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Exempting Department of Defense from Federal Hazardous Waste Laws:

Resource Contamination as “Range Preservation”? 

Caitlin Sislin*

In 2004, the Department of Defense (DOD) introduced federal legislation proposing exemptions from the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation and Liability Act, and the Clean Air Act. This proposal was the last of a three-part legislative package called the Readiness and Range Preservation Initiative, through which DOD sought exemptions from several federal environmental statutes in order to ensure military readiness in the face of environmental compliance requirements. While Congress granted earlier exemptions from the Migratory Bird Treaty Act, the Marine Mammal Protection Act, and the Endangered Species Act, it declined to grant exemptions from the hazardous waste and clean air laws in 2004. The DOD, however, will propose these exemptions again in 2005. Public interest groups, representatives from local and state governments, scientists and community advocates raised several concerns regarding the proposed hazardous waste law exemptions, most notably that these exemptions were dangerous to the public health, redundant, and founded in exaggerated concerns. Arguably, the current statutory scheme provides DOD with sufficient flexibility to avoid liability while still ensuring unyielding protection for the environment and public health. If the exemptions were to be granted, DOD would not face liability or mitigation responsibility for munitions-based toxic contamination until there was an “imminent and

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substantial endangerment" to the public health; at that point, mitigating the hazardous waste and protecting the public health would present tremendous and possibly insurmountable challenges.

INTRODUCTION

The Department of Defense (DOD) is distinct as both a significant contributor to environmental research and conservation, and one of the nation's most egregious polluters. On the one hand, because the military's operational ranges are largely shielded from urban development in order to maintain realistic and isolated training environments, they contain among the highest concentrations of endangered species and untouched wildlife habitat of all federal lands. Additionally, state agencies and scientific organizations often cite DOD's exceptional marine mammal research and its innovative conservation efforts. Conversely, because of DOD's long history of training and testing on military ranges, many of these lands are severely contaminated with pollutants ranging from munitions components to nuclear waste. DOD has handled this contamination using internally-developed and monitored cleanup programs, but has also been subject to liability under federal

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environmental laws regulating hazardous waste since the time of the passage of those laws.\(^6\)

In the National Defense Authorization Acts for fiscal years 2003, 2004, and 2005, DOD sought to include legislation exempting itself from several federal environmental laws under the umbrella of a proposal called the Readiness and Range Preservation Initiative.\(^7\) DOD representatives told Congress that in order to maintain the highest level of military readiness, DOD needed to be wholly exempt from a number of statutory requirements, despite existing provisions allowing the President to grant case-by-case exemptions from each of the laws.\(^8\) Congress approved of some of DOD’s proposals, authorizing exemptions from the Migratory Bird Treaty Act, the Endangered Species Act, and the Marine Mammal Protection Act in the National Defense Authorization Acts for fiscal years 2003 and 2004.\(^9\) DOD attempted unsuccessfully for a third time in fiscal year 2005 to gain exemptions from the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and the Clean Air Act.\(^10\) In January 2005, DOD released draft legislation again seeking exemptions from these three environmental statutes for fiscal year 2006.\(^11\)

In arguing for the exemptions, DOD cited the inadequacy of the existing exemption structure, the paralyzing effect of environmental litigation on military readiness, and the narrow scope of the exemptions and the insignificant policy changes effected by the amendments.\(^12\) These arguments, however, tend to reflect unfounded concern rather than grounded fact. No president has ever denied a DOD request for exemptions from an environmental statute, and no hazardous waste litigation or cleanup requirements have ever suspended military

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9. *Id.*
operations to the detriment of readiness. The proposed amendments would effect significant policy and definitional changes in the statutes, reducing opportunities for governmental and public oversight of hazardous material management on DOD lands. As such, the exemptions would significantly impact public health, most notably by permitting the continued unregulated emission of perchlorate and other hazardous contaminants into soil and groundwater at DOD facilities.

The two rules currently governing DOD's relationship to hazardous waste mitigation, the RCRA Military Munitions Rule and the CERCLA national security exemption, comprise a satisfactory scheme governing military exemptions from federal environmental laws, holding the DOD to high standards of environmental compliance while permitting exemptions for national security and military readiness. This scheme is both flexible and stringent; it grants DOD ample latitude in its efforts to comply with hazardous waste standards, while at the same time upholding congressional intent by subjecting the federal government to the same rules as the general public. The Readiness and Range Preservation Initiative would needlessly circumvent the existing system, and in so doing would present a grave threat to public health.

1. NATIONAL SECURITY AND ENVIRONMENTAL PROTECTIONS: A TENSE AND TENUOUS BALANCE

DOD maintains a consistent record of environmental preservation efforts, especially in the areas of habitat conservation and restoration, species protection, and research programs. The Environmental Protection Agency, other federal agencies involved with environmental monitoring, and state environmental agencies often honor DOD for its conservation activities. DOD also contributes significant financial and personnel resources to independent conservation organizations like the Nature Conservancy and the American Bird Conservancy, in order to promote habitat restoration and species recovery on military lands. In addition to these localized partnerships, DOD works with state

14. Id. at 3-4.
15. Id. at 20-24.
18. Id.
governments to repair habitat destruction at the regional level, beyond
range borders, and to support large-scale scientific investigation. For
example, a grant from the United States Navy's Office of Naval Research
to the University of California (UC) enabled scientists at UC Santa Cruz
to undertake an extensive research program on the effects of noise
pollution on seals, sea lions, and other marine mammals.

Finally, DOD conservation and preservation standards exist in
codified form in both federal law and agency policy. In 1960, Congress
passed the Sikes Act to govern treatment of natural resources on DOD
lands. This Act requires DOD to create and implement an Integrated
Natural Resource Management Plan (INRMP) for each individual
military installation, unless the Secretary of Defense finds that the
installation lacks significant natural resources. INRMPs serve as the
primary guidelines for the management of forests, fish and wildlife, land
and aquatic habitat, and public use and recreation on DOD lands. The
Sikes Act mandates that INRMPs balance sustainable environmental
management with unfettered military use of an installation.

In addition to DOD's avowed commitment to conservation, the
agency also implements agency-wide measures to deal proactively with
hazardous waste. In 1986, the Superfund Amendments and
Reauthorization Act (SARA) established the Defense Environmental
Restoration Program (DERP), to govern and fund toxic waste mitigation
programs on DOD lands. DERP focuses DOD resources on the
cleanup of toxic contamination, and assures that land transferred from
DOD's control to the public will be safe for human occupancy and use.
DERP's primary program, the Installation Restoration Program (IRP),
implements cleanup of traditional industrial contaminants of

19. Id.
20. Office of Research, Univ. of Cal. Office of the President, UC Boosts DOD's high tech
advantage, DEPARTMENT OF DEFENSE/UNIVERSITY OF CALIFORNIA, Autumn 2001, at 3, at
22. 16 U.S.C. § 670a (2005); Dep't of Defense, INRMP Comprehensive Strategic Action
Plan, Defense Environmental Network and Information Exchange, at 3 (Aug. 6, 2004 Draft), at
https://138.145.4.91/denix/Public/Library/NCR/Documents/DRAFT-INRMP-Strat-Plan-
082004.pdf.
24. 42 U.S.C. §§ 9601-9675. (2000); DEP'T OF DEFENSE ENVIRONMENTAL CLEANUP,
History of the DERP, at http://www.dtic.mil/envirodod/CProgram/CPHistory.htm (last visited
June 25, 2005).
25. Dep't. of Defense, Defense Environmental Restoration Program Annual Report for
2003 at 4, at http://63.88.245.60/DERPARC_FY03/PDFS/FY03_Report/dod_ch.pdf (last visited
June 25, 2005).
groundwater and soil found on military ranges.\textsuperscript{26} In 2001, DOD established the Military Munitions Response Program (MMRP) within DERP to specifically and comprehensively address health and safety hazards resulting from unexploded ordnance and munitions, which were not sufficiently treated under the IRP.\textsuperscript{27}

