will apply; however, because it is a possibility, legal accountability is not the best solution. The relationship between the DoD and the government contractors operating the burn pits will need to be examined to determine what guidelines, if any, the DoD approved for contractor operation of burn pits. More information is needed regarding how the contractors managed the burn pits and how closely they followed DoD instructions. It will have to be determined whether the DoD or the contractors were aware of the risks of improperly operating the burn pits.

Additionally, courts may be reluctant to decide on an issue involving military action because it could be politically charged. In _Baker v._


\(^{139}\) Cohen & Burrows, _supra_ note 138, at 1.

\(^{140}\) Id. at 4 (citing 340 U.S. 135, 139 (1950)).

\(^{141}\) Id. at 1 n. 3 (citing 28 U.S.C. § 2671).


\(^{143}\) Id. at 501. This test was developed for a products liability case but could be applied to burn pit litigation depending on the level of government knowledge and involvement. See id.
Carr, the Supreme Court identified factors that determine the presence of a political question that the Court may not decide. Political questions under Baker usually contain:

[T]extually demonstrable constitutional commitment of the issue to a coordinate political department; or a lack of judicially discoverable and manageable standards for resolving it; or the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; or the impossibility of a court’s undertaking independent resolution without expressing lack of the respect due coordinate branches of government; or an unusual need for unquestioning adherence to a political decision already made; or the potentiality of embarrassment from multifarious pronouncements by various departments on one question.

Baker v. Carr determined that each case must be examined individually to decide whether a political question is involved. Questions involving foreign relations are political questions if they are clearly committed to the executive or legislative branch. Military environmental protection could fall into this category, and if a court determined it to be a political question, it would not be able to encroach on the power of the executive or legislative branch.

The obstacles for plaintiffs attempting to bring a suit against the DoD or a government contractor due to harms inflicted because of poor environmental regulation overseas are too numerous and uncertain to be a reliable solution. Litigation is costly and time-consuming for all parties and is retroactive rather than proactive. A forward-looking, efficient solution is needed to close the gap between environmental protection within our borders and environmental protection in overseas military operations.

C. Legislation

The best solution is for Congress to act by creating legislation that provides clear responsibility for DoD, reasonable standards, means for holding DoD accountable, and a proper balance between our interests in

145 Id.
146 Id.
147 Id. at 211 (citing Oetjen v. Central Leather Co., 246 U.S. 297, 302 (1918)).
148 See id.
national security, efficiency, and environmental protection. The United States has an environmental protection plan for military action, but it is not comprehensive and provides numerous loop-holes that allow the DoD to get around environmental protection.149

The 2010 Defense Authorization Act150 offers a useable baseline for what the proposed legislation could be modeled after.151 The 2010 Defense Authorization Act was tailored specifically to the burn pit problem,152 but this Note suggests that legislation is needed to create a structured environmental protection regime for all military action. NEPA is also helpful for draft legislation as it is a general environmental regulation that embodies a similar purpose to what this Note suggests for the proposed legislation153 and was the impetus behind President Carter’s Executive Order.154 The 2010 Defense Authorization Act and NEPA will be used to draft the proposed language.

The legislation should be a comprehensive statute that includes the best aspects of what currently motivates environmental protection within the DoD and should also incorporate new ideas that will fill in the current gaps. The new legislation could be called the Military Environmental Policy Act (“MEPA”). The parts of MEPA that will be highlighted in this Note are the purpose, procedural requirements, substantive requirements, exceptions, and presumptions for burn pit diseases. Sample language is provided for each highlighted section.

The overreaching theme of MEPA is a balance between environmental protection and national security.155 The purpose of MEPA could be very similar to the purpose as delineated in NEPA:

The purposes of this chapter are: To declare a national [military] policy which will encourage . . . harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man;

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149 See supra Part II.
151 See supra Part II.E.
154 Exec. Order No. 12,114, supra note 60.
155 The quote from the Introduction of this Note is a prime example of the “balance” that is the overarching theme of MEPA. MEMORANDUM OF UNDERSTANDING, supra note 18. “America’s national interests are inextricably linked with the quality of the earth’s environment, and . . . threats to [the] environmental quality affect broad national economic and security interests, as well as the health and well-being of individual citizens. . . .” Id.
[and to demonstrate the United States’ belief that national security operations and the natural environment should be intertwined rather than considered exclusively].

