

INTRODUCTION

Environmental programs within the Department of Defense (DoD) have grown dramatically during the past three decades. Even though DoD did not have a cohesive environmental program prior to 1970, the Department did recognize the importance of conserving resources—DoD began recognizing installation efforts with a Natural Resources Award in 1962. Since then, the growth in DoD's environmental programs has produced a proud heritage of conserving resources. Today, DoD's environmental programs have a budget of more than \$4 billion and employ more than 8,000 full-time environmental professionals.

A healthy and productive environment is a key element of national defense. Without clean air and water and productive land, DoD cannot raise and support military forces. Environmental stewardship, through effective conservation of natural and cultural resources and the use of pollution prevention techniques, is vital to national defense. DoD's environmental programs support national defense by ensuring quality working and living conditions, exercising prudent environmental stewardship, promoting safe military operations, and making smart investments to reduce total infrastructure ownership costs. The Department works closely with its partners, finding the tools to enhance efficiency, and recognizing those areas where improvements can be made.

Environmental stewardship is also a reflection of the high ethical ideals and standards of America's military men and women. Because Americans expect and demand a deep and abiding commitment to environmental stewardship, DoD must continue to satisfy that expectation.

ORGANIZATION AND RESPONSIBILITIES



MISSION STATEMENT OF THE OFFICE OF THE DEPUTY UNDER SECRETARY OF DEFENSE (INSTALLATIONS AND ENVIRONMENT)

Reduce the total ownership costs of the military infrastructure while providing focused investments to efficiently support warfighter deployment and training capabilities and ensure secure, safe, and environmentally sound living and working conditions.

DoD's ENVIRONMENTAL PROGRAM THROUGH THE YEARS

The military's direct responsibility for the stewardship of the nation's environment, particularly its natural resources, dates back to 1872 when Congress directed what was then the War Department to protect Yellowstone, the nation's first national park. During World War II, DoD's



Members of M Troop, 1st U.S. Cavalry, patrol Yellowstone National Park around the turn of the century.

resource management efforts included controlling dust and soil erosion created by construction and training exercises. DoD's conservation responsibilities grew with the use of military lands for forestry, farming, hunting, fishing, and other uses. In 1960, with the passage of the Sikes Act, DoD began developing fish and wildlife management plans in cooperation with the U.S. Fish and Wildlife Service and state fish and game agencies.

The Office of the Secretary of Defense was created in 1947 under the National Security Act. At that time, different departments within DoD handled the various responsibilities related to environment, safety, and occupational health (ESOH). In 1972, the Office of the Assistant Secretary of Defense (Health and Environment) was created. In 1976, Donald Rumsfeld was the first Secretary of Defense to combine ESOH-related responsibilities into one office—the Office of the Deputy Assistant Secretary of Defense (Environment and Safety). In 1991, then-Secretary of Defense Richard B. Cheney combined the responsibilities of ESOH, explosives safety, and pest management into the Office of the Deputy Assistant Secretary of Defense (ESOH). Also in 1991, then-Deputy Secretary of Defense Donald J. Atwood, Jr., directed DoD to establish a comprehensive management strategy and system for implementing DoD's environmental mission.

“Defense and environment’ is not an either/or proposition. To choose between them is impossible in this real world of serious defense threats and genuine environmental concerns....The real choice is whether we are going to build a new environmental ethic into the daily business of defense—make good environmental actions a part of our working concerns from planning acquisitions to management.”