However, despite a consistent conservation record and documented efforts to mitigate toxic contaminants, DOD remains one of the nation’s worst polluters. Arising from decades of munitions use and development, a history of improper and insufficient cleanup techniques,\textsuperscript{28} “and neglect during the Cold War,”\textsuperscript{29} contamination on DOD lands reaches epic proportions. Of the 177 federal facilities listed on the Superfund National Priorities List (NPL), it is estimated that 129 of those are DOD facilities.\textsuperscript{30}

DOD already dedicates a significant quantity of financial resources towards environmental mitigation, but much more is necessary. In 2001, DOD estimated that it spent approximately $25 billion on programmatic cleanup efforts since 1984.\textsuperscript{31} In 2003, DOD acknowledged contamination at more than 29,600 current, former, and closing military installation sites nationwide. While over 20,400 sites had been cleaned up at a cost of approximately $20.2 billion, DOD predicted that it would need nearly $30.2 billion to address the approximately 9,200 sites still requiring cleanup.\textsuperscript{32} DOD attributed this marked cost increase to the magnitude and type of contamination at the remaining sites, as well as to the need for accelerated cleanup efforts for base closure sites under the Base Realignment and Closure Act.\textsuperscript{33} In May of 2004, the General Accounting


\textsuperscript{28} Bettigole, supra note 4, at 667.


\textsuperscript{33} BEARDEN, supra note 32, at 5. In 1990, Congress passed the Defense Base Closure and Realignment Act (BCRA) in order to “provide a fair process that will result in the timely closure and realignment of military installations in the United States.” P.L. No. 101-510. The
Office estimated that costs to DOD for cleanup of all contaminated facilities ranges between $16 billion and $165 billion; the figure varies so widely because DOD lacks a uniform methodology for identifying the contours of its existing ranges, the extent of contamination, or the cost of mitigation.\(^\text{34}\)

With regard to military installations no longer in use, such as closed portions of active installations, closing sites, and formerly used defense sites (FUDS)\(^\text{35}\), DOD data as of 2003 demonstrated military munitions contamination on more than 2,300 sites comprising fifteen million acres of land.\(^\text{36}\) Such sites exist in each state, with California housing the largest portion – 376 sites.\(^\text{37}\) However, the overall figure is only a preliminary estimate. DOD continually identifies additional contaminated sites “and is not likely to have a firm inventory for several years.”\(^\text{38}\) DOD has also identified 362 sites that do not need any further cleanup action. However, since these sites are classified as FUDS, and the initial assessments of contamination were less thorough than assessments for active sites, DOD’s evaluation of their cleanup requirements may merit review.\(^\text{39}\)

A wide variety of toxic chemicals are known to contaminate military ranges. Some of these contaminants include trinitrotoluene (TNT), a

intended end result of base closure and realignment is the transfer of title from DOD to municipalities or private entities. Steppick, \textit{supra} note 29, at 450. Base closures allow DOD to conserve and efficiently redistribute funds, and to adapt DOD’s physical infrastructure to serve changing defense needs. In passing the BCRA, Congress intended to maximize efficiency in the base closure process by imposing a series of concrete deadlines for base closure, vesting oversight responsibility in a non-partisan commission, and minimizing the avenues for political maneuvering in the process. \textit{DEP’T OF DEFENSE, The Report of the Department of Defense on Base Realignm ent and Closure}, April 1998, at 18, at http://www.defenselink.mil/pubs/brac040298.pdf. To date, four rounds of base closures have occurred, with a fifth round proposed for 2005. See \textit{Dep’t of Defense, Base Realignm ent and Closure Installations, Defense Environmental Restoration Program}, at http://www.dtic.mil/envirodod/CProgram/FocusA/CP_FABRAC.htm (last visited June 25, 2005). Many former bases proposed or slated for closure are heavily polluted with contaminants regulable under CERCLA. Steppick, \textit{supra} note 29, at 451-52. Despite the transfer of title to city agencies or private individuals, the government may retain the majority of CERCLA liability for this contamination. \textit{Id.} at 463-64.

\(^{34}\) \textit{U.S. GEN. ACCOUNTING OFFICE, DOD OPERATIONAL RANGES: MORE RELIABLE CLEANUP COST ESTIMATES AND A PROACTIVE APPROACH TO IDENTIFYING CONTAMINATION ARE NEEDED} 15-16 (2004).

\(^{35}\) FUDS, or Formerly Used Defense Sites, are “properties that were formerly owned by, leased to or otherwise possessed by the United States and under the jurisdiction of the Secretary of Defense;” Department of Defense is responsible for the cleanup of environmental contamination at these sites. United States Army Corps of Engineers, \textit{Formerly Used Defense Sites}, Environmental Community of Practice, at http://hq.environmental.usace.army.mil/programs/fuds/fuds.html (last visited June 25, 2005).

\(^{36}\) \textit{U.S. GEN. ACCOUNTING OFFICE, MILITARY MUNITIONS: DOD NEEDS TO DEVELOP A COMPREHENSIVE APPROACH FOR CLEANING UP CONTAMINATED SITES} 1, 4 (2003).

\(^{37}\) \textit{Id.} at 10.

\(^{38}\) \textit{Id.} at 4.

\(^{39}\) \textit{Id.}
possible human carcinogen that may impact blood, liver, immune system, and reproductive systems; Royal Demolition Explosive (RDX), a carcinogen that may also damage the nervous system, reproductive system, and liver; white phosphorus, which affects the reproductive system as well as the liver, heart, and kidney; and perchlorate, the primary ingredient in rocket fuel.\textsuperscript{40}

Perchlorate contamination in groundwater supplies connected to military bases nationwide is a significant political and public health issue associated with DOD’s “toxic legacy.”\textsuperscript{41} Perchlorate, the primary constituent in fuel used to power rockets and missiles, is known to cause multiple health problems.\textsuperscript{42} Perchlorate interferes with thyroid function by inhibiting iodide uptake.\textsuperscript{43} In adults, thyroid impairment affects metabolism functioning, while in children it may cause birth defects and impede proper nervous system development. Perchlorate exposure may also contribute to the formation of cancerous tumors in the thyroid.\textsuperscript{44}

Concern over perchlorate in public water supplies grows as evidence of widespread contamination increases. Commentators estimate that perchlorate contamination affects over five hundred drinking water sources in twenty states, supplying approximately twenty million people.\textsuperscript{45} The Democratic Staff of the Committee on Energy and Commerce identified in March 2004 nearly forty-five DOD sites known to be contaminated with perchlorate,\textsuperscript{46} and it is possible that hundreds of additional military facilities have used and stored perchlorate or perchlorate-based munitions.\textsuperscript{47}

In California alone, the Department of Health Services identifies over 350 perchlorate-contaminated public drinking water sources.\textsuperscript{48} Studies indicate that levels of contamination in California water wells

\textsuperscript{40} COMM. ON ENERGY AND COMMERCE DEMOCRATIC STAFF, Potential toxic effects of contaminants DOD is seeking to exempt from the hazardous waste management law (RCRA) and the Superfund cleanup law (CERLCA), at http://www.house.gov/commerce_democrats/DODexemptions/potentialtoxiceffects.pdf (last visited June 25, 2005).
\textsuperscript{41} Bettigole, supra note 4, at 667.
\textsuperscript{43} Id.
\textsuperscript{44} Id.
\textsuperscript{47} MILITARY TOXICS PROJECT, supra note 45, at 3.
range from 12 to 682,000 parts per billion.\textsuperscript{49} Tests conducted by the Food and Drug Administration reveal the presence of perchlorate in samples from lettuce, bottled water, and milk nationwide.\textsuperscript{50} Moreover, although the Environmental Protection Agency (EPA) requires some perchlorate sampling under the Unregulated Contaminant Monitoring Regulation\textsuperscript{51} and recommends an acceptable range of perchlorate presence in drinking water of 4 to 18 parts per billion,\textsuperscript{52} the agency does not yet regulate perchlorate content in water under the Safe Drinking Water Act.\textsuperscript{53} Most states do not affirmatively regulate perchlorate, but many have issued recommendations for acceptable levels of perchlorate in groundwater.\textsuperscript{54} Recently, California adopted a "Public Health Goal" of reducing perchlorate presence in public water sources to 6 parts per billion.\textsuperscript{55}

