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NAVAL READINESS, OPERATIONAL TRAINING, AND ENVIRONMENTAL
PROTECTION: ACHIEVING AN APPROPRIATE BALANCE BETWEEN
COMPETING NATIONAL INTERESTS

by

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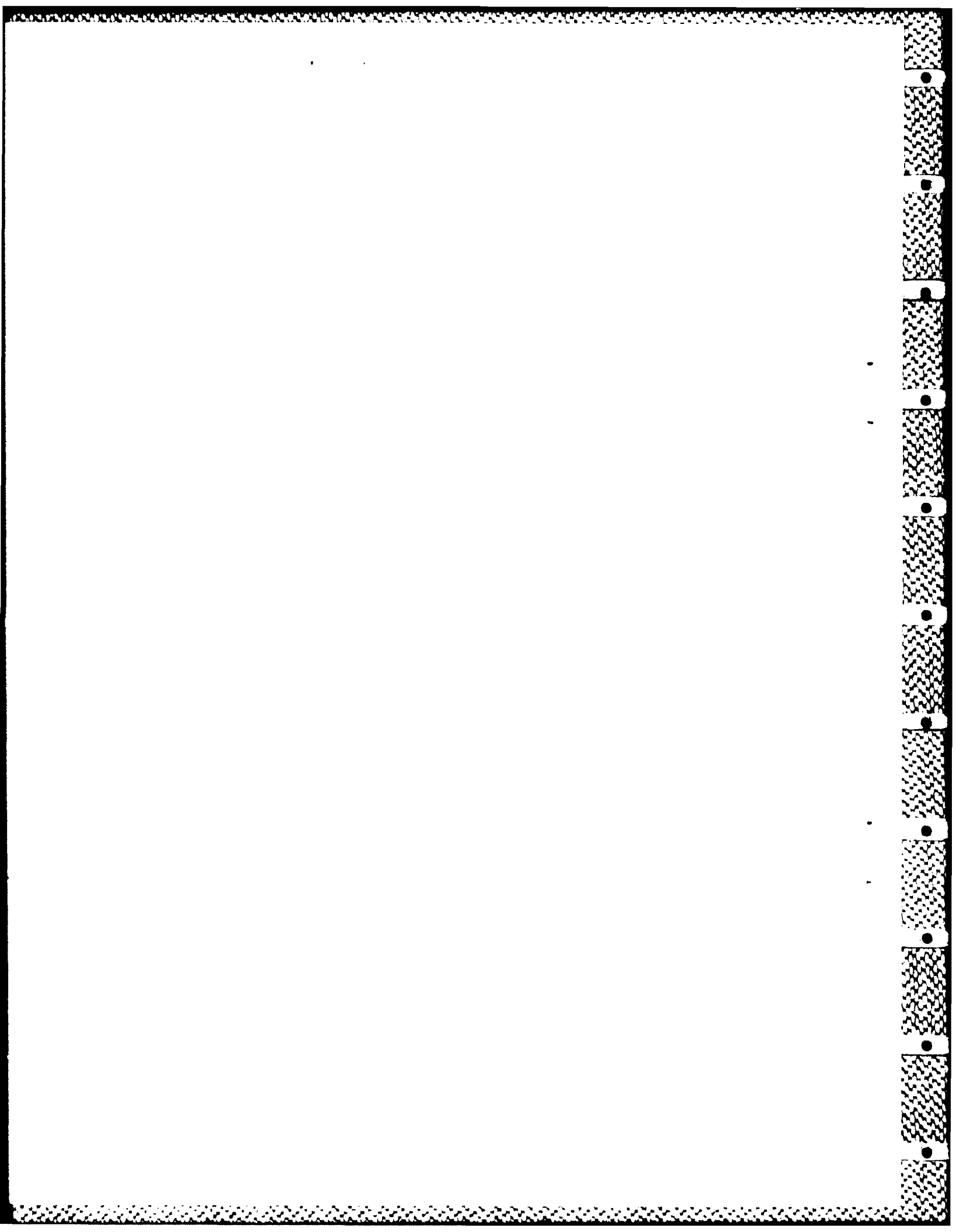
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This paper describes the interrelationship between naval readiness, operational training and environmental protection. Surveys fourteen environmental laws which either directly or indirectly impact on operational training and/or installation support of that training. Describes the roles that civilians outside the Department of Defense may play in implementing and enforcing environmental laws on naval installations. Provides an example of how the Department of the Navy integrated environmental protection and operational training so that the naval services could continue to use a key training facility. Concludes with a proposed strategy designed to assist the naval services in establishing and maintaining an appropriate balance between environmental protection and mission accomplishment on a case-by-case basis.					
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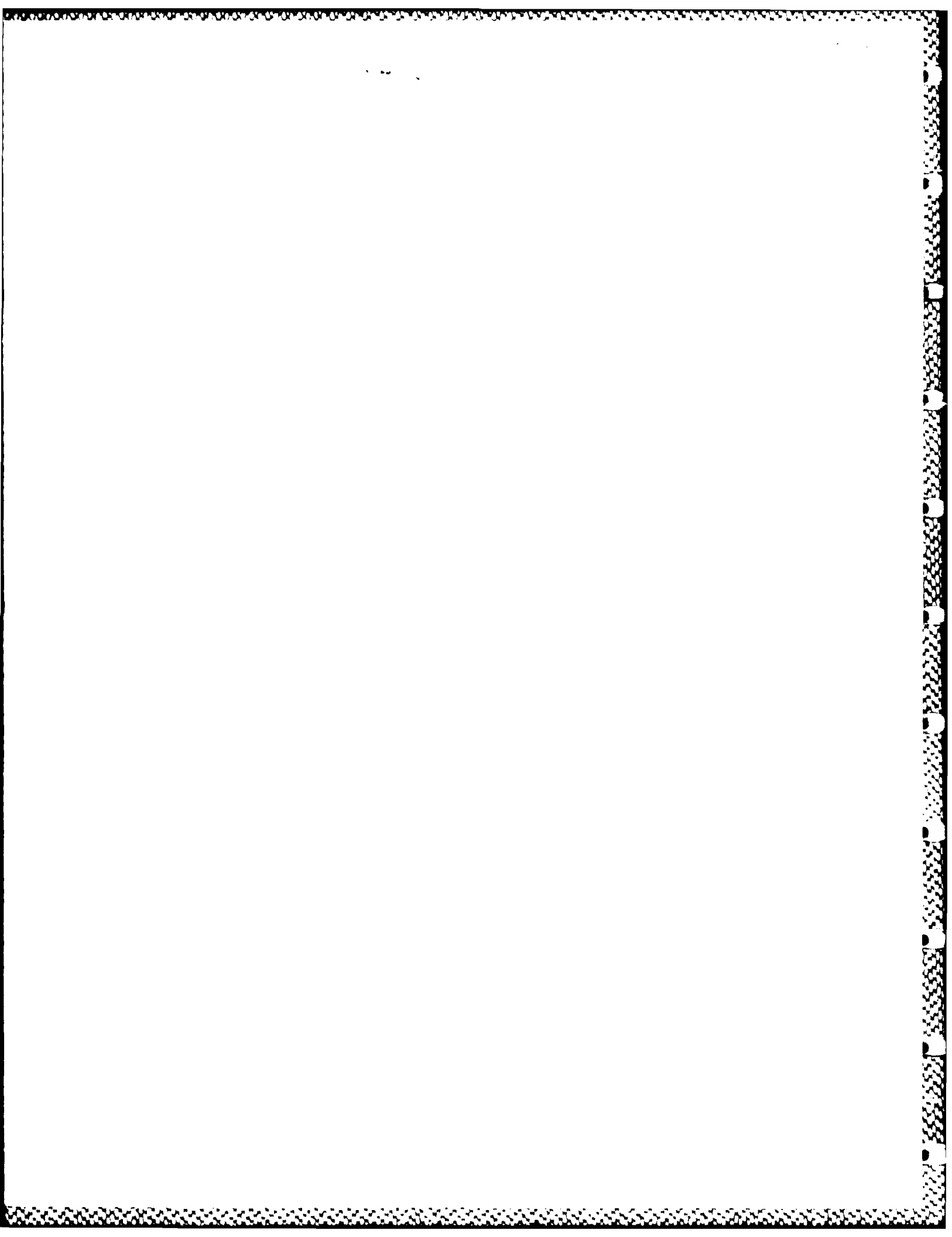
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EXECUTIVE SUMMARY