—then-Secretary of Defense, Richard B. Cheney, 1990

ORGANIZATION OF DoD'S ENVIRONMENTAL PROGRAM

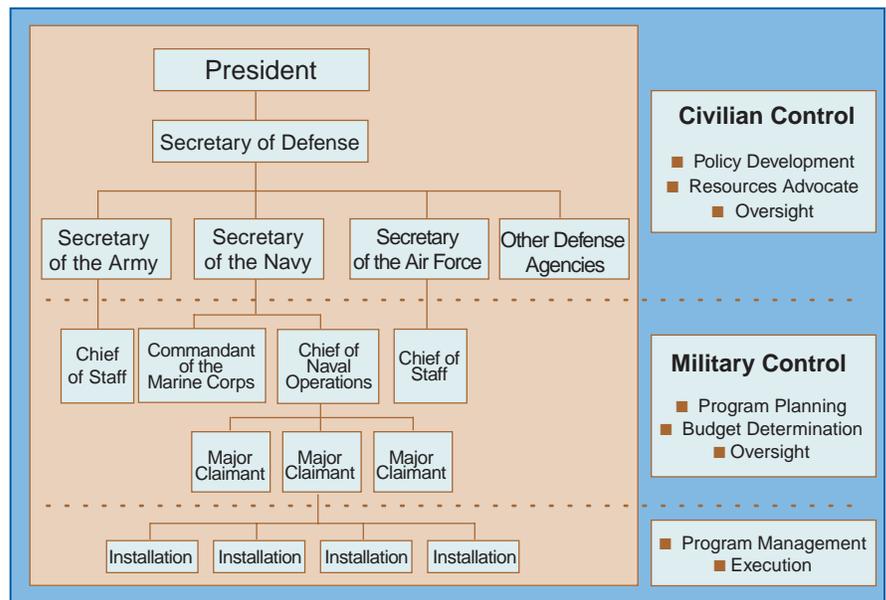
Today, DoD's environmental program consists of three broad tiers that correspond to its major environmental responsibilities. Figure 1 illustrates this structure. The highest tier is the responsibility of the Office of the Secretary of Defense, the Secretaries of each Military Department (Departments of the Army, Navy, and Air Force), and the Defense Agencies (including the Defense Logistics Agency (DLA)). This tier addresses policy development, budget advocacy and guidance, and oversight of program execution.

The second tier is the responsibility of the DoD Component (Army, Navy, Marine Corps, Air Force, and DLA) headquarters and the operational major commands. This tier involves developing policy, program planning, determining budgetary requirements, and overseeing program execution. A DoD Component is one of the subordinate organizations that form a joint force. A joint force is usually organized with a combination of Military Services (the U.S. Army, U.S. Navy, U.S. Air Force, U.S. Marine Corps, and the U.S. Coast Guard) and functional components. A major command is a unit or units, an organization, or an area under the command of one individual.

The third tier is the responsibility of the individual installation commanders who address program management and execution.

The Defense Agencies, including DLA, play an important role in DoD's environmental management strategy. DLA is a combat-support agency that provides worldwide logistics support and related services throughout DoD, including supply distribution and inventory management. It procures,

Figure 1
DoD Peacetime Support Organization



stores, and distributes all bulk fuel for DoD and is responsible for the environmental management functions associated with these tasks. DLA is also the disposal agent for hazardous materials and waste, and centrally procures, stores, and manages DoD's stockpile of ozone depleting substances for mission-essential uses.

Appendix A provides contact information for the Office of the Deputy Under Secretary of Defense (Installations and Environment) as well as the environmental office for each DoD Component.

REORGANIZATION UNDER THE NEW ADMINISTRATION

When Donald Rumsfeld was sworn in as the 21st Secretary of Defense in spring 2001, he instituted several changes to meet the challenges of the future. The change that has most impacted the Environmental Quality Program is combining the responsibilities of the Office of the Deputy Under Secretary of Defense (Installations) and the Office of the Deputy Under Secretary of Defense (Environmental Security) into the Office of the Deputy Under Secretary of Defense (Installations and Environment) (ODUSD(I&E)). This reorganization will help DoD's environmental programs be more effective.

Although the Installations and Environment structure has changed, its vision remains the same. The ODUSD(I&E) and DoD are committed to protecting human health and the environment through effective conservation of natural and cultural resources, the use of pollution prevention techniques and through compliance with environmental laws and regulations. By reducing the total ownership costs of the military infrastructure, such as roads, vehicles, buildings, and weapons, while providing focused investments in such areas as pollution prevention and technology, DoD efficiently supports the U.S. Armed Forces, whether training within the United States or protecting American interests abroad, and ensures secure, safe, and environmentally sound living and working conditions.

LEADERS OF DoD'S ENVIRONMENTAL PROGRAM

With the reorganization of the ODUSD(I&E) came new leaders. These new leaders are committed to implementing the new mission of the combined office, as well as their own departments; protecting America's interests at

home and abroad; ensuring that U.S. Armed Forces are ready to carry out their mission; being a leader in the international community and working closely with nations that share America’s values and goals to enhance DoD’s ability to protect the United States; and shaping, preparing, and responding to the changing requirements and international global security environment of the 21st century.

