Introduction

A successful compliance program ensures that the Department of Defense (DoD) can successfully implement its mission in an uninterrupted and cost-effective manner, while protecting the safety and health of DoD personnel and their families. The objective of DoD's Compliance Program is to ensure effective and efficient compliance with environmental laws and regulations. The Compliance Program absorbs the largest percentage of the Fiscal Year (FY) 2003 Environmental Quality budget request, at 81 percent.

GOALS

The goal of the Compliance Program is to maintain compliance with all Federal, state, and local environmental laws and regulations. As new laws and regulations are developed, DoD responds swiftly by providing compliance guidance. This guidance focuses on developing efficient compliance practices and identifying pollution prevention opportunities. Figure 18 lists key environmental regulations and any corresponding recent amendments.

Supporting goals include developing and implementing budgeting tools, protecting mission readiness from compromise during the development of laws and regulations, and ensuring that laws and regulations provide achievable protection at a reasonable cost. Ensuring that regulators understand the implications of their decisions on mission readiness or training ability is critical during the development of regulations.

STRATEGY

DoD policy clearly supports pollution prevention as the preferred method to achieve compliance. To maximize returns on investments in environmental compliance, DoD has developed a program to address the full spectrum of

COMPLIANCE



Figure 18
Key Environmental Laws and
Most Recent Amendments

LAW	DESCRIPTION	MOST RECENT AMENDMENT
Resource Conservation and Recovery Act	Regulates the generation, transportation, storage, treatment, and disposal of hazardous waste.	1986
Clean Water Act	Regulates hazardous water pollutants at their source through National Pollution Discharge Elimination System permits.	1987
Clean Air Act	Regulates hazardous air pollutants at their source and through ambient air quality measures.	1990
Safe Drinking Water Act	Establishes national standards for safe drinking water supply systems in the United States.	1996

the compliance life-cycle, from legislative and regulatory development through implementation of regulations. This program includes determining compliance requirements and measuring progress in meeting these requirements. As DoD reviews and assesses its own progress, it makes adjustments to maximize compliance.

Highlights of Activities During FY 2001

DoD's Compliance Program continues to demonstrate success, as the following performance metrics for Fiscal Year 2001 illustrate—Clean Water Act (CWA)

and National Pollutant Discharge Elimination System (NPDES) permits, Consumer Confidence Reports (CCRs), compliance enforcement actions, and fines and penalties.

Monitoring Legislation

One of the most important functions of the DoD and Component regional environmental coordinators (RECs) is to monitor legislation to ensure compliance with all applicable laws and regulations—both old and new. To ensure compliance, the RECs monitor state and local environmental legislation. However, the abundance of Federal and state environmental regulations and legislation can be difficult to monitor and evaluate at the installation or command level. Any oversight can result in increased compliance costs, violations resulting in potential fines and penalties, or impacts to DoD's ability to maintain mission readiness.

Legislative and regulatory reviews are one of the most valuable tools DoD has in maintaining compliance. Effective reviews and procedures by the RECs ensure that DoD's interests are represented in the state and local environmental legislative and regulatory processes; provide an "early

warning" system for determining state and local regulatory and legislative impacts; and support development of DoD and Component policy, guidance, and regulations to implement environmental requirements.

During the 2001 legislative year, the Region 3 REC monitored almost 7,000 bills introduced in the states of Virginia, Maryland, and West Virginia. Of 2,645 bills introduced in the 2001 Virginia General Assembly, the REC reviewed 27 bills (1 percent) relating to environmental matters. In Maryland, the REC reviewed 38 environmental bills, only 1.5 percent of the 2,365 bills introduced. The REC also monitored West Virginia's 1,960 bills for environmental impact.

The RECs have noted that legislation is often developed and passed based on a limited knowledge or understanding of the potential impact on the military and readiness. Therefore, the RECs communicate with legislators and the staff that drafts bills to educate them on the impact a proposed bill may have on DoD's mission. In addition, the RECs increase awareness among legislators and the community about DoD's environmental programs and initiatives.

WATER QUALITY

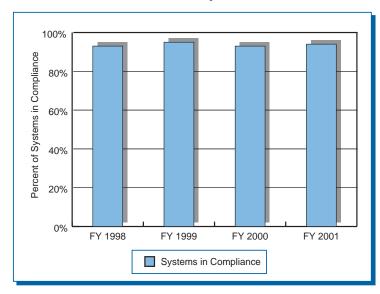
Water quality is important to DoD and the success of its mission—ensuring that drinking water is of the highest quality ensures that DoD troops, their families, and other personnel are healthy and able to perform their important functions. Therefore, the Department works hard to comply with all relevant regulations governing the quality of drinking water and other bodies of water. Water quality standards are adopted by each state and approved by the U.S. Environmental Protection Agency (EPA). The standards describe the way a particular body of water may be used and establishes the water quality criteria that must be met to protect designated uses.

COMPLIANCE WITH CLEAN WATER ACT PERMITTED SYSTEMS

The Clean Water Act is the principle law governing pollution control and water quality of the nation's waterways. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Originally enacted in 1948 as the Water Pollution Control Act, Congress has amended it numerous times.