Naval operational and installation commanders are subject to a variety of federal, state and local environmental laws which were enacted to control pollution, to protect natural and historic resources and to provide for environmental restoration. Through these laws legislators, regulators, investigators, judges and individual citizens may influence how, where and when the Navy and the Marine Corps conduct operational training. This paper:

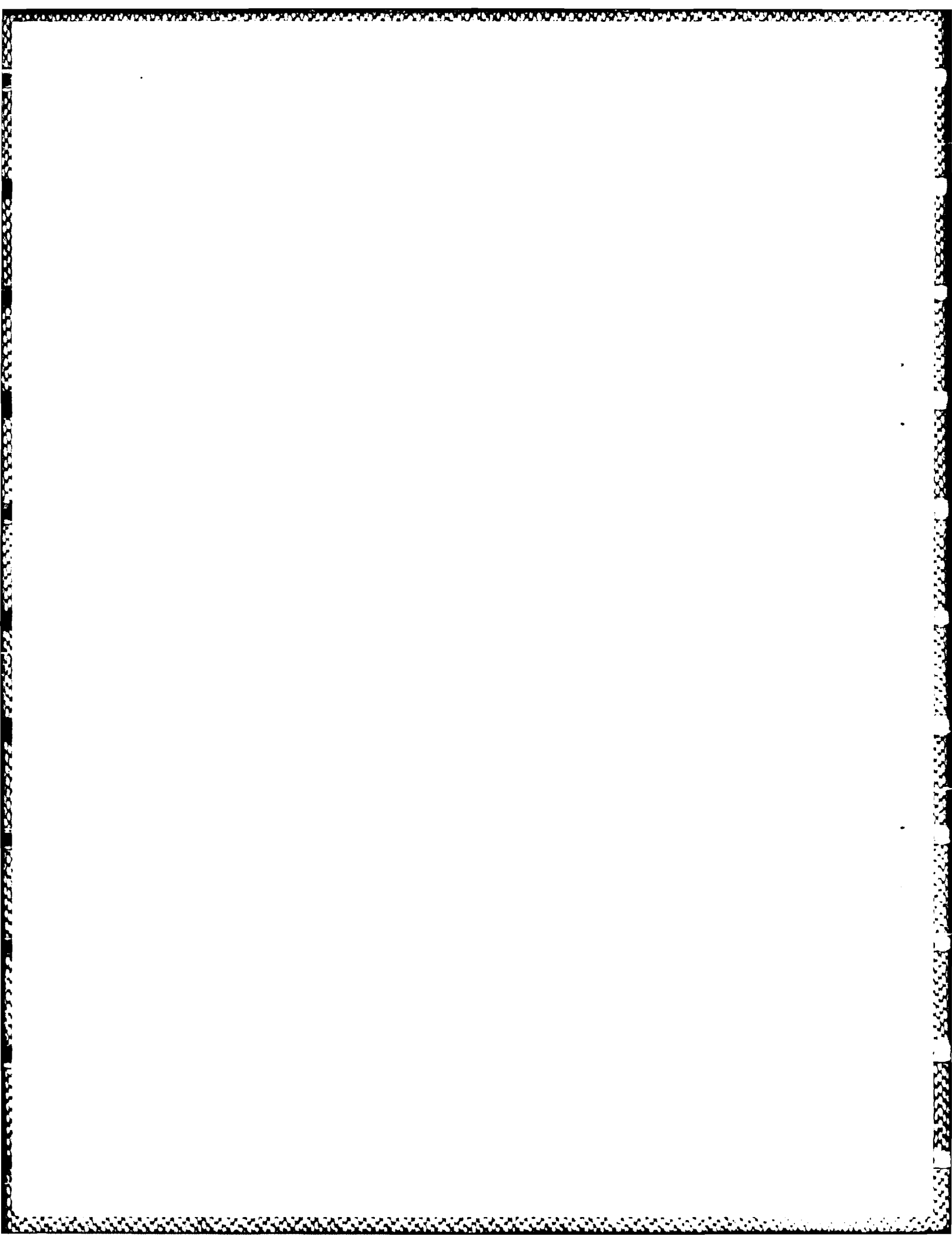
(1) describes the interrelationship between naval readiness, operational training and environmental protection.

(2) surveys fourteen environmental laws which either directly or indirectly impact on operational training and/or installation support of that training.

