Mr. Chairman and Members of the Subcommittee, thank you for inviting me to speak with you today on behalf of the Environmental Protection Agency (EPA) about the protection of human health and the environment. In administering pollution control and cleanup laws, EPA protects both our national and environmental security, a mission the Agency shares with the Department of Defense.

As you know, EPA administers and enforces a variety of pollution control laws, including the Clean Air Act, the Clean Water Act, and laws related to the management, disposal and cleanup of hazardous waste such as the Resource Conservation and Recovery Act (RCRA), and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). EPA also has a role in the oversight of the National Environmental Policy Act (NEPA) through its filing and review of NEPA documents prepared by Federal agencies. EPA does not administer or enforce laws concerning wildlife protection and habitat conservation, such as the Endangered Species Act.

When Congress passed the pollution control laws that EPA administers, it provided in most of them a mechanism for DoD to obtain an exemption from environmental requirements where the President determines that such an exemption is in the paramount interest of the United States. This
authority has been invoked twice in the past: to exempt refugee transport operations during the 1980 Mariel boatlift and to protect the secrecy of a classified military base. In addition, in 1998 Congress amended 10 U.S.C. § 2014 to give the military an opportunity to raise readiness issues to the political level of the Executive Branch and Congress and to suspend administrative actions pending consultation between the Secretary of Defense and the head of the executive agency involved. DoD also participates actively under the public notice and comment provisions of the Administrative Procedure Act in Federal agency rulemaking. Finally, executive orders provide the Department of Defense advance input on regulatory agency proposals prior to their implementation and provide a national security exemption for certain military construction projects during war or formally declared national emergencies.

DoD and EPA agree that environmental protection is essential to preserving military training grounds, developing more efficient weapon systems and safeguarding our servicemen and women and their communities. EPA, states and DoD have worked cooperatively toward achieving these goals, with tangible results inuring to both the military and public alike. But where DoD’s environmental compliance efforts have fallen short, EPA and states have taken enforcement actions to protect human health and the environment. Notably, only one such action in EPA’s thirty-two year history has ever required even a temporary shutdown of a military training range (namely, the Massachusetts Military Reservation, or MMR), an action I discuss later in my testimony.

We believe that EPA’s and DoD’s missions are compatible and that the military can continue to build on its environmental accomplishments while maintaining readiness. To illustrate the benefits of cooperation between EPA and DoD, I first highlight just a few examples of the Agency and
Department working together at specific installations, mutually agreeing on environmental matters while also saving the Department, and the taxpayers, millions of dollars. Next, I discuss a few instances where EPA was compelled to take enforcement actions against DoD components, with emphasis on the serious environmental problems giving rise to the sole case where the military was obliged to temporarily shut down a training range in order to protect human health and the environment.

**Environmental Compliance and Military Readiness are Compatible**

EPA commends the Department for its recognition of the importance of environmental compliance and its relationship to readiness. Indeed, as DoD observed in its 1999 environmental report to Congress, “Healthy land, air and water are critical to the defense mission because they provide safe and realistic training environments to help us ensure readiness.” I want to highlight for you some examples of where the environmental laws EPA oversees have worked to promote readiness while saving taxpayer dollars.

In designing its New Attack Submarine, the Navy appointed an environmental manager to coordinate environmental design issues. The environmental management team reviewed the design plans with a view toward lowering environmental compliance costs from construction through ultimate decommissioning. The team came up with a number of common sense suggestions that will ultimately save the Navy millions of dollars. For example, the environmental team suggested designing the sub’s reactor core to last the entire life of the ship, eliminating the need for refueling, decreasing the amount of radioactive waste generated and resulting in a multi-million dollar cost avoidance. Other design changes would reduce worker exposure to lead and chromium and enable the ship to be constructed without the need for harbor dredging, thereby eliminating another potential source of disposal of potentially
contaminated dredging. The team developed a hazardous materials map, identifying the location and type of hazardous materials on the New Attack Submarine. The team also limited the variety and amount of adhesive, paints, welding materials, lubricants and solvents on the sub, leading to significant reductions in ozone depleting substances, volatile organic compounds, hazardous air pollutants and hazardous wastes associated with manufacturing and maintaining the ship. These, and other changes, taken in direct response to environmental requirements, led to the creation of a smarter and cheaper ship.