The proposed language of MEPA is formulated to allow for a sixty day period during which the military presence is exempt from MEPA. If the military action or presence does not extend for more than sixty days, MEPA will not apply. Once the presence or action passes the sixty day mark, all military action must comply with MEPA.

One of the flaws in President Carter’s executive order was that it afforded DoD too much deference in deciding when an environmental assessment was required. To remedy this issue, the proposed legislation should provide a workable definition for what types of actions require an environmental assessment. The proposed language provides for a sixty day period wherein MEPA would not apply. After the sixty day period, all military action that has an inherent health or environmental concern that would affect more than 100 acres of land, a comparable amount of water, any threatened or endangered species, or have a possibility of long-term human health effects on the native or military community would be subject to the procedural requirements set forth in the model language. This definition would differ from the definition that the DoD created in DoD Directive 6050.7 because it would consider the human and environmental factors rather than economic factors, such as necessary resources and money.

The first section of MEPA should describe the threshold that military action must reach to be subject to MEPA regulation. The threshold level should be drafted as:

The Congress authorizes and directs that . . . :
(1) [All branches of the military, for actions in all areas outside United States borders that have an inherent health or environmental concern, that would affect more than 100

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156 National Environmental Policy Act of 1969, 42 U.S.C. § 4321 et seq. (2006) (The purpose of NEPA has been altered to serve as the purpose of MEPA. Changes are noted in brackets.).
157 Congress could change this time period after considering the amount of time it takes to have an effect on the environment of a certain area, the length of the average military project in an area, and the feasibility of completing the MEPA requirements to prepare for the project.
158 This is an arbitrary number and should be determined based on scientific data on effects of land from military action.
159 Similar to the effects on land discussed in note 158, the effect on water should be determined by scientific data.
160 DEP’T OF DEF., DIRECTIVE NO. 6050.7, supra note 61, § 1.
acres of land, a comparable amount of water, any threatened or endangered species, or have a possibility of long-term human health effects on the native or military community, and are associated with a military presence of more than sixty days, shall...][161]

The legislation should emulate the NEPA-basis of President Carter’s Executive Order[162] and should require officials of the DoD, and any other federal agency that may undertake action outside United States borders, to examine environmental effects of proposed decisions and determine whether the action will comply with substantive requirements. Procedural and substantive requirements will be connected in MEPA. The procedural requirements of MEPA will be very similar to § 4332 of NEPA with a few additions.163 Most notably, MEPA will require that the military, like all domestic agencies of the Federal Government:

[I]nclude in every recommendation or report on proposals for . . . actions significantly affecting the quality of the human environment, a detailed statement . . . on[.] (i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, [and] (iii) alternatives to the proposed action. . . .164

The procedural requirement of the environmental assessment will be completed to ensure that the effects of actions remain within standards which form the substantive portion of MEPA. Under the current instructions, procedural and substantive requirements are wholly separate, and if a commander satisfies the substantive requirements, he would not be required to base his conduct on an assessment required procedurally.165 The proposed legislation would combine the procedural and substantive requirements into one process, the entirety of which must be completed for actions that meet the threshold defined in the legislation. The OEBGD

161 National Environmental Policy Act of 1969, 42 U.S.C. § 4332 (2006) (Section 4332 was adapted to pertain to military operations rather than all agencies within the Federal Government. Changes are noted in brackets.).
162 Exec. Order No. 12,114, supra note 60.
164 Id. (The proposed language is from NEPA for the sake of a model. Changes to the original text are noted in brackets.).
165 See DEP’T OF DEF., INSTRUCTION 4715.5, supra note 74.
and FGS\textsuperscript{166} should continue to be used as part of MEPA’s substantive requirements. The creation of the OEBGD and FGS as outlined in MEPA should follow the language from DoD Instruction 4715.5:

> The Department of Defense shall establish, maintain, and, as described in [DoD Instruction 4715.5], comply with the OEBGD. The OEBGD shall be designed to protect human health and the environment; shall consider generally accepted environmental standards applicable to DoD installations, facilities, and actions in the United States; and shall incorporate requirements of United States law that have extraterritorial application to the Department of Defense.\textsuperscript{167}