(3) describes the roles that civilians outside the Department of Defense may play in implementing and enforcing environmental laws on naval installations.

(4) provides an example of how the Department of the Navy integrated environmental protection and operational training so that the naval services could continue to use a key training facility.

(5) concludes with a proposed strategy designed to assist the naval services in establishing and maintaining an appropriate balance between environmental protection and mission accomplishment on a case-by-case basis.



PREFACE

The Author. The author's first tour of duty following Marine Officer Basic Training was as an infantry platoon commander with the First Battalion, Fifth Marines in the Republic of Viet Nam. He next performed ceremonial duties at Marine Barracks, Washington, D.C. and security duties at Naval Support Facility, Thurmont, Maryland (Camp David Presidential Retreat). Since being certified as a judge advocate in 1978, he has served as Trial Counsel, Chief Trial Counsel, Chief Defense Counsel, Chief Legal Assistance Officer, Chief Civil Law Officer, Special Assistant U.S. Attorney, Special Court-Martial Military Judge and General Court-Martial Military Judge. He has presided over courts-martial at Marine Corps Development and Education Command (Quantico, Virginia); Washington Navy Yard, Naval Air Stations Patuxent River (Maryland), Bermuda and Keflavik (Iceland); Marine Corps Air Station Iwakuni (Japan); U.S. Naval Base Yokosuka (Japan); and on Okinawa (Japan).

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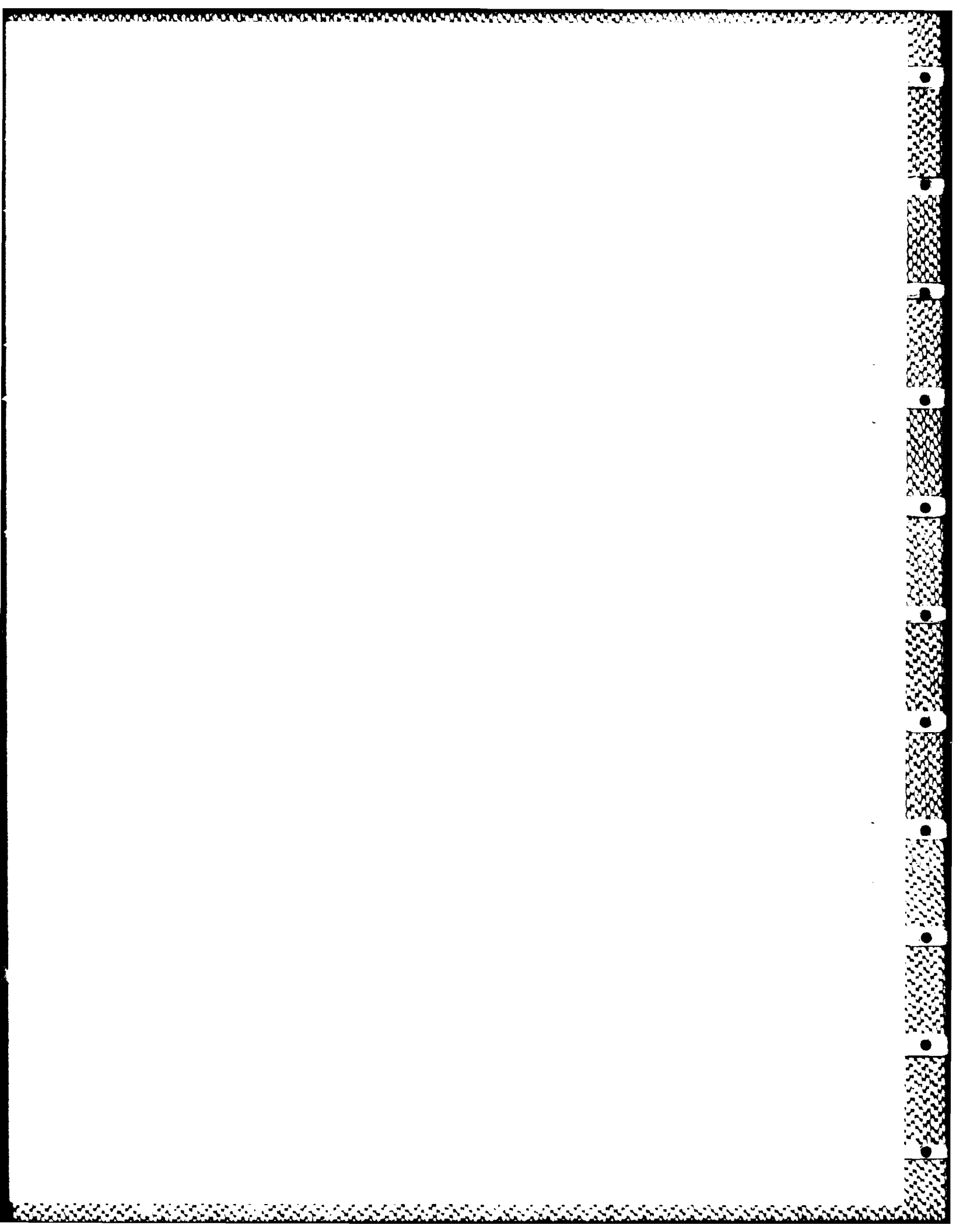
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NAVAL READINESS, OPERATIONAL TRAINING AND ENVIRONMENTAL
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CHAPTER I

INTRODUCTION

A. Congress, the Naval Commander and the Environment.

Congressional efforts to protect our national environment have increased dramatically since the end of the Second World War. To observe this trend one need look no further than the federal water pollution control legislation which has been enacted over the past ninety years. From 1899 to 1947, a period of forty-eight years, Congress provided for federal control of water pollution through the enactment of the Rivers and Harbors Act of 1899/1 and the Oil Pollution Control Act of 1924.2 The purpose of the first statute was to protect navigation from floating obstructions while that of the second was obviously the protection of the environment from water-borne oil pollution. During the thirty-nine years between 1948 and 1987, Congress legislatively addressed the issue of controlling water pollution on seven occasions as shown in Table I-1 below.