EPA identifies "defense manufacturing and test sites" as primary contributors to the presence of perchlorate in groundwater and public water supplies, and claims that DOD, along with the National Aeronautics and Space Administration, use approximately 90 percent of the perchlorate produced nationwide.\textsuperscript{56} Experts attribute perchlorate contamination found in the Colorado River and regions of Southern California, Arizona and Nevada to DOD activities on military ranges in those areas.\textsuperscript{57} Perchlorate may enter soil and groundwater through the wastewater from rocket launcher washing activities and through development, testing, and detonation of munitions and explosives.\textsuperscript{58}

Despite demonstrated adverse health effects of perchlorate, and substantial evidence implicating military activities in widespread perchlorate contamination, DOD downplays the magnitude of the
contamination and the risks associated with perchlorate consumption. Although DOD issued a September 29, 2003 “Interim Policy on Perchlorate Sampling,” requiring military authorities to collect perchlorate data at operational and closed ranges, DOD fails to effectively identify, address and mitigate areas of perchlorate contamination on military lands. DOD’s evasion of these statutorily-mandated duties led the Natural Resources Defense Council to file a March 2004 lawsuit under the Freedom of Information Act against DOD, EPA, and the Office of Management and Budget, for failure to disclose documents describing the extent of perchlorate contamination and federal responsibility for mitigation.

Perchlorate contamination remains a live and growing public policy issue. After the National Research Council (NRC) of the National Academies released a report in January 2005, stating that perchlorate does not pose a public health risk at very low doses, the EPA issued an oral reference dose of 0.007 mg/kg/day. The reference dose is not binding on any agency or decision-maker, but represents EPA’s estimate as to what constitutes “safe exposure” to a certain substance. EPA’s reference dose drew fire from many environmental groups, who contended that the standard of 0.007 mg/kg/day is dangerously weak in comparison with the NRC’s assessment, and that EPA’s analysis does not account for perchlorate ingestion from other sources besides drinking.

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64. Envtl. Prot. Agency, Perchlorate and Perchlorate Salts, at http://www.epa.gov/iris/subst/1007.htm (last visited June 26, 2005). According to the site, an “oral RfD is an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily oral exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime. The RfD is based on the assumption that thresholds exist for certain toxic effects such as cellular necrosis and is expressed in units of mg/kg-day.”
The impacts of EPA’s ruling on state agencies’ determinations of perchlorate health risks, as well as on the setting of national maximum limits on perchlorate in drinking water, remain to be seen.

Examples abound of the adverse impacts of perchlorate and other toxic contaminants on military installations. At Camp Lejeune Marine Corps Base in North Carolina, routine water sampling tests conducted during 1982 revealed the presence of volatile organic compounds at up to 280 times the amount considered safe for human consumption. The Marine Corps estimates that approximately 50,000 people came into contact with the contaminated water before closure of the base’s water wells in 1985. Since then over 270 related tort cases have been filed against the Marine Corps. In 2003, the Agency for Toxic Substances and Disease Registry identified 103 cases of childhood cancers or birth defects near Camp LeJeune within a population sample size of 12,598 -- approximately three to five times the normal rate of birth defect occurrence.

On Cape Cod, the EPA suspended training activities at the Massachusetts Military Reservation in 1997 because carcinogenic munitions-related chemicals had migrated from the installation into the aquifer from which groundwater served hundreds of thousands of Cape Cod residents. After finding chemicals such as Royal Demolition Explosive, trinitrotoluene, and dinitrotoluene in Cape Cod’s public water wells at concentrations grossly exceeding standards for safe drinking water, the EPA issued an executive order halting almost all live-fire

68. Id.
69. Id.
70. See Agency for Toxic Substances and Disease Registry at http://www.atsdr.cdc.gov/about.html (last visited June 26, 2005) (“The mission of the Agency for Toxic Substances and Disease Registry (ATSDR) is . . . to serve the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and disease related to toxic substances”).
72. Roig-Franzia and Skipp, supra note 67.
activities and requiring comprehensive cleanup and monitoring activities.\textsuperscript{74}

Incidents of extreme contamination also occur beyond United States' borders. The United States Air Force and United States Navy acknowledged significant contamination at the Clark Air Base and Subic Bay Naval Facility in the Philippines, including possible human exposure to high levels of lead, PCBs, and untreated sewage.\textsuperscript{75} However, the original basing agreement with the Philippines indemnified the United States against liability for environmental contamination. Furthermore, applicable United States environmental regulations do not extend overseas.\textsuperscript{76}

Notwithstanding myriad documented incidences of environmental contamination at military facilities, federal officials representing both DOD and environmental agencies note that enforcement of environmental laws and regulations tends not to interfere with military activities. Christine Todd Whitman, former EPA Administrator, testified in 2003 that "there is [no] training mission anywhere in the country that is being held up or not taking place because of environmental protection regulation."\textsuperscript{77} In a 2003 memorandum to the Secretaries of the Army, Navy and Air Force, Deputy Secretary of Defense Paul Wolfowitz stated that "[i]n the vast majority of cases, we have demonstrated that we are able both to comply with environmental requirements and to conduct necessary military training and testing."\textsuperscript{78} In addition, most federal environmental statutes contain national security exemptions which permit the President to exempt DOD from environmental requirements on a case-by-case basis.\textsuperscript{79} Although DOD does not often take advantage of these exemptions, senior DOD officials have repeatedly advised staff to develop procedures for utilizing the exemptions as tools for sustaining military activities when faced with environmental compliance challenges.\textsuperscript{80}

\textsuperscript{74} U.S. EPA Region 1, \textit{Administrative Order for Response Action, As Modified}, at 6 (May 19, 1997), available at http://www.epa.gov/boston/mmr/Ao2.pdf.


\textsuperscript{76} Id.


\textsuperscript{78} Memorandum from Paul Wolfowitz, Deputy Secretary of Defense, \textit{Consideration of Requests for Use of Existing Exemptions Under Federal Environmental Laws}, at 3 (March 7, 2003) (on file with author).


\textsuperscript{80} Wolfowitz, supra note 78, at 2.
II. MILITARY READINESS AND LEGISLATIVE CHANGE

DOD's relationship with environmental laws changed, however, as the nascent twenty-first century brought catastrophic world events and significant changes in domestic political discourse. Responding to escalating fears regarding real and perceived threats to national security after September 11th, the United States government took several affirmative steps to expand its ability to act against terrorism and to limit its legal accountability in so acting. In this climate, DOD began increasingly to emphasize 'military readiness' as its paramount concern. Amidst the global war on terror, the war on the ground in Iraq, and the bolstering of existing military operations elsewhere in the world, DOD repeatedly cited the crucial importance of an unfettered capacity to train and prepare soldiers for combat.

In public communications, DOD began to identify environmental regulation and compliance as major barriers to realistic and effective combat training. DOD notes that one significant obstacle to training is encroachment. DOD defines 'encroachment' as "the cumulative result of any and all outside influences that inhibit normal military training and testing," including endangered species habitat management, urban development on lands bordering military installations, and compliance with laws regulating unexploded ordnance and munitions components. According to DOD, such encroachments "introduce an unacceptable degree of artificiality" into training exercises by forcing the military to 'work around' protected habitat and to suspend activities while fulfilling...
environmental compliance mandates. General Michael J. Williams of the United States Marine Corps likened a military installation to a "tale of two cities," in that in its similarity to "many medium-sized cities" it requires numerous environmental compliance measures, but unlike a civilian city its primary purpose is to sustain military readiness. According to DOD, legal and physical encroachments related to environmental preservation unacceptably interfere with readiness.

A second threat to readiness identified by DOD is legal liability. Pointing to one lawsuit enjoining all live-fire operations on an island military installation because the resultant killing of birds violated the Migratory Bird Treaty Act, and another suit conditionally halting the Navy's worldwide use of low frequency active sonar because of its illegal harmful effects on marine mammals, DOD identifies as a priority "protecting [its] ranges from harassment by litigation."