As the new DUSD(I&E), Mr. Raymond F. DuBois, Jr. is responsible for overseeing and guiding policy for managing DoD’s installations, which occupy more than 46,000 square miles worldwide, with 600,000 structures valued at more than \$600 billion. Mr. DuBois is the principal staff assistant and advisor to Mr. E.C. Aldridge, Under Secretary of Defense (Acquisition, Technology, and Logistics), and the Secretary and Deputy Secretary of Defense for matters concerning DoD’s oversight and policy guidance for DoD Installations and Environment programs. This oversight and policy guidance includes—

- Integrating installations and environment concerns into the weapon systems acquisition process
- Privatization and outsourcing initiatives
- Ensuring greater reliance on commercial products and practices
- Managing infrastructure budgets and policies, including housing, energy, historic properties, base realignment and reuse, and economic adjustment
- Safety and occupational health policies and programs
- Environmental restoration at active and closing bases
- Compliance with environmental laws
- Conservation of natural and cultural resources, pollution prevention, environmental technology, fire protection, and explosives safety.

The goals of the ODUSD(I&E) are to—

- Rationalize DoD’s infrastructure to its force structure
- Sustain, restore, and modernize the facilities needed to support DoD’s mission



A plane captain from the “Mighty Shrikes” of Strike Fighter Squadron Nine Four washes the canopy of an F/A-18 Hornet aboard the USS Carl Vinson. When not flying planes, plane captains are responsible for the general care and upkeep of their particular aircraft, including supervising refueling, rearming, and movement on the deck.

- Ensure military members have access to quality, affordable housing and communities
- Restore and protect the natural environment of DoD installations
- Protect the health and safety of military members where they work and live
- Ensure the sustainability of ranges and other training areas in the face of civilian growth and encroachment
- Maximize the competition of commercial functions to ensure the best value
- Provide economic adjustment assistance to state and local governments impacted by DoD activities
- Ensure access to secure, safe, reliable, and efficient utility systems; effective and efficient energy and water procurement; and maximum energy and water conservation.

As the new Assistant Deputy Under Secretary of Defense (Environment) (ADUSD(E)), Mr. John Paul Woodley, Jr., is the principal staff assistant and advisor to the DUSD(I&E) for all matters related to environment, safety, pest management and disease control, and other related programs for Defense activities worldwide, including the interrelationship between the environment and DoD's military missions.

The ADUSD(E) serves as DoD's liaison with the President's Council on Environmental Quality, the U.S. Environmental Protection Agency (EPA), and state environmental offices and also represents DoD on the White House Environmental Policy Review Group and similar councils and task forces. The ADUSD(E)'s priorities include assessing DoD's environmental readiness, the Pollution Prevention Program, and other key Defense programs regarding environmental quality. Mr. Woodley's responsibilities that are specifically related to the Environmental Quality Program encompass the following—

- Develop policy and provide program oversight for environmental planning, education and training, compliance, pollution prevention, conservation, and environmental justice

- Promote pollution prevention in reducing the total ownership cost of weapon systems and installations
- Provide program oversight of DoD's government-to-government relationships with Federally recognized tribes
- Ensure access to land, sea, and air within the United States for training and exercises by managing training lands
- Represent the DUSD(I&E) to Federal and state agencies, intergovernmental organizations, Indian tribes, international entities, and nongovernmental organizations
- Administer the Native American Lands Environmental Mitigation Program.