TABLE 1-1

**FEDERAL WATER POLLUTION CONTROL LEGISLATION
ENACTED BETWEEN 1948 AND 1987**

WATER POLLUTION CONTROL ACT (OF 1948)

FEDERAL WATER POLLUTION CONTROL ACT (OF 1956)

FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1961

FEDERAL WATER QUALITY ACT (OF 1965)

FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972

CLEAN WATER ACT OF 1977

WATER QUALITY ACT OF 1987

Not only did the frequency of federal water pollution control legislation increase after World War II, but so also did the scope of congressional efforts to correct that problem.. Beginning with the Federal Water Pollution Control Act Amendments of 1972, the Congressional purpose for such legislation became "(the restoration and the maintenance of) the chemical, physical and biological integrity of the Nation's waters."/3 From the foregoing, it is evident that the legislative concern with water pollution at the federal level expanded from floating refuse and oil spills to all forms of water contamination. Looking beyond water pollution, we see that post-war federal environmental legislation has addressed a variety of subjects. Since 1948, federal laws have been enacted with regard to air, noise, and

pesticide pollution; hazardous and nonhazardous waste management; federal agency environmental planning; historic and archeological preservation; endangered species and marine mammal protection; coastal zone management; ocean dumping; and environmental restoration (where the latter is required as the result of past improper hazardous waste disposal).

The proliferation of environmental statutes* would be of but passing interest to naval commanders** were it not for the impact of those laws on the ability of the Navy and the Marine Corps to conduct operational training. As the volume of federal environmental legislation has increased, so also have the regulatory requirements placed upon operational and installation commanders. Those commanders often find that their discretion to train or to allow training in certain areas or in certain ways has been severely curtailed or eliminated altogether due to a myriad of environmental constraints. Through these constraints, various non-DOD federal executive agencies and state regulatory agencies are able to exert influence on how and where Navy and Marine forces are

*The term "environmental statutes" as used in this paper includes those laws enacted to control pollution, to protect natural and historic resources, to control the use of federal lands and to shape the extent and the execution of federal projects.

**The terms "naval commander" and "naval officer" represent both Navy and Marine Corps officers in this paper. Likewise the term "naval services" includes both the United States Navy and the United States Marine Corps.

trained. Finally, federal courts, up to and including the Supreme Court of the United States have been called upon to resolve conflicts between naval operational training and environmental protection.

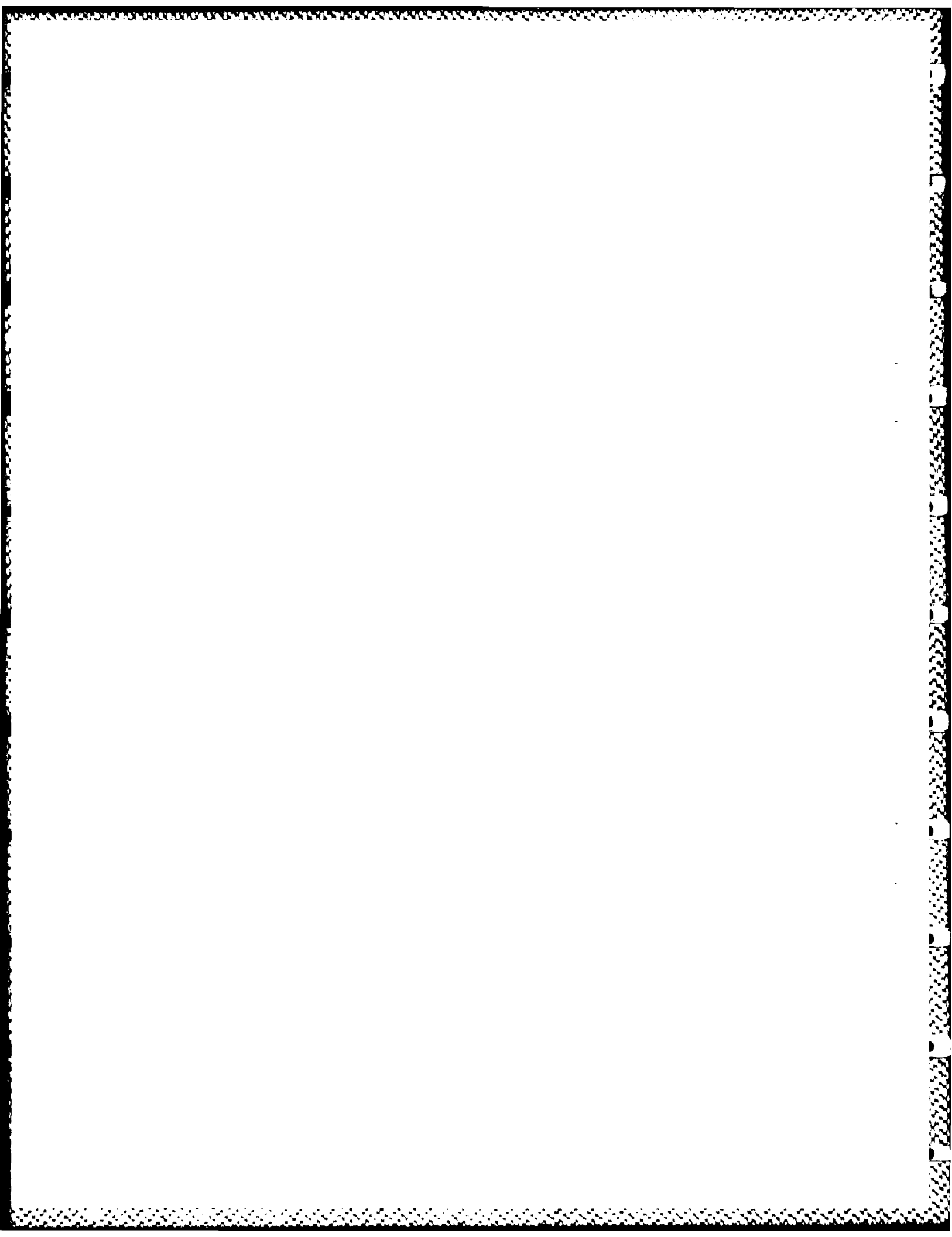
B. Purpose. The purpose of this paper is to provide a variety of readers, (including naval commanders, judge advocates, civilian policy makers, environmental regulators and interested citizens) with an appreciation of:

1. The interrelationship of naval readiness, operational training, and environmental protection.
2. Federal pollution control, resource protection, land use control and environmental restoration legislation which impacts on the naval services.
3. The potential liability of federal civil officials and naval personnel for violations of federal, state and local environmental laws.
4. The various means by which federal and state regulatory authorities may influence the manner in which the naval services conduct operational training.
5. The ability of individual citizens to influence the manner in which the naval services conduct operational training.
6. The role of the courts in striking the balance between environmental protection and naval

operational training.