DOD cited these two impediments to readiness in advocating the 2002 Readiness and Range Preservation Initiative (RRPI), an eight-piece "legislative package" presented to Congress over the course of three years. Through the RRPI, DOD sought amendments and exemptions from a host of federal environmental laws including the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), the Resource Conservation and Recovery Act (RCRA), and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Congress approved a number of the requests, but to date has denied DOD's requests for exemptions from the hazardous waste statutes and the Clean Air Act.

In 2002, Congress rejected all but one of the proposed exemptions, permitting only a temporary exemption from the Migratory Bird Treaty Act (MBTA) which allowed for incidental takings of migratory birds by armed forces engaged in readiness activities. For the purposes of this exemption, the fiscal year 2003 Act defined 'military readiness activities' as including "(A) all training and operations of the Armed Forces that relate to combat; and (B) the adequate and realistic testing of military equipment, vehicles, weapons, and sensors for proper operation and
suitability for combat use." The following year, Congress included in the fiscal year 2004 National Defense Authorization Act ("fiscal year 2004 Act") DOD’s proposed exemptions to and amendments of the ESA and MMPA.

The fiscal year 2004 Act amended section 4(a)(3) of the ESA to preclude assignment of a critical habitat designation to "any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan [INRMP] prepared under Section 101 of the Sikes Act...". While the ESA prioritizes habitat conservation and considers military needs as one of many factors in the authorization process, INRMPs "give the military mission primacy."

Under the fiscal year 2004 Act, the DOD and the Fish and Wildlife Service and its state counterparts are required to reach agreements regarding the development of the INRMPs, and are to take into account both the conservation interests at stake and the maintenance of functioning military bases. Additionally, the fiscal year 2004 Act specifies that none of the listed amendments alters DOD’s obligation to comply with the ESA’s mandate preventing "extinction and taking of endangered species and threatened species."

The fiscal year 2004 Act also amended three portions of the MMPA. First, the fiscal year 2004 Act created two definitions for the term "harassment," one applicable to the military and one applicable to all other agencies. As a result of this change, a finding of harassment that would formerly have halted certain military activities no longer bars authorization of those activities.

98. Id. at § 315(f).
100. The ESA defines critical habitat as:
(i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of this Act... on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of this Act... upon a determination by the Secretary that such areas are essential for the conservation of the species.
102. Bearden, supra note 32, at 18.
103. Id.
105. Id. at § 319(a)-(b).
106. Id.
The second amendment to the MMPA promulgated in the fiscal year 2004 Act was the inclusion of a clause entitling the Secretary of Defense to exempt for two years "any action or category of actions undertaken by the Department of Defense... from compliance with any requirement of this Act, if the Secretary determines that it is necessary for national defense." The Secretary of Defense may also extend these exemptions for as many subsequent two-year periods as he or she deems appropriate. These exemptions require no additional environmental review to be undertaken.

The final amendment to the MMPA applies to regulations the Secretary of the Interior or other analogous agency member may issue, prescribing the "means of effecting the least practicable adverse impact on [a given] species or stock and its habitat..." for a given activity. The amendment states that for military readiness activities, a determination of least practicable adverse impact must now take into account "personnel safety, practicality of implementation, and impact on the effectiveness of the military readiness activity" in addition to concerns relevant to aquatic life. Biological needs were formerly the primary concerns to be evaluated in making the 'least practicable adverse impact' determination.

III. DOD'S CURRENT PROPOSAL: EXEMPTIONS FROM FEDERAL HAZARDOUS WASTE LAWS

In 2004, DOD again submitted to Congress proposals for exemptions from RCRA and CERCLA. Citing its "unique responsibility to prepare for and win armed conflicts," DOD claimed that the flexibility it needed to balance military readiness with environmental stewardship obligations could only be achieved through amendments to the nation's hazardous waste laws.

107. Id. at § 319(b).
108. Id.
112. DOD also proposed an exemption from the Clean Air Act, which would have allowed DOD a three-year grace period before new military readiness activities had to come into compliance with the CAA. Dept of Defense, RRPI Legislation for 2004, Defense Environmental Network and Information Exchange, at https://www.denix.osd.mil/denix/Public/Library/Sustain/RRPI/Documents/RRPI-Legislation2004April.pdf (2004). This issue will not be treated in this comment.
Congress enacted the Resource Conservation and Recovery Act in 1976 as an amendment to the Solid Waste Disposal Act. Responding to widespread public concern with systemic mismanagement of hazardous wastes, RCRA governs the waste management process from inception to completion, or “cradle to grave.” Any person or facility that “generates, transports, treats, stores or disposes of hazardous waste, and any entity that produces, burns distributes or markets any waste-derived fuels” is subject to the requirements of RCRA. The statute and its regulations permit EPA to inspect facilities that handle or have handled hazardous waste, and provide for civil and administrative remedies in cases of noncompliance.

While RCRA addresses hazardous materials intended for imminent disposal or recycling, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) addresses hazardous materials and contaminated sites that are no longer in use. CERCLA, passed in 1980 and also known as the Superfund Act, allocates liability and cleanup costs for hazardous waste sites through a system of “strict, retroactive, and joint and several” liability.

Four statutory requirements precede an application of CERCLA. First, the site in question must be a facility. Second, releases or threatened releases of hazardous substances must have occurred at the site. The statute defines “releases” as “any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant).” The statute excludes several categories of release from liability, including releases permitted under other statutes and state laws. Third, the defendant must fall into one of four identified categories of potentially

115. Hazardous wastes are defined according to their ignitability, corrosivity, reactivity, or toxicity. 40 C.F.R. 261 (1999); see also Env'tl. Health and Safety Online, Waste, at http://www.ehsol.com/chshome/wastefas.html#RCRA (last visited July 15, 2005).
117. Id.
123. Id.
124. Id. at § 9601(22).
125. Id. at § 9601(10).
responsible parties (PRP). PRPs include current owners and operators, past owners and operators at the time of the release, persons who arranged for the treatment, disposal, or transportation for treatment or disposal of hazardous wastes, and persons who accepted hazardous wastes for transport to disposal or treatment facilities. Fourth, in order to recover costs, the plaintiff must have incurred response costs resulting from the release.

CERCLA also provides that the EPA may initiate cleanup of contaminated sites when liable parties are insolvent or unidentifiable. In these instances, EPA may either engage in a short-term removal action when a release demands a prompt response, or a long-term remedial action when a non-emergency release requires sustained mitigation efforts. These remedial actions may only take place at sites listed on EPA's National Priority List, also known as Superfund sites.

Both CERCLA and RCRA contain waivers of federal sovereign immunity, which subject federal agencies to the same hazardous waste requirements as are applicable to all members of the public. In authorizing the CERCLA waiver, congressional intent was expressed in the words of one federal judge who noted that "government agencies [should] shoulder their proportionate share of CERCLA response costs when they have acted as owners, operators, generators or transporters."