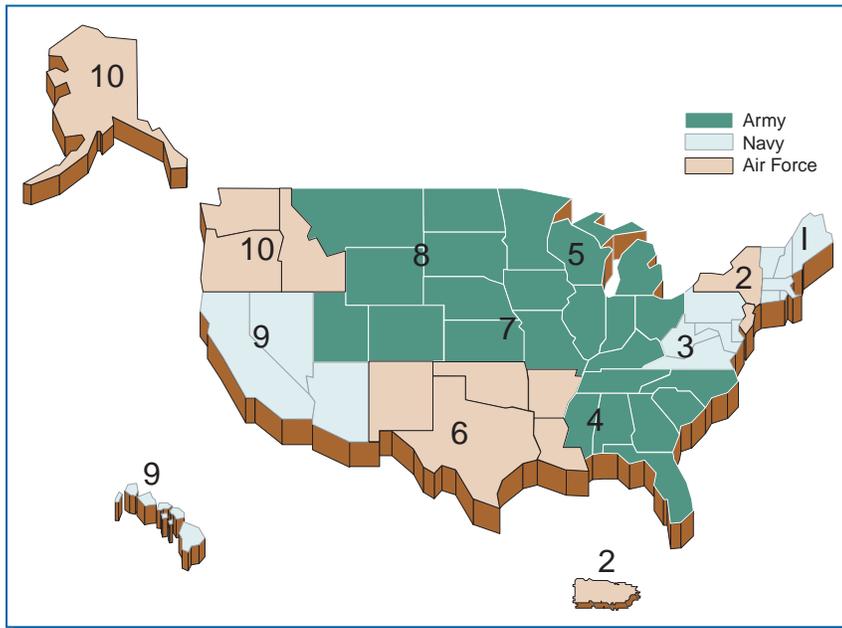
EXECUTIVE AGENTS AND REGIONAL ENVIRONMENTAL COORDINATORS

Communicating and cooperating with Federal, state, and local environmental and regulatory agencies is one of the keys to maintaining and improving DoD's environmental performance, as well as ensuring that military readiness and the mission are maintained. To effectively communicate and cooperate with these entities, DoD established executive agents (EAs) and regional environmental coordinators (RECs) to identify and resolve issues between installations and regulators. EAs and RECs help ensure that every installation responds, in a consistent and timely manner, to new laws and regulations.

In 1996, DoD issued Instruction 4715.2, "DoD Regional Environmental Coordination," which implemented policy, assigned responsibilities, and prescribed procedures for establishing and operating a program for regional environmental coordination within DoD. The instruction also established DoD regional EAs and RECs and Component RECs, each with specific responsibilities for carrying out and promoting DoD's environmental programs.

DoD assigned EAs to each of EPA's ten regions (Figure 2). In each region, the Military Service with the largest presence in that region is the EA. The Department of the Army is the EA for Regions 4, 5, 7, and 8; the Department of the Navy is the EA for Regions 1, 3, and 9; and the Department of the Air Force is the EA for Regions 2, 6, and 10. An EA's primary responsibilities are to

Figure 2
DoD Regional Executive Agents



coordinate environmental matters within their assigned region, and to update DoD headquarters on regional matters and issues that might require further policies or decisions.

Each regional EA appoints a REC to monitor and participate in day-to-day environmental activities within the region. Each DoD Component within the region also appoints their own Component REC. RECs play a key role in DoD’s environmental quality strategy by conducting outreach activities and building partnerships with environmental

regulators and the public. They are also responsible for ensuring consistent performance and enforcement throughout the region and for reporting regional activities and trends to headquarters. DoD’s regional RECs—

- Monitor and coordinate the consistent interpretation and application of DoD’s environmental policies within the region
- Establish and maintain a list of DoD Component RECs and regional, state, and local environmental regulatory agency points of contact
- Monitor regional, state, and local legislative, regulatory, and enforcement activities (environmental or otherwise) and inform the DoD Component RECs of developments and lessons learned
- Monitor and coordinate training activities among the DoD Components to promote the most effective use of DoD Component and regulator assets, courses, and expertise.

One of the DoD Component RECs’ most important functions is to monitor and communicate DoD’s position on proposed regional, state, and local legislation and regulations to the appropriate regulatory authorities. The Component RECs monitor and coordinate the consistent interpretation and

application of DoD's environmental policies at their Component installations within the region, and elevate issues of interest or those requiring EA- or DoD headquarters-level attention to the DoD REC; serve as the focal point for information and coordination of issues related to their Component's activities in the region; provide semi-annual summaries of their Component's regional activities, success stories, and issues to the DoD REC; participate in regional meetings with other DoD Components and regulators; and monitor and coordinate training activities with the DoD REC. The Compliance chapter contains a more detailed discussion of the RECs' role in monitoring the development of regulations and communicating with regulators.