DoD is working to achieve 100 percent compliance with the CWA, which includes the NPDES permit system. DoD currently holds 1,996 CWA permits for 2,944 systems, including domestic and industrial wastewater treatment plants and storm water treatment systems. In FY 2001, 94 percent of DoD's wastewater systems were in compliance with their CWA permits (Figure 19).

Figure 19
DoD Compliance with CWA
Permitted Systems



In FY 1998, DoD set a goal of devoting at least 15 percent of its CWA compliance budget to pollution prevention efforts. DoD originally projected that it would reach this goal by 2004. Instead, DoD met this goal in early FY 2001—three years earlier than projected.

COMPLIANCE WITH NPDES PERMITTED SYSTEMS

As authorized by the CWA, NPDES permits regulate point (identifiable, stationary) sources that discharge pollutants into waters of the United States. Industrial, municipal, and other

facilities must obtain NPDES permits if their discharges directly enter surface waters.

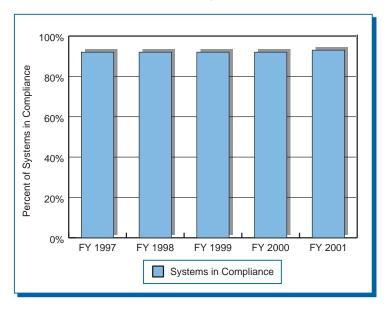
DoD currently holds 1,338 NPDES permits for 2,096 systems, including domestic and industrial wastewater treatment plants and storm water

New Initiatives to Decrease Discharge Permits

The U.S. Army Environmental Center (USAEC) Compliance Branch Wastewater Program participated in a recent Army audit of CWA permits. One of the key issues USAEC identified during this audit was that the Army may not need a large number of discharge permits it currently has, particularly permits for storm water discharges. As a result of this effort, several major Army commands are reviewing the need for these permits and, where appropriate, are requesting waivers from permit requirements. It is anticipated that this effort will reduce the number of discharge permits the Army holds by several hundred, as well as reduce the cost of obtaining and maintaining compliance with these permits.

treatment systems. NPDES permits are a subset of CWA permits; therefore, DoD's compliance rate with NPDES permits is included in the overall compliance rate for CWA permits. For each of the past four years, DoD has achieved greater than 90 percent compliance with its NPDES permits. In FY 2001, 93 percent of DoD's wastewater systems were in compliance with their NPDES permits (Figure 20). A variety of factors may contribute to a given system's temporary noncompliance with its NPDES permit. The majority of these incidents are administrative issues, such as late reporting to regulators, rather than system operating errors.

Figure 20
DoD Compliance with NPDES
Permitted Systems



COMPLIANCE WITH SAFE DRINKING WATER ACT REQUIREMENTS

DoD drinking water systems are crucial to military readiness. Any compromise of the integrity of these systems or the quality of the water supply threatens the health of the men, women, and children living on, working on, or visiting DoD installations.

The Safe Drinking Water Act (SDWA) was enacted by Congress in 1974, and amended in 1986 and 1996. The purpose of the law is to protect the

HYDROLOGY SURVEY AT MCAS CHERRY POINT

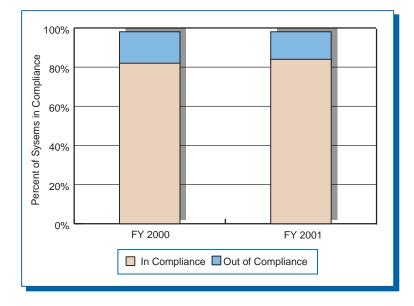
Marine Corps Air Station (MCAS) Cherry Point, North Carolina, recently completed a two-year project to map its complete surface and subsurface drainage system. The land mapped covers an estimated 9,000 acres that drain to Slocum and Hancock Creeks and the Neuse River. Although MCAS Cherry Point originally initiated the project to support its Federal NPDES storm water permit for discharges to surface waters, it has already proved valuable in project permitting, planning, and programming. As a condition of its storm water permit, MCAS Cherry Point must understand the complete surface drainage system to track the volume and quality of storm water leaving the Air Station, to identify contaminant pathways as they enter primary surface waters surrounding the installation, and to define general watershed boundaries based on soils and surface topography. This mapping effort is one of the first storm water mapping efforts completed in North Carolina.

population by maintaining drinking water and groundwater standards. EPA has set national drinking water standards for public water systems, which includes DoD's drinking water systems. These standards apply to water contaminants including physical, chemical, biological, and radiological constituents and properties.

The SDWA requires any operator of a drinking water system, including DoD, to publish annual Consumer Confidence Reports to promote public awareness of drinking water quality. Operators send reports to all households for which they provide drinking water. CCRs detail the quality of drinking water throughout the previous year. All operators of community water systems, including DoD, must publish their CCR by July 1 of each year.

DoD has 275 drinking water systems, serving more than 2.2 million people, which are subject to CCR requirements. The rest of DoD's population obtains water from other municipal water systems. During Calendar Year

Figure 21
Drinking Water System Compliance
with CCR Requirements



2000, approximately 16 percent of DoD's systems were out of compliance with drinking water requirements at some point during the year (Figure 21). DoD brought most of these systems back into compliance quickly and continues to make every effort to ensure that these systems are always in compliance to protect personnel.