The waivers of sovereign immunity contained in RCRA and CERCLA have been alternately expanded and diminished by judicial decisions. Because the application of a waiver of sovereign immunity to federal activities requires an "unequivocal" and "unambiguous" indication that the legislature intended to include a waiver within a given statute, and because such a waiver must be construed in favor of the sovereign by courts, judicial review of the granting or denial of a waiver takes into account legislative history, and the structure and language of the waiver. For example, the Ninth Circuit in United States v. Shell Oil Company found that CERCLA's waiver of sovereign immunity applies to all federal activities that invoke CERCLA liability, despite the United

126. Id. at § 9607.
127. Id.
128. Id.
130. Id.
131. Id.
States' argument that the waiver only applies to "nongovernmental' activities" in which the United States is acting as a private party and not in its official capacity.\textsuperscript{136}

Judicial review has limited the RCRA sovereign immunity waiver. In 1992 the United States Supreme Court promulgated a narrow construction of the RCRA sovereign immunity waiver and thereby excluded the federal government from punitive liability, holding in \textit{Department of Energy v. Ohio} that Congress never waived the federal government's sovereign immunity from liability for past violations of RCRA against a state.\textsuperscript{137} While agreeing that federal agencies are liable under RCRA's sovereign immunity waiver for "coercive" fines, intended to force agencies' future compliance with judicial orders, the Court held that the waiver's language could not be construed unequivocally to include federal agencies among those punishable for past violations.\textsuperscript{138}

Responding to uncertainty over the extent of the RCRA sovereign immunity waiver, and to concerns that an unclear regulatory scheme would lead to widespread hazardous waste mismanagement, Congress in 1992 enacted the Federal Facility Compliance Act (FFCA).\textsuperscript{139} With this Act, Congress intended to unequivocally ensure that federal facilities complied with hazardous waste laws on a coequal basis with private industry.\textsuperscript{140} The FFCA "effectively overturned the Supreme Court's ruling" in \textit{Department of Energy v. Ohio}, amending RCRA to ensure a full waiver of sovereign immunity.\textsuperscript{141} FFCA states that the federal government is subject to "all administrative orders and all civil and administrative penalties and fines... [whether] punitive or coercive..."\textsuperscript{142}

Among other requirements, FFCA compelled EPA to create a rule applicable specifically to DOD, "identifying when conventional and chemical military munitions become hazardous waste under RCRA, and to provide for protective storage and transportation of that waste."\textsuperscript{143} After consulting with DOD and appropriate state officials, EPA issued the Military Munitions Rule (MMR) in 1997.\textsuperscript{144} For the purposes of MMR, military munitions are defined as any and all "conventional and chemical ammunition products and their components," manufactured by

\begin{itemize}
\item \textsuperscript{136} 294 F.3d 1045, 1051-54 (9th Cir. 2002).
\item \textsuperscript{137} 503 U.S. 607 (1992).
\item \textsuperscript{138} \textit{Id.} at 619-20.
\item \textsuperscript{140} Federal Facilities Compliance Act, Pub. L. No. 102-386 (October 1992).
\item \textsuperscript{141} Dep't of Energy, \textit{supranote 139}.
\item \textsuperscript{142} Pub. L. No. 102-386 §102(a)(3).
\item \textsuperscript{143} EPA Wastes, \textit{Military Munitions Final Rule}, at http://www.epa.gov/epaoswer/hazwaste/military/index.htm (last visited June 29, 2005).
\item \textsuperscript{144} 40 C.F.R. §§ 260-270.
\end{itemize}
or for DOD for the purposes of national security. This Rule regulates "1. unused munitions; 2. munitions being used for their intended purposes; and 3. used or fired munitions."

The MMR clarifies RCRA's applicability to military munitions based on their "life cycles." Under the MMR, when munitions are abandoned preceding disposal, removed from storage for disposal, deteriorated to the point of obsolescence, or determined to be solid waste by a military official, they qualify as "unused munitions" and therefore are regulable under RCRA as solid waste. Under a doctrine known as the intended purpose principle, munitions are not regulable as solid waste under RCRA when they are being used for their intended purposes, including training and research; when they are destroyed during range clearance operations; and when they are subject to "materials recovery activities" including reuse and recycling. Munitions therefore do not qualify as solid waste governable by RCRA unless they are abandoned and no longer serving their intended purpose.

DOD commentators laud MMR for its flexible approach to balancing environmental concerns with military readiness, pointing to the intended purpose principle as a determinant of, and often a limitation upon, RCRA liability. Applying RCRA only to munitions not being used for their intended purposes limits the administrative and financial burden of compliance, supports unimpeded military readiness activities, and yet upholds RCRA by leaving intact EPA's and citizens' statutory powers to force compliance when munitions of any sort pose an "imminent and substantial hazard."

Critics of MMR note that the practical application of the intended purpose principle may improperly preclude regulation of highly toxic, inadequately treated hazardous waste. MMR defines "intended purpose" very broadly to include all types of munitions destruction, training for munitions destruction, and weapons testing and research. Moreover, the intended purpose shield remains in place even after munitions have been put to their intended use and are abandoned. This permits the unregulated accretion of munitions on military lands and prevents

146. EPA Wastes, supra note 143.
147. Id.
148. Id.
150. Id. at 498.
151. Id. at 498-99.
152. Id. at 506.
regulatory intervention until contamination poses an imminent and substantial hazard.\textsuperscript{153}

Despite these concerns, the federal government has affirmed its overall commitment to ensuring full environmental compliance at federal facilities. In a 2001 letter to the Chairman of the Senate Committee on the Environment and Public Works, former EPA Administrator Christine Todd Whitman confirmed that EPA enforces environmental laws against federal agencies and holds federal facilities fully liable for compliance with these laws.\textsuperscript{154} EPA also maintains a website dedicated to environmental compliance at federal facilities, containing extensive information about compliance requirements at a wide array of facilities.\textsuperscript{155}

While the MMR does not satisfactorily solve the problem of contaminants on military lands, as the governing standard for treatment of munitions under RCRA it represents a reasonable congressional attempt to balance environmental concerns with military autonomy and self-governance. More broadly, the MMR indicates congressional commitment to a meaningful degree of continued DOD accountability for its hazardous waste activities.

Despite this statutory flexibility and avowed federal commitment to confronting toxic contamination, DOD persists in weakening an already-lenient policy on munitions contamination mitigation. The proposed RCRA amendment for fiscal year 2005 would have changed the definition of "solid waste"\textsuperscript{156} to affirmatively exclude "military munitions, including unexploded ordnance, and the constituents thereof, that are or have been deposited, incident to their normal and expected use, on an operational range, and remain thereon."\textsuperscript{157} According to the proposed

\begin{footnotes}
\footnote{153}{Id.}
\footnote{155}{See Fed Center, Environmental Compliance, at http://www.fedcenter.gov/programs/compliance/ (last visited June 28, 2005).}
\footnote{156}{As it is now written, RCRA defines 'solid waste' as any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act ... or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) [42 U.S.C. 2011 et seq.].}
\end{footnotes}
statute, all other military munitions and their constituents would still be regulable under RCRA. The statute would not exempt from RCRA military munitions that have migrated or are deposited off an operational range, that remain on the range once it is no longer operational, or that are recovered, collected and buried or disposed of in a landfill.\footnote{Id.}

The proposed CERCLA amendment for fiscal year 2005 would similarly have changed the definition of ‘release’\footnote{As it is now written, CERCLA defines ‘release’ as “any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant), but excludes (A) any release which results in exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons, (B) emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine, (C) release of source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act of 1954 [42 U.S.C. §§ 2011 et seq.], if such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under section 170 of such Act [42 U.S.C. §§ 2210], or, for the purposes of section 104 of this title . . . or any other response action, any release of source byproduct, or special nuclear material from any processing site designated under section 102(a)(1) or 302(a) of the Uranium Mill Tailings Radiation Control Act of 1978 [42 U.S.C. § 7912(a) or 7942(a)], and (D) the normal application of fertilizer.” 42 U.S.C. § 9601(22) (2000).} to affirmatively exclude “the deposit or presence on an operational range of any military munitions, including unexploded ordnance, and the constituents thereof, that are or have been deposited there incident to their normal and expected use, and remain thereon.”\footnote{Dep’t of Defense, Legislation for 2004, Sec. __. Range Management, supra note 157.} The proposed statute also defines ‘constituents’ as “any materials originating from military munitions, including unexploded ordnance, explosive and non-explosive materials, and emission, degradation, or breakdown products of such emissions.”\footnote{Id.}

Similar to the RCRA exemption, a ‘release’ governable under CERCLA would still include military munitions that migrate or are deposited off an operational range, or that remain on the range once it is no longer operational.\footnote{Dep’t of Defense, RRPI Fiscal Year 2004 Information: RRPI Questions and Answers, supra note 87, at 5.}

The proposed statute clarifies that this CERCLA exemption would not preclude the President from taking action under CERCLA Section 106, after the President became aware of an “imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance...”.\footnote{Id.} The proposed statute also states that the exemption would not apply to military munitions deposited on a formerly-operational range once the range is no longer operational, including closed ranges, transferred FUDS.
ranges, or transferring ranges. Finally, the proposal would not apply to traditional waste management practices, including disposal through burning or detonation.