In order for this legislation to be workable there will have to be exceptions, but they should be less numerous than those the DoD created in Directive 6050.7.\textsuperscript{168} MEPA will have to include exceptions for:

1. Actions taken by or pursuant to the direction of the President or a cabinet officer when the national security is threatened.\textsuperscript{169}
2. Actions taken by the president pursuant to the War Power Resolution,\textsuperscript{170}
3. Disaster or emergency relief actions,\textsuperscript{171} and
4. Case-by-case exemptions shall be allowed if it is determined by the Council for Environmental Quality and the Assistant Secretary of Defense that an exemption is merited.\textsuperscript{172}

\textsuperscript{166} See supra Part II.C.
\textsuperscript{167} See Dep’t of Def., Instruction 4715.5, supra note 74, § 6.2.1 (The proposed language is from DoD Instruction 4715.5 for the sake of a model. Changes are noted in brackets.).
\textsuperscript{168} See Dep’t of Def., Directive No. 6050.7, supra note 61, § E2.3.3; supra Part II.B.
\textsuperscript{169} Dep’t of Def., Directive No. 6050.7, supra note 61, § E2.3.3.1.4.
\textsuperscript{170} War Powers Resolution of 1973, 50 U.S.C. § 1541. Because the War Powers Resolution forbids the military from remaining in a combat zone for more than 60 days without authorization from Congress, if the President has sent the military to a foreign country pursuant to his power under the War Powers Resolution and the military stays for less than 60 days, MEPA will not apply.
\textsuperscript{171} Dep’t of Def., Directive No. 6050.7, supra note 61, § E2.3.3.1.8.
\textsuperscript{172} Dep’t of Def., Directive No. 6050.7, supra note 61, § E2.3.3.2.1. DoD Directive 6050.7 provides for case-by-case exemptions which may be required, “because emergencies, national security considerations, exceptional foreign policy requirements, or other special circumstances preclude or are inconsistent with the preparation of environmental documentation and the taking of other actions. . . .” Id. In any of those cases, the procedures stated in DoD Directive 6050.7 for case-by-case exemptions should be followed. Id.
The purpose of MEPA is to provide an environmental policy for military actions overseas, but Congress needs to remember that there is a presumption that legislation is not meant to apply extraterritorially.\textsuperscript{173} This legislation will be useless if Congress does not provide ample evidence to suggest that it intends for MEPA to apply outside the United States borders as suggested in \textit{Foley Brothers}.\textsuperscript{174}

As burn pit exposure is emerging as a large problem for veterans returning home from tours in Iraq and Afghanistan, the proposed legislation should also include a section to address this issue in a similar way that the Agent Orange Act addressed exposure during the Vietnam War.\textsuperscript{175} Similar to the Agent Orange Act of 1991, the proposed legislation should create presumptions for certain diseases associated with exposure to burn pits, allow for \textit{Foley Bros. v. Filardo} addition or deletion of presumptions, and extend medical treatment and compensation to those veterans who have been harmed by the exposure.\textsuperscript{176} The language for MEPA could be adapted from the Agent Orange Act of 1991:

\begin{verbatim}
Presumptions of service connection for diseases associated with exposure to certain [fumes from burn pits]; presumption of exposure for veterans who served in [Iraq and Afghanistan]
(A) [A] disease specified in paragraph (2) of this section becoming manifest as specified in that paragraph in a veteran, who, during active military, naval, or air service, served in [Iraq or Afghanistan] during [the time to be determined when burn pits were in use]; and
(B) [E]ach additional disease that the Secretary [of Defense] determines in regulations prescribed under this section warrants a presumption of service-connection by reason of having a positive association with [exposure to burn pits].\textsuperscript{177}
\end{verbatim}

MEPA should go on to delineate diseases and provide for regulations for adding additional diseases. The time frame for exposure will need to be

\textsuperscript{173} \textit{See supra} Part II.F.
\textsuperscript{176} \textit{Id.}
\textsuperscript{177} \textit{Id.} (The proposed language is from the Agent Orange Act of 1991 for the sake of a model. Changes are noted in brackets.).
determined from facts and scientific studies. Because the purpose of MEPA is comprehensive and not limited to burn pit problems, the section on presumptions for diseases associated with burn pit exposure should also delineate a procedure for creating presumptions for other exposures during military action. If MEPA proactively delineates ways to deal with exposure issues, the DoD will not have to deal with returning veterans’ health problems on an individual basis. This solution is more efficient, forces the DoD to take responsibility for the effect it has had on the lives of many, and offers the health services that veterans should be entitled to.