DoD is committed to protecting the health of its personnel by providing safe drinking water. However, the challenge to do so continues as drinking water systems age and infrastructure deteriorates. Interim solutions are in place to address any immediate health concerns. Where

necessary, DoD has developed long-term plans and projects to eliminate possible future health effects related to systems that are not in compliance.

UNIFORM NATIONAL DISCHARGE STANDARDS

The FY 1996 Defense Authorization Act amended the Clean Water Act and authorized DoD and EPA to jointly develop regulations defining Uniform National Discharge Standards (UNDS) for non-sewage liquid discharges for armed forces vessels. UNDS law is modeled under the existing Section 312 of the Clean Water Act that regulates vessel sewage discharge. Enacted in 1972, Section 312 requires EPA to set national standards of performance for marine sanitation devices (MSDs), which are devices used to prevent the discharge of untreated or inadequately treated sewage. Section 312 further requires the Secretary of Defense, in the case of DoD vessels, to promulgate regulations regarding the design, construction, installation, and operation of MSDs that will meet EPA standards.

UNDS discharges are all non-sewage liquid discharges incidental to the normal operation of Armed Forces vessels.

The UNDS law, codified in Section 312(n) of the CWA, extended the Section 312 model to ship liquid discharges other than sewage. Section 312(n) mandates joint rulemaking by the Secretary of Defense and the EPA Administrator. The Secretary of Defense delegated his authority under 312(n) to the Secretary of the Navy.

One of the purposes of UNDS is to "enhance the operational flexibility of vessels of the Armed Forces..." UNDS will ultimately protect ship Commanding Officers from having to interpret different rules for each port and deal with the potential liability since states will not be able to regulate separately vessel discharges. The UNDS law establishes a complex rulemaking process to address 25 discharges for 7,000 Armed Forces vessels across seven legislative factors. The law established seven factors for DoD and EPA to consider: 1) nature of the discharge; 2) environmental effects; 3) practicability of using a Marine Pollution Control Device (MPCD); 4) effect on the operation or operational capability of a vessel; 5) applicable U.S. law; 6) applicable international standards; and 7) costs.

A Marine Pollution Control Device (MPCD) may be either hardware or a management practice.

The Navy and EPA are using a phased approach to implement the UNDS requirements:

- Phase I, completed in June 1999, characterized 39 discharges. The characterization process included determination of flow rates, constituents, concentrations, mass loadings, and an assessment of the potential of each discharge to have an adverse environmental effect. Of the 39 discharges characterized, EPA and the Navy determined that 25 discharges were of sufficient environmental consequence that the use of an MPCD may be warranted.
- Phase II involves development of federal MPCD performance standards for each discharge determined in Phase I as requiring control.
- Phase III, the final phase of the UNDS rulemaking process, will entail promulgation of rules governing the design, construction, installation and use of the MPCDs established in Phase II.

The Navy and EPA have identified numerous potential MPCDs for evaluation during Phase II. The Navy and EPA evaluate each MPCD to determine whether the MPCD is sufficiently proven in the marine environment. The MPCDs passing the screening process then undergo detailed feasibility and environmental analyses on vessels that represent the range of different vessel types generating the discharges.

- The feasibility analysis requires the evaluation of the combined operational, practicability, and cost impacts.
- The environmental effects analysis involves multiple evaluations for each MPCD, including a comparison of constituent concentrations from the controlled discharge to Federal and State water quality criteria, identification of bioaccumulative contaminants of concern, and evaluation of discharge toxicity.

Lastly, information from these analyses serves as the basis for the development of performance standards.

Navy and EPA concluded that conducting these analyses for all 25 discharges at the same time is not practical and are discussing conducting the analyses in "batches" of five discharges at a time. The Navy and EPA currently estimate

that the final rule for the first batch of five discharges will be completed in September 2005.

The Navy and EPA estimate that they will complete Phase III no later than two years after completion of Phase II. In the interest of the earliest possible promulgation of UNDS, Navy and EPA are working together to expedite the rule development process without compromising appropriate scientific rigor and UNDS rulemaking procedures.

In FY 2001, the Navy and EPA completed development of the technical approaches for screening discharges, identifying appropriate vessels to use as the basis for analyses (referred to as vessel grouping), and conducting environmental effects analyses. For surface vessel bilgewater, small boat engine wet exhaust, and deck runoff, the Navy and EPA completed MPCD screens, identified appropriate vessel groups, prepared feasibility analyses, initiated modeling for environmental effects, and prepared environmental effect analyses.

FINES AND PENALTIES

DoD facilities must comply with Federal, state, and local environmental laws and regulations. These facilities may be subject to fines and penalties if found to be in noncompliance with these regulations. DoD makes every effort to maintain compliance while ensuring the success of the mission.

INCENTIVE-BASED COMPLIANCE

There is a growing trend within EPA and state inspection and enforcement programs toward incentive-based environmental compliance programs—that is, trying to avoid compliance violations. Many of these programs offer significant benefits for DoD installations and activities, including reduced monitoring, streamlined permitting and reporting, positive recognition, and lower frequency of compliance inspections.