Congress rejected all the exemptions from RCRA, CERCLA, and the Clean Air Act proposed for fiscal year 2005. The Energy and Commerce Committee refused to waive its jurisdiction over the proposals and thereby allow them to pass to the floor of the House. Consequently, the House Armed Services Readiness Subcommittee approved the full text of the fiscal year 2005 National Defense Authorization Act without the proposals. The hearings conducted in the House regarding the proposed exemptions revealed their extensive scope and controversial nature; one government staff member speculated that the chair of the Energy and Commerce Committee saw the proposed exemptions as an undue political risk, especially given the upcoming election.

After the passage of the fiscal year 2005 National Defense Authorization Act without the proposed exemptions, Major General Anders Aadland, director of the Army's Installation Management Agency, issued a memorandum to Army garrison commanders directing that they “[t]ake additional risk in environmental programs; [and] terminate environmental contracts and delay all non statutory enforcement actions to FY05.” The memorandum contained directives requiring commanders to reduce funding and resources for several other programs. Following public release of the memorandum by the watchdog group Public Employees for Environmental Responsibility (PEER), the Army sent another memorandum to garrison commanders advising that they “proceed with all previously planned activities within your annual funded program; do not reduce or defer environmental projects as called for.” The Army denied that the release of the original memo affected the issuance of the second memo. Commenting on the

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166. Ferullo, supra note 10.
168. Telephone interview with House Energy and Commerce Committee staff member (October 27, 2004).
170. Id.
171. Linda Roeder, Army Reverses Decision to Cut Funds for Environmental Programs, Enforcement, BNA ENVIRONMENT REPORTER, June 4, 2004, at 1217.
172. Id.
events, PEER director Jeff Ruch stated that “this episode illustrates precisely why the Pentagon should not be allowed to self-certify environmental compliance.”

In fiscal year 2006, DOD will again present the proposed exemptions from RCRA, CERCLA and CAA to Congress for inclusion in the National Defense Authorization Bill. Given the Republican ‘mandate,’ and the ever-increasing emphasis on national security and the prioritization of military readiness, DOD may find the current Congress more sympathetic to the proposed exemptions.

IV. HAZARDOUS WASTE EXEMPTIONS: A THREAT TO THE AMERICAN PUBLIC

In presenting the fiscal year 2005 Readiness and Range Preservation Initiative to Congress and the public, DOD repeatedly stressed that the proposed exemptions were not major policy alterations. DOD claimed that the exemptions were limited in scope, mere clarifications of existing rules governing the military’s hazardous waste responsibilities. DOD also claimed that the RRPI does not bear on the federal government’s current regulatory authority. However, these claims present an inaccurate picture of three fundamental policy changes that the exemptions would actually effectuate.

The first major change is a significant expansion of the scope, both geographical and statutory, of DOD’s invulnerability to environmental regulation. While senior DOD officials emphasize that the RCRA and CERCLA exemptions would apply only to operational ranges and not to transferred ranges, transferring ranges, and FUDS, these contentions do not adequately portray the full geographical reach of the proposed exemptions.

The term ‘operational ranges’ encompasses approximately twenty-four million acres of land and is not limited to lands actively in use by the military. According to the fiscal year 2004 National Defense Authorization Act, an operational range is “a range that is under the jurisdiction, custody, or control of the Secretary of Defense and (A) that is used for range activities, or (B) although not currently being used for range activities, that is still considered by the Secretary to be a range and

173. Id.
177. Id.
has not been put to a new use that is incompatible with range activities." 179 This definition could include a range that has been defunct since World War I, but that still contains used munitions deposits remaining after live-fire training. 180 Analysts note that this definition also includes buffer zones around military installations, in which members of the public may hunt, fish and camp. 181 Finally, while DOD sometimes attempts to quantify its range holdings, 182 it does not do so in a timely or transparent manner. 183

As well as improperly portraying the geographic scope of the proposed exemptions, DOD's contentions are misleading with regards to the scope of the activities covered by the proposed statute. Despite DOD's claims that the exemptions would apply only to military readiness activities and not to activities related to "industrial areas, maintenance areas,... contract facilities... [or] traditional waste management...", 184 the proposed exemptions are not expressly limited to 'military readiness' activities. In fact, the phrase 'military readiness' does not appear in the portions of the proposed exemptions relating to RCRA or CERCLA. 185

DOD's proposals could thus conceivably exempt from regulation under RCRA and CERCLA any munitions, munitions constituents, and unexploded ordnance that have no relationship to the military's readiness to engage in combat or respond to national and international crises, 186 as long as the munitions were being put to their "normal and expected use." 187 For example, contamination excluded from the definition of 'solid waste' under RCRA might include contamination arising from improper management of discarded munitions, groundwater contamination resulting from disposal of munitions in waste streams or from ammunitions washout, or groundwater contamination originating from the manufacture of munitions and munitions constituents. 188 Since there is no absolute definition for 'military readiness,' DOD might assert that such activities were conducted in pursuit of military readiness, but neither regulators nor the public is equipped to discern the validity of this claim.

181. Id.
183. MILITARY TOXICS PROJECT, supra note 45, at 6.
186. Id.
187. Id.
188. STAFF OF THE ATTORNEYS GENERAL OF COLORADO, IDAHO, UTAH, AND WASHINGTON, supra note 13, at 11.
The second major change effected by the proposed exemptions is the substantial deviation from the federal government's current rules and policies governing military munitions use and disposal. DOD claims that the proposals would do nothing more than codify the Military Munitions Rule (MMR), which states that military munitions are solid wastes, and thus regulable under RCRA only when the munitions are no longer being used for their intended purposes.\(^{189}\) The MMR exempts DOD from having to obtain a RCRA permit for normal munitions use, but permits regulation of munitions once they have been discarded.\(^{190}\)

By narrowing the RCRA's definition of solid waste, DOD's proposal would alter the MMR scheme in a number of important ways. As they are written, RCRA permits and the MMR support regulation of expended munitions. DOD's legislative proposal would exempt most used munitions and munitions constituents from RCRA's cleanup protocols if those munitions had been "deposited incident to their normal use."\(^{191}\) This narrowing of the definition of 'solid waste' would also narrow the RCRA sovereign immunity waiver, since the waiver currently identifies 'solid waste' as regulable with respect to federal facilities.\(^{192}\) DOD could thus maintain sovereign immunity in the face of state action because the new definition would prevent states from ordering cleanup of contaminated military ranges and from adopting regulations more stringent than those codified in RCRA itself.\(^{193}\)

Finally, by excluding 'munitions constituents' from the definition of 'solid waste,' where the MMR simply excludes munitions themselves from that definition, the proposed exemptions would apply to the chemical components of munitions.\(^{194}\) These chemicals include perchlorate, Royal Demolition Explosive, white phosphorus, and other chemicals that leach into soil or groundwater beneath military ranges and cause demonstrable harm to human health.\(^{195}\)

The third major policy change that would result from the passage of these exemptions, despite DOD's claims to the contrary, is that the new laws would substantially limit the authority of governmental authorities.