DoD'S ENVIRONMENTAL QUALITY PROGRAM

DoD's Environmental Quality Program focuses on three main areas—pollution prevention, compliance, and conservation. These areas directly support DoD's mission by protecting resources critical to maintaining military readiness, and supporting the mainstay of DoD's mission—deterrence, or the capability to fight and win.

POLLUTION PREVENTION

Pollution is inherently wasteful of limited resources. Pollution prevention, the cornerstone of DoD's Environmental Quality Program, improves processes, reduces costs, and eliminates waste. By preventing pollution, DoD recognizes its obligations to be a good steward and a good neighbor. DoD's program goals for pollution prevention are to comply with all legal requirements by promoting pollution prevention as the preferred means of achieving environmental compliance; protect human health and the environment by reducing the use of hazardous materials, and reduce costs by integrating cost-effective pollution prevention practices into all DoD operations and activities, while ensuring the performance of DoD's mission.

COMPLIANCE

The objective of the Compliance Program is to ensure effective and efficient compliance with existing Federal, state, and local environmental laws and regulations. The program ensures that vital mission needs are not put at risk

because of fines and penalties DoD must pay as a result of not complying with environmental regulations. The Compliance Program also works to provide clean water, reduce air emissions, and maintain access to land for training and operations. As new laws or regulations develop, DoD responds swiftly by providing guidance for compliance.

ENVIRONMENTAL PLANNING

Environmental planning is the process of identifying and considering environmental factors that impact, or are impacted by, planned DoD activities and operations, and the appropriate response and associated budget requirements. Environmental planning is crucial to identifying opportunities to reduce or eliminate threats to human health and the environment, and to lessen potentially negative effects on an installation's ability to perform its mission. Early in the planning process, DoD must consider significant environmental problems and issues associated with its activities to allow enough time to consider alternatives, take different courses of action, or adopt strategies to avoid adverse environmental consequences.

ENVIRONMENTAL JUSTICE

DoD recognizes the importance of fostering safe working and living environments for its military and civilian employees and its neighboring community members. To this end, DoD develops initiatives to ensure that all communities and people across the nation live in a safe and healthy environment. DoD is committed to balancing mission requirements with the environmental concerns of all communities. Since many minority and low-income populations are located near military installations, DoD wants to ensure that these communities are not harmed by its activities.

SUSTAINABLE RANGE MANAGEMENT

To effectively protect military personnel and civilians at home and abroad, DoD must train its troops and practice using its weapons to ensure that they are ready to respond immediately to any threat. These training and testing opportunities include real-time testing of tactics, techniques, procedures, equipment, and personnel. Ranges are the stages where these test and

training exercises take place. DoD's Sustainable Ranges Initiative involves developing life-cycle management techniques for military ranges by managing the land and the military's use of the land.

CONSERVATION

DoD's Conservation Program has two primary goals—the first is to protect access to the land, sea, and airspace necessary for realistic testing and training exercises; the second is to protect the valuable natural and cultural resources of these areas for the benefit of current and future generations. The Conservation Program supports the military mission by providing for the sustained use of land, sea, and air resources; protecting valuable natural and cultural resources for future generations; meeting all legal requirements; and promoting compatible multiple uses of those resources.

AMERICAN INDIAN AND ALASKA NATIVE INITIATIVES

Under its Federal Indian trust responsibility, DoD has an obligation to address environmental impacts on Indian lands resulting from its activities. DoD's American Indian and Alaska Native Policy supports this trust responsibility, as well as the principles of consultation, tribal self-governance, and government-to-government relations between the Federal government and tribes. To implement the policy, DoD is actively pursuing cooperative endeavors with American Indian and Alaska Native tribes to mitigate the negative impacts of prior activities, minimize the effects of current activities, and prevent future impacts.

DEFENSE ENVIRONMENTAL COOPERATION

The ODUSD(I&E) engages in military-to-military cooperation with the ministries of Defense of more than 30 nations to reduce regional tensions and strengthen military ties. Environmental cooperation activities enable DoD to better define its roles, missions, and functions to meet these challenges. International cooperation activities and partnering efforts contribute to interoperability; maintain access to resources, including air, land, and sea, for training and readiness; and foster a global military environmental ethic. Through bilateral and multilateral efforts, DoD can better evaluate, prioritize, and more effectively meet military environmental needs. At the same time, DoD's environmental activities

reinforce efforts by militaries in newly democratic states to adjust to concepts such as civilian oversight, public accountability, openness, and cooperation with civilian agencies.