EPA set an example for the states with the National Performance Track Program (NPTP). This program recognizes, motivates, and rewards top environmental performers who use a systematic approach to managing environmental responsibilities, extra efforts to reduce and prevent pollution, and good-neighbor actions.

FORT HOOD: A LESSON IN MAINTAINING COMPLIANCE

Fort Hood's outstanding compliance record has set a benchmark for the Army—for five successive years (1997-2001), Fort Hood received no findings from the Texas Natural Resource Conservation Commission RCRA multimedia inspection. Fort Hood covers 214,000 acres in central Texas and is the Army's premier warfighting installation. Proper attention to the environment today ensures that Fort Hood can perform its mission in the future.

All those who make up the Fort Hood community, including employees, are responsible for the safe, efficient use of scarce resources in meeting mission requirements. Fort Hood's objectives include establishing clear and understandable standards, defining responsibilities, updating and integrating management plans, and increasing environmental awareness. Fort Hood's environmental program is evaluated by environmental audits, command readiness and compliance inspections, and incentive awards. Evaluations provide the opportunity to identify areas of noncompliance, operational deficiency, or shortcomings and fix them before enforcement actions are taken.

Fort Hood's Compliance Program has received numerous awards, including the 1999 Secretary of the Army Environmental Security Award for Environmental Quality for overall environmental mission accomplishment and individual effort. In addition, the Texas Natural Resource Conservation Commission praised Fort Hood for its environmental stewardship efforts.

The NPTP opened the door for many states to establish or test their own programs. For example, the New Jersey Department of Environmental Protection (NJDEP) established "The Silver and Gold Track Program" in 1999. The program is made up of three levels—Silver Track, Silver Track II, and Gold Track. Membership benefits offer different degrees of regulatory flexibility and oversight based upon demonstrated capabilities and environmental performance. Naval Air Systems Command Lakehurst, New Jersey, is the only DoD facility so far to apply to the Silver Track Program. Lakehurst submitted a Silver Track application in October 1999, and received a letter of approval in May 2000. Lakehurst has since submitted a Community Outreach Plan and is developing an Environmental Management System Plan. NJDEP recently accepted Lakehurst into the Silver Track II Program.

ENVIRONMENTAL COMPLIANCE ASSESSMENT SYSTEM

In accordance with DoD policy, each DoD Component maintains a self-assessment program. The Army established its Environmental Compliance Assessment System (ECAS) in 1991 to assist Army commanders in attaining, sustaining, and monitoring compliance with Federal, state, and local environmental laws and regulations, as well as DoD and Army requirements.

CITY RECOGNIZES ROCK ISLAND ARSENAL FOR COMPLIANCE RECORD

The City of Rock Island, Illinois, honored Rock Island Arsenal (RIA) in February 2001 for a perfect compliance record in wastewater monitoring. This is the third time RIA has received the award. RIA pumps an average of 400,000 gallons of sewage daily from the arsenal to the city's treatment plant. RIA's discharge permit sets limits on the levels of certain chemicals and other contaminants found in the arsenal's sewage. To ensure compliance, the city conducts quarterly inspections of the arsenal's sewage system, and retains the right to revoke the permit if repeated violations occur. No violations occurred, and RIA fully complied with all provisions of the sewage treatment permit—a perfect record!

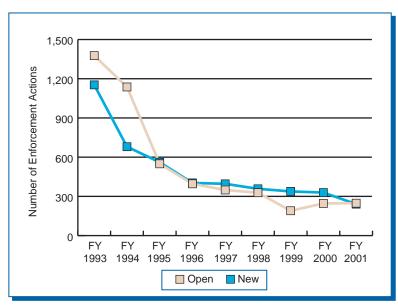
ECAS uses external and internal assessments to identify areas of noncompliance and deficiencies, provide suggestions for immediate and long-term corrective actions, and indicate resources necessary to implement these actions. The ECAS program has been instrumental in reducing the number of compliance issues at Army installations. As a result, the number of enforcement actions and fines has decreased.

Installations can use the ECAS Installation Corrective Action Plan (ICAP) to monitor not only the correction of ECAS findings, but also the results of any internal inspections. Continued use of the ICAP helps prevent repeat findings in the same area. It also helps communicate an installation's compliance status and environmental commitment to installation officials, and when necessary, to regulators and the public.

COMPLIANCE ENFORCEMENT ACTIONS

By issuing a compliance enforcement action, regulators give an installation the opportunity to correct a potential violation before assessing a fine or penalty. The number of open compliance enforcement actions has risen slightly since their lowest level in FY 1999 (Figure 22). The number of new compliance enforcement actions is at their lowest level since their peak in FY 1993, even as the number and frequency of state and Federal inspections remain high. Since FY 1993, open enforcement actions have declined 82 percent and new

Figure 22
Compliance Enforcement Actions



Number of Army Installations on EPA Significant Noncompliance List Continues 2-Year Decline

The number of Army installations on EPA's Significant Noncompliance (SNC) list has substantially decreased each quarter since early 1999. The quarterly list identifies facilities with recurring or outstanding noncompliance issues. An installation is placed on the SNC list based on EPA criteria. However, in many instances, an installation may be unaware that it is on the SNC list or it may have already resolved a noncompliance issue and is awaiting removal. An installation remains on the SNC list until EPA or state regulators officially determine that the installation has resolved the noncompliance issue.