7. A case study involving the actions taken by the Navy to achieve an appropriate balance between the protection of sensitive environmental interests and the use of operational training facilities on and near the island of Vieques, Puerto Rico.
9. A proposed strategy to facilitate naval service compliance with environmental legislation.

C. Scope. While federal and state environmental statutes usually do not distinguish among the various branches of the federal government or its numerous agencies, this paper is limited to a discussion of the impact of environmental legislation on the Department of the Navy. This limitation is necessary due to the impracticality of addressing in this paper how more than one federal agency has responded to the many demands of existing environmental laws. By substituting their implementing regulations for the naval instructions, regulations and orders cited herein, members of the other branches of the armed forces may evaluate how their service has responded to the training challenges raised by the present array of federal and state environmental statutes and regulations.



CHAPTER 11

THE NAVAL READINESS - ENVIRONMENTAL PROTECTION INTERFACE: OPERATIONAL TRAINING

Overview. Our armed forces exist for the purpose of protecting the Nation's security. Their contribution to that end is the maintenance of combat forces with sufficient strength and mobility to deter aggression and, should deterrence fail, to end any conflict on terms favorable to the United States and its allies./1 To constitute a credible deterrent however, our operational forces must be adequately manned, armed and trained.

A. The Critical Need For Realistic Operational Training.

Many of the reasons why the naval services conduct operational training are readily apparent. Included within this category are the development of individual combat skills, the development of unit cohesion/integrity and the conduct of large scale field/sea exercises to inform exercise participants, high level planners and senior policy-makers of the capabilities and the limitation of our operational forces. Other reasons are less readily apparent. One example of this later category is the need to expose naval commanders and their subordinates to the "friction of war".

The Friction of War. Approximately 160 years ago, the noted Prussian military theorist Carl von Clausewitz

identified the primary reason why military operations often turn out differently than they were planned. In his treatise On War /2, von Clausewitz described the phenomenon of "friction in war" together with its impact upon the conduct of military operations./3 That description provided in part that:

Everything in war is very simple, but the simplest thing is difficult. The difficulties accumulate and end by producing a kind of friction that is inconceivable unless one has experienced war.

* * *

Friction is the only concept that more or less corresponds to the factors that distinguish real war from war on paper. The military machine - the army and everything related to it - is basically very simple and therefore seems easy to manage. But we should bear in mind that none of its components is of one piece: each part is composed of individuals, every one of whom retains his potential of friction. In theory it sounds reasonable enough: a battalion commanders duty is to carry out his orders; discipline welds the battalion together, its commander must be a man of tested capacity, and so the great beam turns on its iron pivot with a minimum of friction. In fact, it is different, and every fault and exaggeration of the theory is instantly exposed in war. A battalion is made up of individuals, the least important of whom may chance to delay things or somehow make them go wrong.

* * *

This tremendous friction which cannot, as in mechanics, be reduced to a few points, is everywhere in contact with chance, and brings about effects that cannot be measured, just because they are largely due to chance. One, for example, is the weather. Fog can prevent the enemy from being seen in time, a gun from firing when it should, a report from reaching the commanding officer. Rain can prevent a battalion from arriving, make another late by keeping it not three but eight hours on the march, ruin a cavalry charge by bogging the horses down in mud, etc./4

Combat Experience and the Friction of War. The only lubricant von Clausewitz identified for the "friction of war" was combat experience.* With regard to the significance of such experience, he stated that:

* * *

If one has never personally experienced war, one cannot understand in what the difficulties constantly mentioned really consist, nor why a commander should need any brilliance and exceptional ability. Everything looks simple; the knowledge required does not look remarkable, the strategic options are so obvious that by comparison the simplest problem of higher mathematics has an impressive scientific dignity. Once war has actually been seen the difficulties become clear; but it is still extremely hard to describe the unseen, all-pervading element that brings about this change of perspective./5

* * *

As with a man of the world instinct becomes almost habit so that he always acts, speaks, and moves appropriately, so only the experienced officer will make the right decision in major and minor matters - at every pulsebeat of war. Practice and experience dictate the answer: "this is possible; that is not." So he rarely makes a serious mistake, such as can, in war, shatter confidence and become extremely dangerous if it occurs often./6

"Peacetime Maneuvers" and the Friction of War. While attempting to disabuse the reader of his day of the idea that "peacetime maneuvers" could provide an adequate substitute for combat experience, von Clausewitz did recognize that there were benefits to be gained from conducting realistic

*In his words: "Is there any lubricant that will reduce this abrasion? Only one, and a commander and his army will not always have it readily available: combat experience."

field training. In describing those benefits he provided that:

No general can accustom an army to war. Peacetime maneuvers are a feeble substitute for the real thing; but even they can give an army an advantage over others whose training is confined to routine, mechanical drill. To plan maneuvers so that some of the elements of friction are involved, which will train officers' judgment, common sense, and resolution is far more worthwhile than inexperienced people might think. It is immensely important that no soldier, whatever his rank, should wait for war to expose him to those aspects of active service that amaze and confuse him when he first comes across them. If he has met them even once before, they will begin to be familiar to him. This is true even of physical effort. Exertions must be practiced, and the mind must be made even more familiar with them than the body. When exceptional efforts are required of him in war, the recruit is apt to think that they result from mistakes, miscalculations, and confusion at the top. In consequence, his morale is doubly depressed. If maneuvers prepare him for exertions, this will not occur. (emphasis added)/7

The Contemporary Value of von Clausewitz's "On War". To the extent that "peacetime maneuvers" were appropriate for an army in 1830, they are even more so for the Navy and Marine Corps today. Those reasons which best demonstrate the critical need for realistic sea and field operational training include the following:

1. Command and Control Complexities. The exercise of command and control on the battlefield, in the air, and on the sea is infinitely more complex today than it was in 1830. Compare, for example, contemporary amphibious, anti-submarine and carrier

anti-air operations with the infantry operations of von Clausewitz's day.