CALENDAR YEAR 2000 TOXIC RELEASE INVENTORY REPORT

The Toxic Release Inventory (TRI) Report provides a valuable source of information about toxic chemicals that are released into the environment or transferred off-site. The Emergency Planning and Community Right-To-Know Act of 1986 and the Pollution Prevention Act of 1990 mandated that EPA develop and maintain a publicly accessible toxic chemical database. This database, known as the TRI, contains information on—

- What chemicals were released into the local environment during the preceding year
- The quantity of each chemical released into the air, water, and land in that year
- The quantity of chemicals transported away from the reporting facility for disposal, treatment, or recycling
- How chemical wastes were treated at the reporting facility
- The efficiency of waste treatment.

Citizens, businesses, and governments can use this information to work together to protect the quality of the land, air, and water.

OVERSEAS OPERATIONS AND ENVIRONMENTAL ACTIVITIES

DoD conducts operations worldwide to support U.S. national security interests. Overseas operations have the potential to affect the natural environment of the host nation, or the health and safety of DoD personnel, local national employees, and dependent families. The effects can have a significant impact on the health of personnel, readiness, and continued access to an installation. Therefore, success in managing environmental stewardship at DoD installations overseas has a direct relationship to DoD's ability to support national security interests.

DoD acts with care in the global commons and within the jurisdiction of a foreign nation. DoD must respect treaty obligations and the sovereignty of other nations, and exercise restraint in applying U.S. laws within foreign nations unless Congress has expressly provided otherwise.

STATUS OF FORCES AGREEMENTS

A Status of Forces Agreement (SOFA) is a bilateral or multilateral agreement that defines the legal position of a visiting military force deployed in a friendly nation. The agreement describes how the authorities of a visiting force may control members of that force. The agreement also describes how the visiting force will comply with local laws and local authorities. Generally, SOFAs obligate U.S. Armed Forces to respect the laws of the nation within which they operate.

Representatives from the United States and the Republic of Korea (ROK) signed a revised SOFA in March 2001. The revised SOFA establishes the conditions under which the U.S. military operates in Korea, including environmental provisions. Specifically, the SOFA states that U.S. Armed Forces stationed in Korea will respect Korean environmental laws and regulations, and that the ROK will consider the safety of U.S. military and civilian personnel and their families. Based on this provision, both sides signed a memorandum of special understanding that includes cooperative measures for environmental protection.

The United States and ROK expressed mutual understanding that this SOFA revision reflects both nations' interests in a wide range of fields, including the environment. The revised SOFA will, in the long term, contribute to maintaining a stable environment for U.S. troops stationed in the ROK and will further enhance the alliance between the ROK and the United States.

DoD INSTRUCTION FOR OVERSEAS ENVIRONMENTAL OPERATIONS

In accordance with DoD Instruction 4715.5, "Management of Environmental Compliance at Overseas Installations," the DoD Components rely on the environmental standards established for each host country as validated budgetary requirements. According to the Instruction, the DoD Components—

- Must not dispose of wastes overseas that are generated by overseas DoD actions and that are considered hazardous under either U.S. law or host-nation standards without the agreement of the nation where the disposal takes place.
- Must use cooperative solutions for environmental facilities or services (e.g., waste storage and disposal facilities, solid waste collection and disposal services, and water or wastewater treatment works) where they are economically advantageous and consistent with mission requirements.
- Shall use commercially proven solutions, where possible, to achieve, maintain, and monitor compliance. Where solutions do not exist, DoD will promote the development and use of innovative technologies to reduce or treat pollutants, where economically advantageous and consistent with mission requirements.
- Must regularly assess environmental compliance at overseas installations. DoD will promptly correct any environmental violations discovered and remedy any harm done.

These requirements are considered functionally equivalent to environmental standards established under U.S. law. The instruction also establishes a DoD Executive Agent (EA) for each country. For example, the Navy is the EA for Italy.

OVERSEAS ENVIRONMENTAL BASELINE GUIDANCE DOCUMENT

The Overseas Environmental Baseline Guidance Document (OEBGD) contains implementation guidance, procedures, and criteria for environmental compliance at DoD installations outside the United States, and its territories and possessions. DoD published a revised guidance document in March 2000.