The Army is working to reduce the number of installations on the EPA SNC list through a formal follow-up process. Each quarter, the USAEC reviews the list and works closely with the major commands to identify the root causes of violations. Installations with issues that can quickly be closed out are targeted for rapid resolution. As a result of cooperating with EPA headquarters staff and monitoring the list, USAEC and EPA have worked to remove an average of six installations per quarter from the SNC list.

enforcement actions have declined 75 percent. This success is due to the use of internal auditing to identify and correct areas of noncompliance before inspections occur.

Analysis of FY 2001 Fines and Penalties Data

Section 8149 of the FY 2000 Defense Appropriations Act required DoD to request and receive statutory authorization from Congress before using FY 2000 appropriations to pay fines and penalties, including conducting supplemental environmental projects. However, this provision did not affect DoD's obligation to comply with environmental statutes and regulations. The FY 2001 Defense Appropriations Act does not include this provision, allowing DoD to resume paying fines and penalties without congressional approval, which it has done. The Department makes it a priority to comply with environmental laws and regulations and further reduce any associated fines and penalties.

The amount of fines and penalties paid during FY 2001 increased 18 fold over the amount paid in FY 2000 (Figure 23). In fact, the majority of the fines and penalties that DoD paid in FY 2001 were originally assessed in FY 2000. A fine assessed in one year may not be paid until a later fiscal year. Therefore, the amounts paid are linked to the amount assessed in the original fine, regardless of the fiscal year assessed.

DoD pays fines either in cash or by conducting supplemental environmental projects (SEPs). A SEP is an environmental project in lieu of paying a fine; the project must improve, protect, or reduce risks to public health or the environment.

Appendix J, Summary of FY 2001

Environmental Quality Fines and Penalties Assessed and Paid, provides a list of the FY 2001 fines and penalties data, highlights trends over the past five years, and lists fines and penalties paid.

The FY 2001 National Defense Authorization Act requires DoD to produce a new, additional report on the history of

6,000
5,000
4,000
2,000
1,000
FY 1995 FY 1996 FY 1997 FY 1998 FY 1999 FY 2000 FY 2001

Assessed Paid (Cash, SEPs, and Administrative)

Figure 23

Fines and Penalties

fines and penalties assessed against DoD from FY 1995 through FY 2001, and analyze this history. To comply with this requirement, this year's report includes an additional appendix—Appendix K, Analysis of Fines and Penalties Assessed Against DoD, FY 1995 through FY 2001.

EPA MILITARY MUNITIONS RULE

Independent of Federal regulation, DoD is committed to responsibly handling and storing military munitions in order to minimize potential harm to human health and the environment. The Federal Facility Compliance Act of 1992, which amended the Resource Conservation and Recovery Act (RCRA), required EPA, in consultation with DoD and the states, to specify when conventional and chemical military munitions become hazardous waste subject to RCRA, and provide for the safe storage and transportation of such waste. As a result, EPA published the Federal Military Munitions Rule (MR) in 1997.

The Federal MR defines when military munitions become waste and how states should manage waste military munitions. States or territories may either adopt the Federal rule or develop their own state waste military munitions regulations that are at least as stringent as the Federal program. The MR also conditionally exempts the military from Federal hazardous

waste storage and transportation requirements, as long as the military follows its own waste munitions storage and transportation procedures.

DoD is encouraging states to adopt the Federal rule, rather than adopting their own versions of the rule. If states choose to adopt their own rule, DoD could face many different, and possibly conflicting, rules and regulations. For example, citing concerns impacting readiness, DoD has requested that California regulators modify portions of a draft munitions waste rule so that it more closely matches the Federal regulation. California's rule would implement the Federal regulation while maintaining the state's more stringent waste management standards. The proposed state rule differs from the Federal requirements in that it declares that a buried munition or one that has passed its shelf life without being redesignated for another type of use is a waste. To date, 34 states have adopted the Federal rule as written or with some state-specific modifications (Figure 24). Other states are currently considering adopting the MR.

The U.S. Army Environmental Center conducted training sessions on the DoD Munitions Rule Implementation Plan at Fort Bliss, Texas, and at the White Sands Missile Range in New Mexico. Personnel from approximately 75 installations and the major commands attended the sessions. DoD has also held several Munitions Rule Training Workshops to facilitate implementation of the rule.

DATA QUALITY

To successfully comply with a broad range of environmental regulations and requirements, the DoD Components must thoroughly sample and test. The resulting data collected are an important part of environmental decision-making, and sharing lessons learned helps each DoD Component make more effective decisions.

Environmental Data Quality Working Group

In 1996, DoD established an Environmental Data Quality Work Group (EDQW) to develop and recommend policies for environmental program sampling and analysis data quality. The DoD Components can use consistent policy to contract with outside laboratories for analytical work. Some of the reasons DoD is undertaking this initiative include inappropriate

laboratory practices, increasingly stringent cleanup criteria, inconsistent requirements across states and EPA regions, and EPA's Performance-Based Measurement System.