2. Technology. The technology used to "move, shoot and communicate" has likewise increased in complexity providing fertile ground for "malfunctions" which may jeopardize mission accomplishment.
3. Loss of Combat Experience. While naval personnel with combat experience may be particularly useful in enhancing the overall combat efficiency of a unit due to their previous exposure to the "friction of war", their numbers dwindle each year. The last major sea battles were fought in World War II, the last major amphibious assault was made in Korea, and it is now over sixteen years since the Navy/Marine Corps team fought in Viet Nam.
4. Substitute for Combat Experience. In the absence of actual combat operations, the only way to expose naval personnel to the "friction of war" is to conduct individual and unit operational training.
5. Personnel Turbulence and the Perishability of Combat Skills. Due to the continuous rotation of personnel into and out of operational units and due to the perishability of finely honed combat skills,

it is necessary to conduct operational training on a recurring basis if a unit is to maintain an acceptable level of readiness.

6. Scope of Commitments. The Navy and the Marine Corps are committed to a multitude of contingencies in every corner of the world. They must be capable of fighting "in the snow of far off northern lands" and in "sunny tropic scenes".* Accordingly, Marine units may be found conducting cold weather training in Norway, jungle training in Panama and desert training in Arizona while Naval units may be training in the North Atlantic, the Mediterranean and the western Pacific.

From the foregoing, it is evident that the Clauswitzian concepts of "friction in war" and realistic "peacetime maneuvers" are as viable today as they were in the early nineteenth century.

Having focused initially on operational training and its role in enhancing individual and unit readiness, we turn next to the interrelationship between operational training, naval readiness and our nation's overall military capability.

*As provided in the second verse of The Marine's Hymn

B. The Role of Operational Training in Attaining and Maintaining the Nation's Overall Military Capability. The following definitions are contained in The Department of Defense Dictionary of Military and Associated Terms:/8

operational training - Training that develops, maintains or improves the operational readiness of individuals or units.

operational readiness - The capability of a unit/formation, ship, weapon system or equipment to perform the missions or function for which it is organized or designed. May be used in a general sense or to express a level or degree of readiness

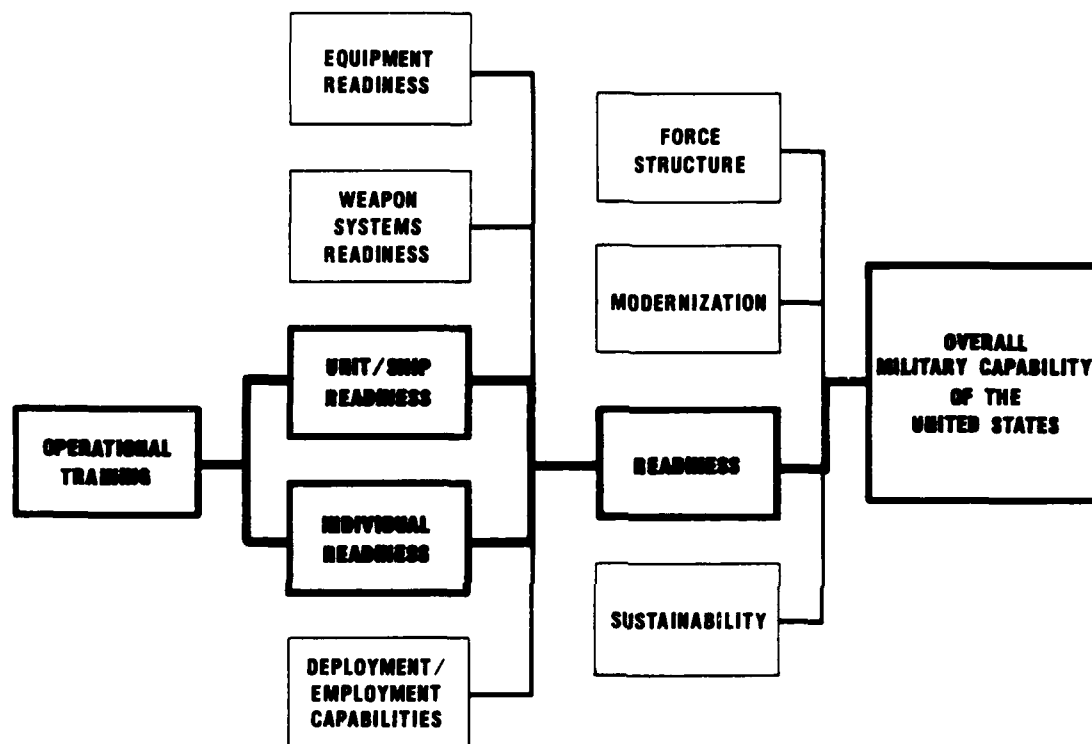
military capability - The ability to achieve a specified wartime objective (win a war or battle, destroy a target set). It includes four major components: force structure, modernization, readiness, and sustainability....

- a. force structure - Numbers, size, and composition of the units that comprise our defense forces; e.g. divisions, ships, airwings.
- b. modernization - Technical sophistication of forces, units, weapon systems, and equipments.
- c. readiness - The ability of forces, units, weapon systems, or equipments to deliver the outputs for which they were designed
- d. sustainability - The "staying power" of our forces, units, weapon systems, and equipments, often measured in numbers of days....

By definition then, operational training directly contributes to operational readiness which is in turn one of the four components of our nation's overall military capability. This interrelationship is depicted in Figure 11-1.

FIGURE 11-1

**THE RELATIONSHIP OF OPERATIONAL TRAINING
TO THE OVERALL MILITARY CAPABILITY OF THE UNITED STATES**



In sum, naval personnel become combat effective only when they are fully familiar with their weapons, with the tactics appropriate to their unit and with the impediments to mission accomplishment which arise from the "friction of war". Short of combat, experience with such "friction" may only be obtained by participating in realistic and challenging operational training. Where such training is conducted,

naval readiness is enhanced and our nation's overall military capability is thereby strengthened.

The attainment of naval readiness through operational training is not without its cost, however. Bearing that cost is the price that society pays for the safeguarding of our freedoms, our institutions and our prosperity.

C. The Costs of Operational Training. The costs of operational training may be divided into the three general categories of monetary, opportunity and environmental costs.

Monetary costs. Monetary costs are the actual dollars spent to conduct or to support operational training. They may be either directly or indirectly attributable to the training function.

Direct Monetary Costs. A "direct" monetary cost of operational training is any cost which can be specifically identified with the execution of that training.^{/9} Such costs include, for example, the dollar value of fuel and ammunition expended during field/sea exercises and the cost of the development and maintenance of training facilities on naval installations.