Environmental remediation efforts are not the subject of this Note and it is the hope of the Author that with the proposed legislation environmental remediation and mitigation efforts will not have to be as commonplace in the future as they are today. MEPA should, theoretically, include some section on transition out of an area after a military operation and the responsibilities of DoD in that situation. As noted in Part II.D of this Note, there are obvious economic concerns when determining the remediation or mitigation required in a country with substantially different environmental regulations than the United States. Despite the economic concerns, environmental harms that do not fall within standards outlined in the rest of MEPA should be dealt with regardless of the foreign country’s environmental policies. The general mitigation and remediation policy should be determined on a country-specific basis, as it is currently under DoD Instruction 4715.8. However, the identification of environmental harm and the process must be more precise than DoD Instruction 4715.8 to avoid many of the issues discussed in Part II.E of this Note.

IV. CALL TO ACTION

Judicial action through liability for the government and government contractors in the courts is not a viable solution for the environmental degradation and human health problems that result from military action overseas because the burdens that plaintiffs must overcome are too heavy to result in consistent decisions, or in any decisions at all. Executive action through an executive order would not cause the kind of change in military behavior that is needed at this point, and Executive Orders have been ineffective in the past because the DoD was able to

178 See supra Part II.D.
179 DEP’T OF DEF., INSTRUCTION NO. 4715.8, supra note 86, § 4.2.
180 See supra Part III.
misconstrue each Order through its own interpretations. Legislative action provides the best option for a long-term solution that will apply to all military action, will have the intent of many federal statutes that already apply within United States borders, will hold military leaders accountable to a rigid set of procedures and standards, and will effectuate the change our country needs.

President Obama has stated that the burn pit problems will not become a second Agent Orange. Individual Congress members have shown concern about the effect that burn pits are having on military personnel. United States Representative Shelley Berkley of Nevada invited Daniel Meyer, a twenty-seven-year-old disabled veteran to President Obama’s State of the Union address in early 2012. Daniel Meyer slept across the road from the open-air burn pit at Joint Base Balad in Iraq and has since developed bronchiolitis obliterans. Elijah James McDonald, and Bethany Airel Bugay are just three of the many veterans who have been affected by exposure to burn pits. There are numerous other veterans who have died or developed debilitating illnesses because of their exposure to burn pits. The effects of burn pits on human health are just becoming apparent and the environmental effects will undoubtedly surface as well. Harm to our veterans, the natural environment, and citizens in foreign nations that the United States military occupies may be avoided by an overhaul of military environmental policy.

If the United States does not want to have another Agent Orange issue to deal with, legislation needs to be passed as soon as possible. The government denied the dangers of Agent Orange for nearly twenty years before passing legislation to solve the problems created by poor practices. Legislation needs to be passed now that will proactively address problems

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181 See supra Part III.
182 See supra Part III.
185 Id.
186 Id.
187 BURN PITS ACTION CENTER, supra note 1.
188 Zlatos, supra note 8.
189 BURN PITS ACTION CENTER, supra note 1.
190 Id.
associated with burn pits and other environmental harms caused by military action. The DoD must be forced to consider environmental effects. If the United States addresses environmental effects proactively rather than retroactively, it will not encounter another Agent Orange issue and the government can merge its national security, health, and environmental security interests.

In recent years the United States has placed environmental protection and improving human health at the top of its list of priorities. We cannot, however, focus our priorities only within our borders. Our citizens travel to foreign countries to protect our freedom and our military actions in foreign countries affect our citizen soldiers as well as the global environment which knows no territorial boundaries. Our environmental protection needs to span to all the areas of the world where we act.