Figure 24
Status of States that Have Adopted Federal Munitions Rule

	Adopted the	Developed a	
State	Federal Rule	State-Specific Rule	
Alabama	Yes	Yes	
Alaska	Yes	No	
Arizona	Yes	No	
Arkansas	Yes	No	
California	No	Yes	
Colorado	No	Yes	
Connecticut	Yes	No	
Delaware	Yes	Yes	
Florida	Yes	No	
Georgia	Yes	No	
Hawaii	Yes	No	
Idaho	Yes	No	
Illinois	Yes	Yes	
Indiana	Yes	Yes	
Iowa	Yes	No	
Kansas	Yes	No	
Kentucky	No	Yes	
Louisiana	No	Yes	
Maine	No	Yes	
Maryland	Yes	Yes	
Massachusetts	No	Yes	
Michigan	No	Yes	
Minnesota	No	Yes	
Mississippi	Yes	No	
Missouri	Yes	Yes	
Montana	Yes	Yes	
Nebraska	No	Yes	
Nevada	Yes	No	
New Hampshire	No	Yes	
New Jersey	Yes	No	
New Mexico	Yes	No	
New York	Yes	Yes	
North Carolina	Yes	Yes	
North Dakota	No	Yes	
Ohio	No	Yes	
Oklahoma	Yes	No	
Oregon	Yes	Yes	
Pennsylvania	Yes	No	
Rhode Island	No	Yes	
South Carolina	Yes	No	
South Dakota	Yes	Yes	
Tennessee	Yes	Yes	
Texas	Yes	Yes	
Utah	No	Yes	
Vermont	No	Yes	
Virginia	Yes	No	
Washington	Yes	Yes	
Washington, DC	Yes	No	
West Virginia	Yes	No	
Wisconsin	No	Yes	
Wyoming	No	Yes	
Total	34	31	

The EDQW, chaired by the Navy, includes representatives from each of the DoD Components. Its primary goals are to—

- Promote the generation of environmental data of known and documented quality
- Develop and recommend DoD policy affecting environmental sampling and testing operations
- Facilitate a coordinated response to legislative and regulatory issues
- Coordinate the exchange of technology and best management practices within DoD
- Improve overall performance.

The EDQW is also participating in several intergovernmental outreach and training initiatives with both DoD contractors and program managers.

In November 2000, the EDQW released a revised progress report entitled *Best Practices for Data Quality Oversight of Environmental Sampling and Testing Activities.* The report documents best practices that DoD identified to ensure that quality data is collected to support environmental program decisions, including—

- Using data quality objectives
- Using a systematic planning process for data collection activities
- Improving policy, guidance, and documentation

DoD Issues Standards Manual for Environmental Labs

In December 2000, DoD released a guidance manual that provides DoD-wide requirements for environmental testing laboratories conducting work for the military. The guide replaces three previous policies developed by the Army, Navy, and Air Force, and tracks requirements set by a national accreditation body. The guidance, *Department of Defense Quality Systems Manual for Environmental Laboratories* (October 2000), is based on the National Environmental Laboratory Accreditation Conference's (NELAC's) quality systems requirements. It integrates NELAC requirements and clarifies DoD's expectations for labs.

The guide is applicable to any commercial or government laboratory conducting sample analysis work for environmental programs at U.S.-based DoD installations and facilities. It sets a minimum threshold program for quality systems management at laboratories performing environmental testing for DoD. The goal is to deter and detect improper, unethical, or illegal activities.

- Improving laboratory oversight practices
- Refining management and contracting processes.

This report serves as the EDQW framework strategy for developing an environmental sampling and testing policy for DoD. The EDQW will update the report periodically.

Uniform Federal Policy for Implementing Environmental Quality Systems

The *Uniform Federal Policy for Implementing Environmental Quality Systems* provides requirements and guidelines for Federal agencies to document and implement quality systems to manage environmental sampling, testing, and data use. The policy serves as a benchmark for evaluating the completeness and effectiveness of a system. EPA, DoD, and the Department of Energy developed the policy as a joint initiative to resolve data quality issues. This policy will help ensure that environmental data are of known and documented quality and are suitable for intended uses. The DoD Components have adopted this policy and are working with the EDQW to develop an implementation plan.

New Program Shortens Operational Environmental Planning Process

Thanks to a new computer program that the Air Force Special Operations Command Environmental Office developed, special operators can now quickly assess the impact of environmental and cultural conditions at deployed locations in just 30 minutes. The Global Operational Environmental Review (GOER) computer program streamlines the environmental impact review process. This process currently takes up to three months.

Developed to provide required environmental review capability on short notice in a secure or deployed location, the GOER program can be expanded to meet all routine mission and exercise planning. The user enters information, such as base camp location, proposed use of airplanes, planned activities, and duration of these activities, into the program. The program then generates an environmental impact statement based on the information provided. The program identifies environmental concerns such as type of soil, threatened and endangered species, climate, and cultural considerations. The program highlights cultural landmarks, no-fly zones, and religious holidays that may be factors affecting planned operations in an area.

This unique tool automates a significant portion of the environmental review process. GOER streamlines and prioritizes critical information needed by the mission commanders and planners and provides this information in a seamless, transparent manner to reduce any additional workload. GOER assists DoD in accomplishing its mission in an environmentally sensitive manner, and does so quickly, accurately, and efficiently.