Indirect Monetary Costs. Indirect monetary costs are by definition those costs incurred for more than one purpose.* An example of a monetary expenditure which is

*The Navy Economic Analysis Handbook (note continued)

incurred by some naval installations and which indirectly supports operational training is the operation of a hazardous waste storage facility (HWSF).^{*} Field operational training results in the generation of hazardous waste such as spent mercury, nickel-cadmium and/or lithium batteries which were used to power field communications equipment. These batteries or their chemical components are classified as being "hazardous" by the Environmental Protection Agency (EPA) and their disposal must be managed in accordance with strict regulatory guidelines. The existence of a HWSF on board a naval installation considerably lessens the administrative burden of operational commanders by allowing the expeditious turnover of such wastes to the storage facility for temporary storage.^{**} Although the HWSF may provide direct support to operational units training on the installation, the facility does not exist solely to support

defines "indirect cost" as follows: Any cost, incurred for joint objectives, and therefore not usually identified with a single final cost objective. Includes overhead and other fixed costs and categories of resources other than direct costs, required to add up all segments of total cost. For example, the cost of bookkeeping is often not identified with a single type of output./10

^{*}HWSFs are regulated under the Resource Conservation and Recovery Act. That Act is discussed in Chapter III, Part A below.

^{**}The HWSF then contracts for the ultimate disposal or recycling of the waste with civilian disposal/treatment facilities.

those units. The HWSF also stores the hazardous wastes generated by motor pools, photo laboratories and medical facilities located on the installation. As such, only a portion of the dollars spent to operate the HWSF may properly be attributed to training support (thereby constituting an "indirect" training cost).

Opportunity Costs. The concept of "opportunity costs" is not as tangible as that of monetary costs. The term "opportunity cost" is defined as follows:

The benefits that could have been obtained by the best alternative use of resources which have been committed to a particular use. The measurable sacrifice foregone by forsaking an alternative investment./11

Simply put, any dollar spent in support of operational training is a dollar which cannot be spent for any other purpose. The reality of opportunity costs frequently requires commanders to make painful trade-offs.* While the

*For example, if a commander is required to drastically reduce flight training in order to conserve fuel and thereby remain "within budget", he may see the operational readiness of his command decline proportionally to the decline in flight time for training. See John H. Cushman, Jr., "Air Force is Facing Critical Gap in Combat Readiness," The New York Times, 9 April 1988, p. A16. wherein the author states that:

* * *

While senior Air Force officers insist that they plan to preserve funds for readiness in (note continued)

consideration of opportunity costs is always important, it is especially so in the recurring eras of severe fiscal constraint which so often (and which currently) confront the naval services.

Environmental Costs. Operational training conducted in the field and at sea also gives rise to environmental costs in the form of environmental impacts and opportunity costs.

Environmental Impacts. Operational training will always involve environmental impacts. These impacts may be as localized as tank tread imprints on a beach or as pervasive as the noise generated by naval aircraft overflights.

Environmental Opportunity Costs. Operational training also generates environmental opportunity costs.

1989 and beyond, they are already telling Congress that military readiness has declined this year after several years of improvement.

"Reductions to the operations and maintenance accounts, the heart of training and readiness, have forced us to reverse some of the progress made in previous years," said Lieut. Gen. Michael J. Dugan, Deputy Chief of Staff for Plans and Operations, in testimony last month.

(An Air Force) memorandum to Mr. Carlucci listed dozens of operations that were being trimmed, including these:

- Flying hour for the B-1B strategic bomber have been cut by 1,200 hours or about 6 percent to save \$20 million.
- Three major exercises have been canceled, as have nine overseas deployments by Air Force units.

The clearing and leveling of a forested area for use as a rifle range, for example, significantly reduces the usefulness of that same site as a maneuver training area because maneuver training requires the availability of natural obstacles for cover and concealment. Likewise, the destruction of an endangered species habitat during or in support of operational training gives rise to an environmental opportunity cost.*

D. The Spectrum of Environmental Impacts Associated With Operational Training. There are seven types of environmental impacts associated with operational training. These impacts

*Environmental opportunity costs are not exclusively the burden of the military departments. The federally-induced extinction of any endangered plant or animal species is an environmental opportunity cost which Congress has determined to have potentially broad implications. In its report on the House version of the bill which was eventually enacted as the Endangered Species Act of 1973, the House Committee on Merchant Marine and Fisheries observed that while the importance of a plant or animal species may not be readily apparent, that species may be the sole source of important information. That report provided in pertinent part that:

"To take a homely but apt, example: one of the critical chemicals in the regulation of ovulations in humans was found in a common plant. Once discovered, and analyzed, humans could duplicate it synthetically, but had it never existed - or had it been driven out of existence before we knew its potentialities - we would never have tried to synthesize it in the first place.

Who knows, or can say, what potential cures for cancer or other scourges, present or future, may lie locked up in the structures of plants which may yet be undiscovered, much less analyzed? ... Sheer self-interest impels us to be cautious. (emphasis added)/12

are either environmentally negative (deterioration, degradation and destruction), environmentally neutral (maintenance) or environmentally positive (enhancement, substitution preservation and set aside preservation). They may arise from:

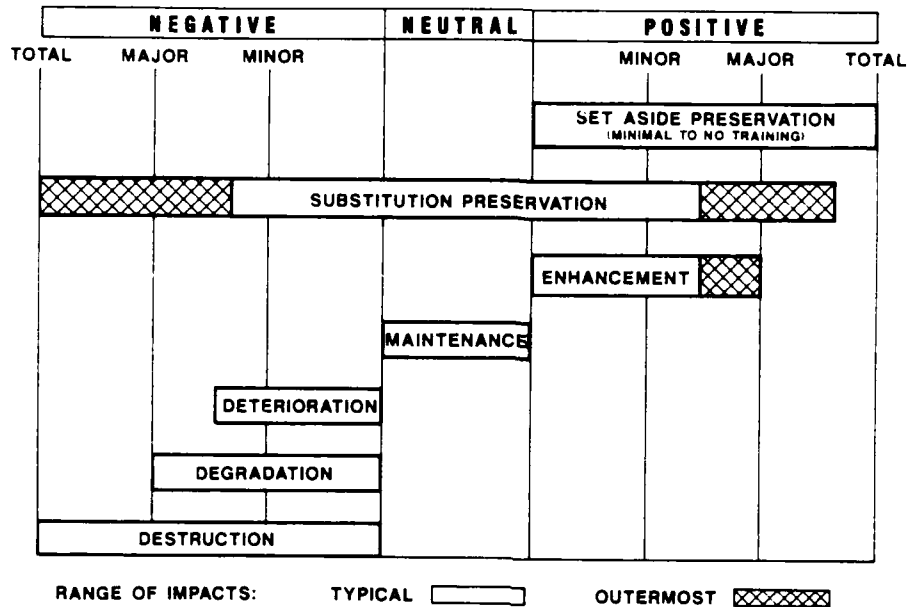
- (1) the failure to mitigate or repair the adverse environmental effects arising from the use of an area for training/training support (negative);
- (2) steps taken to avoid, minimize or eliminate the adverse effects of training/training support (neutral),
- (3) steps taken to both improve the natural environment and operational training at a given location (positive) or
- (4) steps taken to preclude adverse impacts on extremely sensitive environmental areas or protected plant/animal species (positive).