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191. *Id*.
194. *Id*.
to investigate and regulate soil and groundwater contamination on operational ranges.\textsuperscript{196} Under the proposed exemptions, authorities may only intervene under CERCLA when munitions and their constituents "have migrated off an operational range; are deposited off an operational range; or remain on the range once [it] ceases to be an operational range."\textsuperscript{197} Similarly, the proposed RCRA exemptions would permit government intervention only in the aforementioned three situations, as well as cases in which munitions "are recovered, collected, and then disposed of by burial or landfilling."\textsuperscript{198} The federal government, acting through the EPA, would thus be prohibited from addressing the source of pollution when it lies within the boundaries of operational ranges.\textsuperscript{199} The agency could only intervene under its CERCLA section 106 emergency powers, when "there may be an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance...".\textsuperscript{200}

Similarly, state governments would be preempted from the use of their traditional authority under RCRA and CERCLA.\textsuperscript{201} Currently, EPA authorizes forty-eight states to implement RCRA.\textsuperscript{202} With respect to CERCLA, the federal government recognizes that the "vast majority of contaminated sites across the nation will not be cleaned up by the Superfund program. Instead, most sites will be cleaned up under State authority."\textsuperscript{203} States have authority under CERCLA to recommend sites for placement on the National Priorities List,\textsuperscript{204} and to plan and implement site cleanup under a Cooperative Agreement with the EPA.\textsuperscript{205} The proposed exemptions would preclude states to the same degree that they would preclude the federal government from investigating military ranges and ordering cleanup.\textsuperscript{206} DOD exemptions would thus prevent state governments from investigating on-range groundwater contamination even where the state has an ownership interest in its water supply, or where a state in an arid, drought-prone region has a special

\textsuperscript{196} Id.at 4-6.
\textsuperscript{197} Id.
\textsuperscript{198} Id.
\textsuperscript{199} Comm. on Energy and Commerce Democratic Staff, supra note 178, at 4-6.
\textsuperscript{200} Id.
\textsuperscript{201} Id.
\textsuperscript{202} Id.
\textsuperscript{204} Id.
\textsuperscript{205} Id.
\textsuperscript{206} Id.
\textsuperscript{208} Id.
\textsuperscript{209} Id.
\textsuperscript{210} Id.
\textsuperscript{211} Id.
public health and welfare-related interest in ensuring an available supply of clean water.\textsuperscript{207}

These three changes in munitions regulation law and policy would impose significant health costs on the public. The proposed exemptions from RCRA and CERCLA would prohibit EPA from exercising nearly any regulatory authority in cases of hazardous waste contamination occurring within military operational ranges.\textsuperscript{208} Precluding regulatory intervention until contaminants migrate off-range, when the contamination may no longer be containable, could substantially increase the possibility of widespread water contamination and major public health risks.\textsuperscript{209} At that point, extreme action such as the regional well closures at Camp Lejeune and the Massachusetts Military Reservation may be required.\textsuperscript{210} Additionally, cleanup costs for water sources or costs of securing alternative water supplies would likely increase drastically under this scheme.\textsuperscript{211}

However, DOD asserts that public health will not be negatively impacted by the passage of the RRPI, and relies primarily on the Safe Drinking Water Act (SDWA) to support this claim.\textsuperscript{212} Passed by Congress in 1974 and amended most recently in 1996, the SDWA\textsuperscript{213} operates to ensure that all public water systems provide healthy and sanitary drinking water. The Act required the EPA Administrator to issue a "maximum contaminant level goal[ ]" and "promulgate a national primary drinking water regulation" based on assessments of safe lifetime exposure levels for any contaminant identified by the EPA as necessitating such regulation.\textsuperscript{214} If the Administrator determines that the entry of any contaminant into a public water system presents an "imminent and substantial endangerment" to public health, the Administrator may take any actions deemed necessary to protect public health including the commencement of civil actions and the issuance of

\textsuperscript{208} Comm. on Energy and Commerce Democratic Staff, supra note 178, at 5.
\textsuperscript{209} STAFF OF THE ATTORNEYS GENERAL OF COLORADO, IDAHO, UTAH, AND WASHINGTON, supra note 13, at 15-16.
\textsuperscript{210} See supra 657-58.
\textsuperscript{212} Dep't of Defense, RRPI Fiscal Year 2004 Information: RRPI Questions and Answers, supra note 87, at 5.
\textsuperscript{214} Id. at § 300g-1(b).
orders requiring that the public be provided with alternative water sources.\textsuperscript{215}

DOD claims that RRPI did not affect federal or state authority to respond to munitions contamination under the SDWA.\textsuperscript{216} However, the SDWA is limited in a number of ways. First, it is "fundamentally not a cleanup statute" because it offers no guidance either at the federal or state level for investigating or remedying groundwater contamination, but instead serves chiefly to regulate the management and distribution of drinking water.\textsuperscript{217} Second, the SDWA applies largely to public water systems, and not to private water wells or agricultural irrigation.\textsuperscript{218} Furthermore, states have noted that munitions-generated contamination of agricultural water sources is a major concern, citing the presence of perchlorate in farmland irrigation water in California and Arizona.\textsuperscript{219}

More importantly, sole reliance on the SDWA to ensure uncontaminated water would preclude regulation of a whole host of hazardous chemicals closely associated with military operations.\textsuperscript{220} The EPA has designed SDWA regulations for nearly ninety contaminants, including disinfectants, organic and inorganic chemicals, and microorganisms.\textsuperscript{221} But of over two hundred contaminants derived from military munitions, including perchlorate, none are currently regulated under the SDWA.\textsuperscript{222} Although EPA currently monitors perchlorate under the Unregulated Contaminant Monitoring Program,\textsuperscript{223} and recently established a perchlorate reference dose based on information in the recently-issued National Academy of Sciences report,\textsuperscript{224} EPA officials estimate that the agency will likely not officially regulate perchlorate contamination in drinking water before 2006 or 2008.\textsuperscript{225}

Thus, because the proposed exemptions would circumvent current governmental authority under RCRA and CERCLA to monitor DOD's sampling and mitigation of toxic munitions waste, DOD's regulation of

\begin{itemize}
\item \textsuperscript{215} Id. at § 300i.
\item \textsuperscript{216} Department of Defense, \textit{Readiness and Range Preservation Q \\& A}, at 5-6 (2004).
\item \textsuperscript{217} STAFF OF THE ATTORNEYS GENERAL OF COLORADO, IDAHO, UTAH, AND WASHINGTON, \textit{supra} note 13, at 21.
\item \textsuperscript{218} See id.
\item \textsuperscript{219} Summary of State-DOD meeting of December 11-12, 2003, at 7 (copy on file with author).
\item \textsuperscript{220} STAFF OF THE ATTORNEYS GENERAL OF COLORADO, IDAHO, UTAH, AND WASHINGTON, \textit{supra} note 13, at 20-22.
\item \textsuperscript{222} U.S. GEN. ACCOUNTING OFFICE, \textit{supra} note 34, at 12.
\item \textsuperscript{225} U.S. GEN. ACCOUNTING OFFICE, \textit{supra} note 34, at 15.
\end{itemize}
perchlorate would be essentially voluntary under the SDWA.226 Because perchlorate remains unregulated under federal law, DOD’s perchlorate policies are not mandatory and are subject to change based on the availability of funds.227 In 2003 Congress inserted a provision into the fiscal year 2004 National Defense Authorization Bill ordering DOD to conduct two perchlorate risk studies by mid-2005,228 and DOD responded by increasing its monitoring and data-collection regarding perchlorate contamination on military ranges.229 In September 2003, the Under Secretary of Defense issued an “Interim Policy on Perchlorate Sampling,” mandating the collection of perchlorate data with respect to applicable laws such as the SDWA and the CWA, the potential for off-range migration, and environmental restoration.230 This policy appears to fill part of the SDWA gap, but as explained it is discretionary and inefficient.

Despite DOD’s statement of intent that funding be allocated towards perchlorate sampling efforts, no allocation has occurred, and the probability of full financial commitment to perchlorate sampling appears low given existing funding constraints.231 Nor has DOD initiated cleanup efforts where perchlorate contamination exists.232 Even in places where perchlorate impacts public drinking water, such as the Aberdeen Proving Ground, DOD does not necessarily initiate full clean-up efforts but may instead opt to increase sampling or dilute contaminated water with non-contaminated water.233

Despite compelling evidence that the RRPI represents egregious policy change and a threat to the public’s health, DOD insisted that the current system of presidential exemptions is so inefficient, that environmental compliance measures are so intrusive upon military readiness preparations, and that the threat of suit is so imminent, that blanket RCRA and CERCLA exemptions are necessary.234 However, DOD has not sufficiently demonstrated the veracity of any of these claims.