The military’s increasing reliance on pharmacy-style hazardous material tracking systems is yet another example of an innovative approach that enables facilities to comply with environmental requirements while reducing procurement and disposal costs for certain materials.

Prior to 1993, Federal facilities were not required to report toxic chemical releases and transfers under EPCRA Section 313. Executive Order 12856, signed in 1993, required reporting beginning in 1994. Subsequent to the Executive Order, facilities began to track use and disposal of hazardous materials that contain toxic release inventory (TRI) listed chemicals. Many facilities now control purchase, use and disposal of hazardous materials through “pharmacies” which act like medical pharmacies in that they control access to “restricted” materials – in this case, hazardous materials and wastes. A direct, if unexpected, result is significant cost savings. Facilities now purchase fewer materials, manage their use more efficiently, and have less to dispose as hazardous waste. In fact, DoD is actively sharing its successes in this area with Civilian Federal Agencies; the pharmacy concept was recently included as a pilot project for civilian Federal agencies in EO 13148, “Greening the Government

EPA has also shown flexibility in helping the military bases find expeditious, affordable solutions to their environmental problems. For example, during the construction of new military housing at the Elmendorf Air Force base in Anchorage, Alaska, the Air Force discovered contaminated soil and debris. Taking a cautious but expensive approach, the Air Force proposed treating the bulk of the debris as hazardous waste, which would need to be shipped long distances for treatment and disposal. EPA, however, determined in 2001 that a significant portion of this debris was not hazardous and could be recycled as fill in the base’s sanitary landfill. EPA’s analysis and recommendations saved the Air Force approximately $1.4 million.

These examples – just a few of many – illustrate the compatibility of environmental requirements and the military mission. They also show that military’s compliance efforts can save millions of dollars and not adversely impact readiness.

**Environmental Enforcement is Sometimes Necessary**

DoD’s environmental compliance responsibilities are enormous. As you well know, the Department maintains thousands of installations across the country. The installations range in size from a few acres to hundreds of square miles. Many of these installations function like small cities, containing hospitals, sewage treatment facilities, roads, airports, and industrial operations. As such, the installations carry all of the inherent sources of pollution associated with cities.

Mindful of these environmental challenges, EPA provides DoD with a broad array of compliance assistance tools and programs. They include educational seminars and web-based instruction and reference materials. Upon request, EPA also provides environmental management
reviews ("EMRs") to federal agencies. EMRs provide a snapshot of a facility’s environmental management system in comparison to a set of established, international standards. Based on the review, EPA then makes specific, practical recommendations for improvement. EPA’s compliance philosophy is to ensure that Federal facilities comply with all applicable environmental requirements in the same manner and to the same extent as privately owned facilities. EPA may discover or learn of violations by several means including EPA or state inspections or audits, reviews of monitoring and reporting data, or notification by the facility of violations discovered as a result of self-monitoring or auditing. In some cases, EPA or state regulators learn of violations by means of regular reporting required by each program.

In general, however, when EPA determines that a violation has occurred – whether through inspection, self-reporting or a citizens’ report – EPA will consider several factors, including the nature of the violation, its potential for harm, and the violator’s history of compliance, in determining next steps. For example, if the violations are relatively minor, EPA may determine that an informal enforcement response, such as a notice of violation, will achieve a speedy return to compliance. A Federal facility that has received such a notification is given an opportunity to correct the violation and submit certification of the correction to EPA.

In contrast, if the violations are significant, or if the violator has a history of noncompliance, then EPA may determine that a formal enforcement response, including use of EPA’s administrative hearing procedures, is the best way to protect human health and the environment and to bring the facility back into compliance. These procedures set out each party’s rights and obligations. In addition, they provide that an agreement may be negotiated at any time prior to final adjudication. A Federal agency
has an opportunity to negotiate or contest an EPA-issued order, prior to its becoming final.