ENVIRONMENTAL PLANNING

Environmental planning examines constraints and effects and identifies appropriate responses and associated budget requirements of DoD's activities to ensure that DoD's ability to operate in the future is not jeopardized. Responses can include avoidance through pollution prevention, treatment through compliance, or protection of natural and cultural resources through conservation.

The National Environmental Policy Act (NEPA) of 1969 guides DoD's environmental planning principles. NEPA requires that DoD consider the environmental impacts of major activities or actions that may affect the quality of the human environment. DoD follows accepted environmental planning procedures to ensure that all DoD activities and operations appropriately consider and include environmental factors in decision-making processes. DoD's planning strategy includes inventorying opportunities, activities, or products that have significant impacts on the environment; identifying appropriate alternatives, mitigation measures, or contingency plans; setting objectives and goals; and developing an action plan. DoD's planning efforts focus on developing and operating installations and developing, procuring, deploying, and disposing of weapon systems. Environmental considerations include constraints on the way in which an activity is performed and the effects of the activity on the environment. In many instances, these considerations are interrelated.

Environmental Justice

DoD is committed to balancing mission requirements with the environmental concerns of all communities. Many minority and low-income populations are located near military installations. DoD wants to ensure its activities do not pose any disproportionate adverse environmental effects on these populations. Therefore, DoD continues to encourage its installations to reach out to all communities to understand their concerns and consider them in proposed DoD activities.

DoD continues to improve its compliance with Executive Order (E.O.) 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." Under the E.O., DoD must make achieving

environmental justice part of its mission. DoD must identify and address the disproportionately high and adverse human health or environmental effects of DoD's programs, policies, and activities on minority and low-income populations. The E.O. directed DoD and other Federal agencies to provide minority and low-income populations access to public information and the opportunity for meaningful public participation to address environmental justice concerns.

In response to the E.O., DoD issued the *Strategy on Environmental Justice* in 1995. The Strategy identifies the major programs and areas of emphasis DoD believes it can use to best meet the intent of the E.O. and carry out the defense mission. The Strategy recognizes the importance of public participation and outreach in addressing environmental justice concerns and seeks to increase public involvement in DoD decision-making that may affect minority and low-income communities. The implementation plan that accompanies the Strategy outlines the specific steps DoD will take to execute the Strategy.

DoD's Strategy on Environmental Justice Principles

DoD's environmental justice strategy focuses on implementing institutional changes, rather than one-time projects, to ensure that a healthy and safe environment exists around DoD activities that are located in or near minority and low-income populations. To that end, DoD operates in accordance with the following principles with respect to its proposed activities—

- Promote partnerships with all stakeholders
- Identify impacts of DoD activities on minority and low-income populations
- Streamline government
- Improve day-to-day operations of installations
- Foster nondiscrimination in DoD programs.

Environmental Justice Initiatives and Guidance Improve Communication

In FY 2001, DoD developed and led several new initiatives to proactively address environmental justice concerns. These initiatives are meant to raise awareness and increase understanding of environmental justice concerns;

facilitate and improve communication between DoD and neighboring communities; and promote greater public participation in DoD policies, programs, and activities.

GUIDANCE ON WORKING WITH ENVIRONMENTAL JUSTICE COMMUNITIES

DoD is developing a guidance document entitled *Communicating Effectively with Minority and Low-Income Communities and American Indians and Alaska Natives*. The document provides information and tools that are both useful and productive for reaching out to minority and low-income communities, American Indians, and Alaska Natives. The document describes DoD's role in environmental justice, highlights why and how to involve minority and low-income communities, and addresses how to work effectively with Environmental Justice communities. DoD views the implementation of effective and meaningful public participation in minority and low-income communities as essential to avoiding and addressing present and future environmental justice concerns.

PROGRAM MANAGER FOR CHEMICAL DEMILITARIZATION ENVIRONMENTAL JUSTICE STRATEGY
IMPLEMENTATION PLAN

The Army is responsible for disposing of America's chemical warfare materiel. As part of this responsibility, the Army disposes of buried chemical warfare materiel, recovered weapons, binary chemical weapons (weapons containing two separate, relatively non-toxic chemicals), and former production facilities in a safe, environmentally sound, and cost-effective manner. This responsibility is even more challenging because potential non-stockpile sites containing old chemical warfare materiel are located in 38 states and the Virgin Islands. Involving communities and exchanging information with stakeholders is key to successfully completing this mission.

To assist personnel in executing outreach activities with these communities, the Army developed the *Program Manager for Chemical Demilitarization Environmental Justice Strategy Implementation Plan*. The Plan outlines specific, program-wide initiatives to ensure that DoD incorporates environmental justice principles into its overall mission. The Plan lists eight initiatives, ranging from devising public involvement strategies to

reviewing environmental and human health research that the Army will undertake to comply with E.O. 12898. The Plan also provides risk communication and cultural sensitivity training for personnel responsible for cleanup operations. In April 2001, the Army sponsored the Working with Tribal Governments Workshop to introduce personnel to the different habits, customs, and observances of tribal cultures and to provide them with the tools necessary to work with these governments.