The OEGBD includes specific environmental criteria DoD uses to develop Final Governing Standards (FGS). All DoD installations use FGS in the host nations concerned. In establishing the FGS, the OEGBD provides the default environmental protection standards.

FINAL GOVERNING STANDARDS

For each country where DoD maintains substantial installations, the DoD EA establishes Final Governing Standards, a comprehensive set of nation-specific environmental provisions. These provisions typically include technical limitations on effluent discharges or a specific management practice. DoD develops these standards by comparing compliance requirements in host-nation treaties, laws, contracts, and other agreements, including SOFAs, against DoD's OEGBD. DoD adopts the requirements that are most protective of human health and the environment. In the absence of host-nation environmental requirements, DoD uses the OEGBD as the FGS for that country.

The standards contained in the FGS (or the OEGBD in countries where no FGS have been established) are accorded the "highest priority for funding and execution." DoD Components establish their own funding priorities within that general imperative. DoD policy requires all other FGS requirements to be programmed and budgeted over the length of the first Program Objectives Memorandum (POM) cycle following the effective date of DoD Instruction 4715.5 or the effective date of the revised OEGBD (March 2000). The POM is a process used to analyze the Fiscal Year (FY) Defense Plan, which is a list of the resource requirements for the next six years. The standards receive funding in the current or next fiscal year if failure to comply with them would result in one or more of the following—

- An imminent and substantial threat to human health
- A direct threat to ongoing U.S. operations or U.S. access to an overseas base or installation
- A U.S. default on a standard directly applicable to U.S. overseas operations in a basing agreement, SOFA, or other international agreement.

FY 2001 BUDGET EXECUTION

During FY 2001, DoD invested \$200 million in Environmental Quality programs overseas. This amount is similar to the \$203 million that DoD invested in FY 2000. In FY 2001, DoD invested approximately \$20 million to clean up past contamination, \$148 million to ensure that current operations meet environmental standards, \$25 million to prevent pollution, and \$7.6 million to conserve natural and cultural resources.

DoD identified the amounts invested overseas for the past four years in the three Environmental Quality areas—pollution prevention, compliance, conservation and investments in cleaning up past contamination.

FY 2003 BUDGET

The FY 2003 Environmental Quality Program budget includes a request for \$211 million for environmental activities that DoD will conduct overseas. This amount includes approximately \$18 million to clean up past contamination, \$156 million to comply with environmental standards, \$33 million to prevent pollution, and \$4 million for conservation initiatives.

FUTURE DIRECTIONS—ENVIRONMENTAL MANAGEMENT SYSTEMS

DoD's Environmental Quality Program traditionally has focused on three areas—compliance, pollution prevention, and conservation. With the signing of Executive Order (E.O.) 13148, "Greening the Government through Leadership in Environmental Management," this focus began to broaden. E.O. 13148 makes the head of each Federal agency responsible for ensuring that each agency takes all necessary actions to integrate environmental accountability into day-to-day decision-making and long-term planning processes, across all agency missions, activities, and functions. The E.O. also requires Federal agencies to—

- Assess their existing environmental management programs by October 31, 2001
- Implement a pilot environmental management system (EMS) by April 21, 2002
- Implement EMSs at all appropriate facilities by December 31, 2005.

An EMS, as described in the E.O., provides an overarching framework for managing the many facets of the Environmental Quality Program. An EMS helps identify the environmental aspects of the mission, highlights areas of risk, promotes pollution prevention solutions, and tracks improvements in environmental quality. An EMS is designed to improve operational efficiency while reducing environmental risk.

As the White House was developing E.O. 13148, DoD's Environmental Quality Program office was designing and implementing a voluntary pilot study of EMS implementation. A working group, chaired by the ADUSD(E), monitored this pilot study. The two-year pilot study officially concluded in February 2000. Each of the DoD Components conducted, completed, or updated assessments of their environmental management programs during 2001. In addition, the working group began drafting a DoD policy on EMS implementation that is currently in final review. At the same time, the DoD Components also drafted EMS implementation policies.

WHAT IS AN EMS?