In attempting to resolve violations, we recognize that no two military bases or services are alike. Accordingly, EPA works with each installation on a case-by-case basis to achieve environmental compliance.

Despite the Department’s and the Agency’s best efforts, military installations occasionally violate pollution control laws. As a matter of policy, EPA’s enforcement actions are focused on serious violations of our environmental statutes. Many of these violations cause the release, or threatened release, of dangerous chemicals into the environment. These releases create risks to public health and the environment, to military personnel and their families, and to neighboring communities. Where DoD’s own environmental management system fails to provide adequate protection to human health and the environment, EPA must step in and take action. In such circumstances, EPA, in exercising its legal authorities, is fulfilling its mission.

As I noted earlier, only one enforcement action in EPA history has ever led to even a temporary shutdown of an active training facility. That action involved the Massachusetts Military Reservation (MMR for short) on Cape Cod. MMR, a 22,000-acre property that has been used by multiple military services for military training activities since 1911, is located over a sole source aquifer that provides drinking water for 200,000 year-round and 500,000 seasonal residents of the Cape. The Army and the National Guard have used the northern part of the base, known as Camp Edwards, for infantry and artillery training, while the Air Force has used the southern part of MMR to operate Otis Air Force Base. Parts of the Cape Cod aquifer have been contaminated by
fuel spills and other past practices at MMR’s Otis Air Force Base. Otis is currently being cleaned up under EPA’s Superfund program.

Due to preliminary groundwater samples, concerns were raised that military training at Camp Edwards was causing even more damage to the groundwater. A broad range of explosives and chemical compounds were detected in the groundwater under the Training Range and Impact Area, including RDX, which is classified by EPA as a possible human carcinogen. EPA’s New England Office in February 1997 ordered the National Guard to conduct a study of the effects of military training on groundwater. Studies have estimated that between 43 and 60 billion gallons of drinking water have already been contaminated by pollution from MMR, enough to supply Cape Cod’s entire population at peak season levels for seven years. Eleven large plumes of contaminated groundwater have been identified, causing the shutdown of public and private water supply systems.

In May 1997, most military training at MMR’s live artillery range was suspended, including all use of live explosives, propellants, flares and lead bullets. It was the first, and only, time in our country's history that military training activities had been halted under a pollution control law that EPA administers. To date, the military has not invoked explicit provisions of that order allowing training to resume if DoD can demonstrate that national security and readiness needs justify suspension of the order.

As a result of the evidence of contamination, EPA in January 2000 ordered the National Guard to begin the process for the removal of unexploded ordnance from the base and to clean up contaminated groundwater and soils. The order marked the first time EPA has ever required the suspension of training and the cleanup of unexploded ordnance at an active training range. And in January 2001, EPA ordered the National Guard to destroy the more than 2,500 rounds of
ammunition dug out of burial pits on the base during the course of the National Guard's investigation of pollution at the firing ranges.

Recent Massachusetts state legislation allows the military to continue to conduct limited training (that which is not restricted by EPA's orders) and transfers land management responsibilities for Camp Edwards from the military to three state environmental agencies.

Unexploded ordnance (or UXO) represents one of EPA’s primary environmental concerns at MMR. EPA’s practice is to defer to DoD experts on all questions regarding explosive safety at active ranges. Indeed, under current EPA practice, we typically take action on environmental problems only at closed ranges or those ranges that have off-range impacts.

I would like to distinguish briefly the situation at the Atlantic Fleet Weapons Training Facility (AFWTF) on Vieques Island in Puerto Rico. As members of this Subcommittee, you undoubtedly know that President Clinton suspended the use of live ordnance on Vieques in a directive dated January 31, 2000. Mr. Clinton issued this directive largely in response to complaints from citizens of Vieques who objected, in the wake of a civilian guard’s death due to a misdirected bomb on the range, to the continuing use of the Facility for air, ground and sea training. EPA’s prior enforcement actions on Vieques, however, did not limit live ordnance training, but rather merely required the Navy to conduct groundwater studies and to clean up any contamination it found.