To ensure that minority and low-income communities are not disproportionately burdened by chemical demilitarization activities, the Army is compiling census data for each potential site. The Army can more accurately determine if minority or low-income communities reside in the vicinity of the site and, if necessary, perform site-specific research for outreach and consultation purposes. These efforts are incorporated in the *Procedures for the Identification and Involvement of Environmental Justice Populations and Native American Tribal Governments*. The information gathering process allows the Army to conduct activities that ensure meaningful involvement of low-income and minority communities by providing the information necessary to—

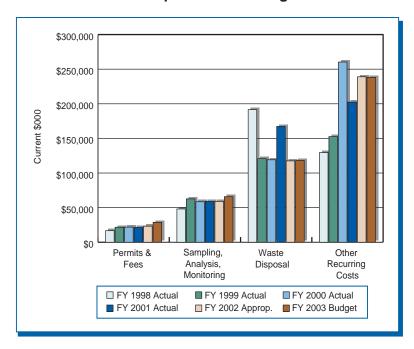
- Locate the communities near DoD activities that are potentially at the most risk from these activities
- Conduct community research to identify any anticipated adverse impacts and what potential concerns may arise to tailor its outreach and public participation efforts to meet these concerns
- Develop site-specific plans that outline interactions and activities to ensure appropriate measures to identify and involve low-income and minority communities and tribal governments.

These efforts provide the Army with the opportunity to minimize any adverse impacts of its activities on low-income and minority communities and tribal governments.

FY 2001 BUDGET EXECUTION

DoD's Compliance Program budget has declined by 19 percent from FY 1998 to FY 2003, allowing for inflation. During FY 2001, DoD invested \$1.6 billion in compliance activities. Of this amount, DoD invested \$450 million in recurring compliance costs, excluding manpower and education and training (Figure 25). Recurring compliance costs are those relatively constant activities that an installation must accomplish to support the mission and maintain compliance with environmental regulations and permit requirements. These activities include routine sampling and analysis of discharges to air and water and hazardous waste disposal. Other recurring costs include purchasing supplies, maintaining and operating equipment, managing NPDES permits and Clean Air Act inventories, and conducting self-assessments. Of the recurring investments, manpower is the largest single cost investment.

Figure 25
DoD Budget Summary:
Compliance Recurring



DoD invested 47 percent, or \$764 Million, of the FY 2001 Compliance Program funds in nonrecurring projects, or one-time events, such as projects to maintain standards at wastewater treatment facilities or to install air pollution controls (Figure 26). One of the largest nonrecurring investments that the Compliance Program makes each year is employing CWA regulations, which requires substantial infrastructure investments in wastewater treatment plants and storm water management.

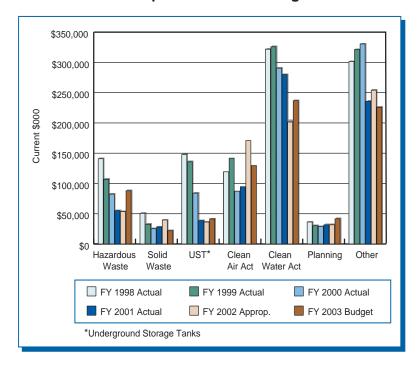
FY 2003 BUDGET REQUEST

The Compliance Program budget request is the largest percentage of the FY 2003 Environmental Quality Program budget request at 81 percent. DoD's FY 2003 budget request for the Compliance Program is \$47 million higher than the FY 2002 budget, as appropriated by Congress. This increase is primarily due to increased personnel costs.

Future Directions— Watersheds

A watershed is an area of land where all of the water that is under it or drains from it eventually flows into

Figure 26
DoD Budget Summary:
Compliance Nonrecurring



the same place. Because watersheds are defined by natural boundaries, they represent the most logical basis for managing water resources. To better manage watersheds, DoD and the Army launched a pilot study to refine a watershed assessment protocol to use at installations. DoD initiated the watershed assessment project to address the increasing number of water quality requirements affecting military installations, such as protecting sources of DoD drinking water and complying with EPA's Total Maximum Daily Load (TMDL) rule. A TMDL is the maximum amount of a pollutant that may be introduced into a body of water so that the water continues to meet and maintain specified water quality standards.

The TMDL program requires states to identify and list bodies of water that do not meet water quality standards. As of 1998, there were more than 20,000 listed waters. The TMDL Rule requires states to compile the list every four years and develop pollution limits for those waterways over the next 15 years. Installations must comply with these limits on their discharges to impaired waters.

COMPLIANCE

Using the assessment protocol, DoD installation managers can determine what activities might affect the quality of the surface water, groundwater, and natural habitat on and near the installation. These activities include recreational and mission activities and runoff from training activities. The protocol allows installations to either clearly indicate they do not harm a watershed or to state their impacts on the watershed. The protocol includes guidance on implementing cost-effective solutions for cleaning up waterways.

DoD will develop a list of best management practices to address common water quality problems that the assessment protocol identifies. Following the pilot, DoD will prioritize where to apply the assessments, based on impaired waters and TMDL development. DoD will then target those bases with permits and other regulatory issues that could affect watersheds.