An EMS is a systematic approach to addressing environmental aspects of an organization's activities. It is a formal management framework intended to help an organization achieve internal environmental goals by continuously improving environmental performance, increasing the efficiency of operations, and enhancing regulatory compliance. The elements of a successful EMS are—

- Public commitment by senior leaders to environmental compliance, pollution prevention, and continual improvement of the EMS
- Integrated planning, including goals and targets for reducing environmental impacts and supporting mission priorities
- Operations to ensure attainment of those goals and targets, and training to ensure individual competence and responsibility
- Procedures for self-evaluation and corrective action, including identifying priority needs in budget processes.

An EMS is valuable for DoD in a variety of ways, such as—

- Providing a consistent, cost-effective environmental management framework
- Reducing risks of regulatory noncompliance by tracking requirements
- Providing a basis for discussing flexibility in regulatory interpretations
- Providing a basis for self-correction and mitigating fines and penalties if noncompliance occurs
- Assisting bases and programs in focusing on the most important, least costly environmental aspects
- Demonstrating reliable environmental protection to help maintain stakeholder confidence.

EMS AND DoD'S MISSION

By systematically identifying and reducing risks, integrating environmental management into overall mission management, and using environmental programs to enhance the mission, EMSs can enhance mission performance. EMSs can reduce the costs of compliance, encourage range sustainment, and reduce encroachment. EMSs provide a framework for integrating environmental, safety, and occupational health programs into the overall mission and institutionalizing pollution prevention and risk management. An EMS is also a framework to encourage DoD to be proactive rather than reactive by promoting innovation and improvements in employee ownership for quality, personnel empowerment, pollution prevention, and compliance.

The most important aspects of using EMSs within DoD are that they can protect and preserve the resources the Department manages, sustain public support, and reduce program costs over the long term. DoD's goal is to establish robust systems that sustain compliance; avoid risk and pollution; inform the public; and promote interoperability with the DoD Components, the militaries of other nations, and industry. A comprehensive EMS program will help DoD meet the challenge of sustaining the national defense training landscape.

FORT LEWIS DEPARTMENT OF PUBLIC WORKS RECEIVES EMS CERTIFICATION

The Department of Public Works (DPW) at Fort Lewis, Washington, received official EMS certification in ISO 14001 in September 2000. Fort Lewis is the first Army Installation to achieve external third party certification under the ISO standard. The DPW has established an internal Web site, which includes the EMS protocol and other information on the progress of the initiative.

By implementing the ISO 14001 process, the Fort Lewis DPW realized many improvements throughout its organization. Specific improvements included creating and using written procedures, implementing a document control system, and improving teamwork and communication between divisions.

Using EMSs will also help DoD achieve the goals established in *Joint Vision 2010*—the concept for how the Department will channel the vitality and innovation of its people and use technology to achieve new levels of effectiveness in joint warfighting. *Joint Vision 2020* builds upon and extends the concepts established in *Joint Vision 2010* to guide the continuing transformation of America's Armed Forces. According to these two reports, commanders will be expected to reduce costs, environmental disruptions resulting from training, and collateral damage in combat. EMSs will help commanders achieve these objectives.

ISO CERTIFICATION

The International Organization for Standardization (ISO) is a network of national standards from 140 countries who work in partnership with international organizations, governments, industries, businesses, and consumer representatives. ISO 14000, of which ISO 14001 is just one, is a group of standards that addresses EMSs, environmental auditing, environmental labeling, environmental performance evaluations, and life-cycle assessment. DoD is committed to incorporating a quality-based systems approach to manage its environmental activities. Since the Department has a mature environmental program, ISO 14001 presents an opportunity to identify and address any gaps that remain in an installation's environmental management program.

Yuma Proving Ground, Arizona, was among DoD's ISO 14001 Implementation Pilot Program sites. The benefits of implementing this particular EMS process at Yuma included re-designing the pollution prevention program;

restructuring requirements for the environmental support services contractor; reorganizing information, document files, and controls; and adopting a closed-loop system for compliance, enforcement, and tracking non-conformities.

DoD recognizes the importance of continually addressing environmental changes and challenges and continues to move beyond compliance to integrate stewardship and environmental protection into every aspect of its operations. Well-established EMSs will help ensure full integration of these elements into all of DoD's policies and practices.