**Changes in Military Training and Operations Resulting from EPA Enforcement**

This Subcommittee asked EPA to provide testimony regarding the training and operational changes military services implemented in order to comply with environmental laws. While DoD is in a better position to provide this information, I’ll highlight a few of the positive effects EPA enforcement
actions have had on daily military operations and preparedness. In fact, most of these changes had multiple benefits: they protected the lives of servicemen and women, and citizens of neighboring communities and saved money.

There are many examples where DOD operational or waste disposal practices resulted in direct environmental degradation, or posed significant health risks to military personnel, and nearby civilians. In these instances, EPA intervened not only because its regulatory mission required it, but also because it was the right thing to do to ensure the continued well-being of the men, women and families who work on bases or live nearby.

In one instance, Fort Hood Army Base dumped hazardous waste oil onto a concrete pad and set it ablaze. Firefighter trainees, who were directed to put the fires out, were exposed to noxious fumes from the burning oil. An additional health hazard to a nearby community resulted when the toxic mix of water, chemicals and hazardous oil, ran off into surrounding soil and a stream used by local residents for swimming. EPA intervened and ordered the Army to cease the illegal dumping and burning, and to conduct an investigation to determine the extent of contamination at the firefighter training unit and the appropriate method for cleaning it up.

EPA also sought to protect drinking water supplied to 65,000 service members, their families and civilians at Fort Bragg, NC. EPA determined that between 1994 and 1999 Fort Bragg’s drinking water system exceeded, on at least sixteen occasions, permitted levels for copper, lead and trihalomethanes (TTHM) – known carcinogens formed when disinfectants mix with naturally-occurring organic matter. Fort Bragg will repair structural problems at the water treatment facility so that the water will comply with permit limits and be safe to drink. These repairs will serve to protect the men and
women of Fort Bragg and allow them to continue to train.

Finally, we also note the example of Reese Air Force Base, located near Lubbock, TX, which was releasing trichloroethylene (TCE) directly into groundwater. TCE is a solvent that can cause birth defects, as well as brain, kidney, liver and heart damage. The contamination migrated off-site and polluted the drinking wells of nearby residences, businesses and a church. The residents had been drinking, bathing, and washing their clothes and dishes with the contaminated water. Despite EPA’s efforts to reach a mutual understanding with the facility, EPA ultimately required the Air Force to eliminate all possible exposures. EPA’s intervention thus served to protect the population from these health risks.

**Challenges to Regulators**

The states are on the front lines of assuring DoD’s environmental compliance. States play a lead role pursuant to their delegated powers under Federal environmental law. They conduct the vast majority of environmental compliance inspections at Federal facilities, issue compliance orders when violations are found, and assess penalties, where sovereign immunity has been waived.

In response to concerns raised by EPA, GAO, state attorneys general and many others, Congress passed the Federal Facilities Compliance Act (FFCA) in 1992, waiving the Federal government’s sovereign immunity under the Resource Conservation and Recovery Act and clarifying that “federal facilities are subject to all the same substantive and procedural requirements, including enforcement requirements and sanctions, to which state and local governments and private companies are subject.” Congress determined that it was necessary to make
sure the same set of RCRA rules applied to both federal facilities and the private sector.

**Conclusion**

There is no debate about whether we need to act to protect just the environment or just national security. We need to do both. We should always be looking at how we can make our partnerships more effective, our regulatory structure more responsive and our innovations more creative. Together, as a team, we will meet new challenges by finding new ways of doing things – not just for the sake of change, but for the sake of progress, the environment and public health.

I am confident that DoD and EPA working together within the overarching framework of our environmental laws can ensure that America’s armed forces are able to train to carry out their national security mission without endangering the health or well being of any American.

This concludes my prepared statement. I would be pleased to answer any questions that you may have.