DOD claimed that it should not be required to request from the President an exemption from a federal environmental law under the law’s emergency waiver provision each time it needs to perform a readiness

228. See Military Cautions Against Precautionary Perchlorate Standard, supra note 59.
232. Id. at 29.
233. Id. at 30.
234. See generally, News Transcript, supra note 84.
activity that would not comply with the law. Because these waivers may be granted only when they would be in the "paramount interests of the United States," and because that determination could be overturned in court, DOD argued that this cumbersome process necessitates blanket statutory exemptions.

However, DOD has not sufficiently explored the possibilities presented by these presidential exemptions. Noting that "the Department has worked to protect our military readiness activities without exercising the national security exemption provisions" available to it, Deputy Secretary of Defense Paul Wolfowitz advised all DOD departments to begin utilizing these existing statutory exemptions. Senior Readiness Oversight Council Executive Secretary Paul Mayberry encouraged DOD officials to develop formal processes for using the exemptions.

In addition, DOD's concerns over the 'paramount interests' standard as a bar to exemption may be unfounded. Case law reveals that the 'paramount interests' standard is "quite deferential." The decision to grant an exemption lies entirely within the President's discretion, and the only two courts to examine a determination of paramount interests have found discretion to not be an appropriate matter for judicial review. This precedent indicates that a President's determination that an exemption is within the nation's paramount interests is unlikely to be disturbed.

DOD's aversion to standard environmental compliance procedures, and assumption that "any response action addressing military munitions-related contamination would necessarily impact readiness," are also without basis in fact. Despite DOD's claim that "flexibility in selected aspects of [RCRA and CERCLA]" is necessary to ensure military readiness in the face of environmental compliance measures, significant

235. Id. at 8.
238. Id.
239. Wolfowitz, supra note 78, at 1.
240. Memorandum from Paul Mayberry, Executive Sec'y, Senior Readiness Oversight Council, to the Sec’y's of the Military Dep'ts, Chairman of the Joint Chiefs of Staff, Under Sec'y's of Defense, Service Chiefs, Senior Readiness Oversight Council Approval of 2003 Sustainable Ranges Action Agenda, at 9 (December 2002).
242. Id.
243. Kasza v. Browner, 133 F.3d 1159 (9th Cir. 1998); Colon v. Carter, 633 F.2d 964 (1st Cir. 1980).
244. STAFF OF THE ATTORNEYS GENERAL OF COLORADO, IDAHO, UTAH, AND WASHINGTON, supra note 13, at 8.
flexibility exists in both contamination monitoring and response measures available to DOD.\textsuperscript{246}

RCRA cleanup measures conducted at Fort Carson, Colorado, exemplify the ease with which DOD officials may simultaneously conduct environmental monitoring and fulfill military readiness needs. In June 2000, the Fort Carson cleanup team identified the implementation of a specific RCRA groundwater monitoring program as a primary goal for the coming year’s environmental remediation plan,\textsuperscript{247} and sought to cooperate with state and federal environmental regulatory agencies in the plan.\textsuperscript{248} The team installed groundwater monitoring equipment on a day when no military activities were being conducted, and state regulators adjusted the required monitoring timeframe to correspond with the Fort’s training schedule.\textsuperscript{249} In demonstrating that “environmental practices have been successfully integrated into the mission of the Fort Carson workforce,”\textsuperscript{250} this facility may serve as a model for other military ranges.

DOD has never cited an incident in which state or federal enforcement of federal environmental laws has negatively impacted military readiness.\textsuperscript{251} The few extraordinary cases cited by DOD in which enforcement did affect military activities, such as the closure of the Massachusetts Military Reservation, represent instances in which DOD did not sufficiently respond to severe, long-term public health threats and so federal intervention became necessary.\textsuperscript{252} Despite these few instances of federal action, and DOD’s acknowledgement that “no state has ever used its RCRA or state superfund authority in a manner that has impacted readiness,”\textsuperscript{253} DOD claimed that the exemptions were necessary to avert any future possibility of state interference such as the adoption of more stringent state-level RCRA or CERCLA

\begin{thebibliography}{99}
\item[246.] Staff of the Attorneys General of Colorado, Idaho, Utah, and Washington, supra note 13, at 8.
\item[248.] Id.
\item[249.] Staff of the Attorneys General of Colorado, Idaho, Utah and Washington, supra note 13, at 8.
\item[251.] Staff of the Attorneys General of Colorado, Idaho, Utah and Washington, supra note 13, at 1.
\item[253.] Summary of State-DOD meeting, supra note 219, at 4.
\end{thebibliography}
requirements.254 Thus, preemption for DOD is actually “not a matter of readiness, but of control.”255 Opponents of the exemptions correctly argued that neither a few instances of federal intervention into extreme situations, nor an ambiguous ‘threat’ of possible future state intervention, justify broad exemptions from federal environmental laws.256

Finally, in supporting these exemptions, DOD points to an unsubstantiated possibility of a wave of nationwide litigation and resulting DOD liability.257 In advocating for the passage of the exemptions, DOD repeatedly cited an ongoing lawsuit involving the Eagle River Flats Range in Fort Richardson, Alaska as an example of the grave threats to military readiness posed by litigation.258 In that case, *Alaska Community Action on Toxics v. Department of the Army, et al.* ("ACAT"), several community organizations sought relief under RCRA, CERCLA and the Clean Water Act for contamination resulting from the Army’s live-fire testing and training at Fort Richardson.259 These plaintiffs claimed a reduced ability to fish, hunt, consume and observe animals resulting from the land and water pollution caused by the Army’s munitions-related activities in the region.260 The high levels of pollution at the site damaged both natural resources and wildlife, and raised significant public health concerns. In 1994, EPA placed Fort Richardson on the Superfund list, identifying it thus as one of the most polluted sites in the nation.261

DOD, comparing as indistinguishable the training done at Fort Richardson with training occurring at any given operational range, claimed that a victory for plaintiffs in *ACAT* would set a dangerous precedent of “harassment by litigation.”262 According to DOD legal counsel, the *ACAT* suit “threatened a wholesale campaign against military installations across the country.”263

However, DOD consistently failed to provide any evidence of either looming litigation anywhere in the country or litigation’s threat to

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255. Summary of State-DOD meeting, supra note 219, at 4.
258. Id. at 5.
260. Id. at ¶ 6.
262. News Transcript, supra note 84, at 5.
263. Id. at 7.
readiness, beyond this dire prediction that such litigation, and even resultant injunctions, would threaten military readiness. In fact, one senior DOD official indicated that litigation may result in improvements to readiness. When questioned about the injunction that closed the Vieques range in Puerto Rico, this official allowed that the closing of Vieques actually contributed to readiness since it provoked the development of "significant alternatives" to traditional training techniques.

After a protracted legal dispute between DOD and the ACAT plaintiffs, the parties reached a settlement agreement in October 2004. The settlement requires that DOD conduct regular water quality monitoring in and around Fort Richardson, consistently provide updated information regarding military toxics on the range, commence thorough munitions cleanup, and permit scientific studies of the area by independent researchers. In commending the settlement, plaintiffs cited their abiding desire to avoid litigation and claimed that DOD drove the conflict into court in order to characterize hazardous waste litigation as a threat to national security. According to plaintiffs, the successful settlement demonstrated again that military readiness and environmental protection are "not mutually exclusive."

CONCLUSION

The reintroduction of the three proposed environmental exemptions for insertion into the fiscal year 2006 National Defense Authorization Act demonstrates DOD's persistence in effecting these changes, and bodes ill for the health and safety of the American public and American lands. As the federal government restricts public speech and conduct, and takes unilateral action in the name of national security, the proposed hazardous waste exemptions illustrate deficiency in the federal government's claimed interest in protecting the American people. Such protection must encompass the natural environment of the United States, where ecological destruction threatens the economy and health of the populace. The government's primary engagement in achieving national security ought not to be war overseas, but a guarantee to today's...
population and future generations that the soil, the water and the air upon which we vitally depend will be clean, safe, and health-promoting. No program for national security can be complete without natural resource security.