The spectrum of environmental impacts associated with operational training are depicted in Figure II-2.

(Figure II-2 on following page)

Figure 11-2

SPECTRUM OF ENVIRONMENTAL IMPACTS ASSOCIATED WITH OPERATIONAL TRAINING



Negative Environmental Impacts. Negative environmental impacts occur at one of the three following levels: environmental deterioration, degradation or destruction.

Deterioration consists of the minor negative effects of operational training on the environment. Soil erosion, sedimentation and water turbidity problems caused by the repeated use of a river bank for tracked vehicle access to and egress from a river are examples of environmental deterioration which might arise from operational training.

Degradation consists of the major negative effects of operational training on the environment. An example of

this level of negative impact involves "tree-kills" which might occur when tracked vehicles (such as tanks) train in wooded areas.*

Destruction occurs whenever an environmental asset is either eliminated or irreversibly altered. An example of environmental destruction includes the alteration of an endangered species habitat which in turn leads to the death of the animals which depended upon the habitat for survival.

Neutral Environmental Impacts. The environment will always experience some "wear and tear" during field and sea operational training. That "wear and tear" may be so minor that it is naturally self-correcting (such as where tank track imprints on a landing beach are obliterated by wave action). Furthermore, the effects of operational training may be so insignificant to the ecology of the training area that corrective action is unnecessary. An example of this second type of neutral impact would involve the sinking of bomb or shell fragments to the sea bed of a target area. In a third instance, training induced effects may be precluded or minimized by pre-training preparations and/or the establishment of an effective maintenance program. If river access points for tracked vehicles are properly prepared and

*Off road tracked vehicle training may result in tree knock-down or in soil compaction. When soil is compacted, tree feeder roots may be destroyed which leads in turn to the death of the tree.

maintained, for example, the problems of soil erosion, sedimentation and water turbidity may be significantly reduced or eliminated all together. So long as a training site/facility maintenance program is properly designed and faithfully executed, the effects of operational training should be essentially environmentally neutral. In the absence of an effective maintenance program, training sites may sustain one or more of the negative environmental impacts described above.

Positive Environmental Impacts. This class of environmental effects includes environmental enhancement, substitution preservation and set aside preservation.

Environmental Enhancement. One type of activity which both enhances the natural environment and improves operational training consists of tree thinning operations in areas used for infantry training. When trees grow too closely together, their competition for sunlight, nutrients and water results in stress on each tree in the stand. Stressed trees mature more slowly and they are especially vulnerable to insect infestation. To reduce the stress and stress-induced problems, stands of trees are periodically "thinned".

A tree thinning operation involves both the selective removal of trees from the stand and a "controlled burn" of the area. These actions, when taken together, enhance the

natural environment by:

- (1) reducing the tree-to-tree stresses within the stand,
- (2) reducing the vulnerability of the trees to insect infestation,
- (3) reducing the potential for forest fires.
- (4) increasing the availability of wildlife browse by providing better natural conditions for increases in undergrowth,* and
- (5) making the area more attractive as a habitat for certain wildlife species.** /13

The thinned area also enhances the quality of training by improving movement through the area by personnel and by their equipment.*** Both the natural environmental and operational training are enhanced by such tree thinning operations.

*The increased level of sunlight reaching the ground will facilitate undergrowth development.

** Wild turkeys are more likely to inhabit a thinned tree stand than one which is overgrown.

*** While von Clausewitz might argue that there is a certain amount of "friction" experience to be gained by requiring infantry units to maneuver through dense forests; here the value of the environmental enhancements more than offset the loss of such experience. Furthermore, if the area were denuded by a forest fire, it could not be used for "maneuver training in a forested area". Finally, large infantry units often avoid densely forested areas because such areas act as natural obstacles to movement.

Substitution Preservation. Should training operations require the extensive modification of environmentally sensitive areas such as wetlands, the United States Government may take steps to protect the overall balance of a region's ecology by purchasing private wetlands outside the training area with the goal of preserving the additional wetlands in their natural state in perpetuity. By precluding the development of the excess wetlands, the federal government would be striking a balance which favors both operational readiness and environmental protection./14

Substitution preservation usually involves both environmental costs and monetary opportunity costs. In the example above, the training area wetland would in all likelihood be modified to better support the training mission.* Therein lies the environmental cost. The money spent to purchase the excess (substitute) wetlands is money which cannot be used for any other purpose and may represent a considerable sum.** Both the money expended to purchase the wetlands and

*Modifications might include ditching to lower the water table in a portion of the area and/or the filling of another part of the area to make access roads.

**The Water Resources Development Act of 1986 provided \$60,200,000 to replace the 34,000 acres of bottomland hardwoods which were to be lost in the Corps of Engineers construction of the Tennessee-Tombigee Waterway. The purpose of the "in-kind" replacement was to protect the diminishing availability of wildlife habitats which exist only in such forested areas./15

the money spent to mitigate the environmental impacts of developing the training area wetlands constitute the monetary opportunity costs of the project.

Set Aside Preservation. When an installation commander sets aside a geographical area within his command for the purpose of environmental preservation he may do so by excluding access to the area all together or by placing limitations on how and when training may be conducted in the area. Due to the shortage of range and maneuver areas aboard most naval installations, naval commanders tend to impose the lowest levels of training restrictions consistent with the protection of the environmental interest which precipitated the restriction. Statutory and regulatory requirements may severely limit the installation commander's discretion to allow any training in environmentally sensitive areas, however. Under those circumstances, set aside preservation will result in significant opportunity costs from an operational training perspective.

E. The Costs of Environmental Protection. As demonstrated in the descriptions of substitution and set aside preservation above, environmental protection may involve considerable monetary and opportunity costs.

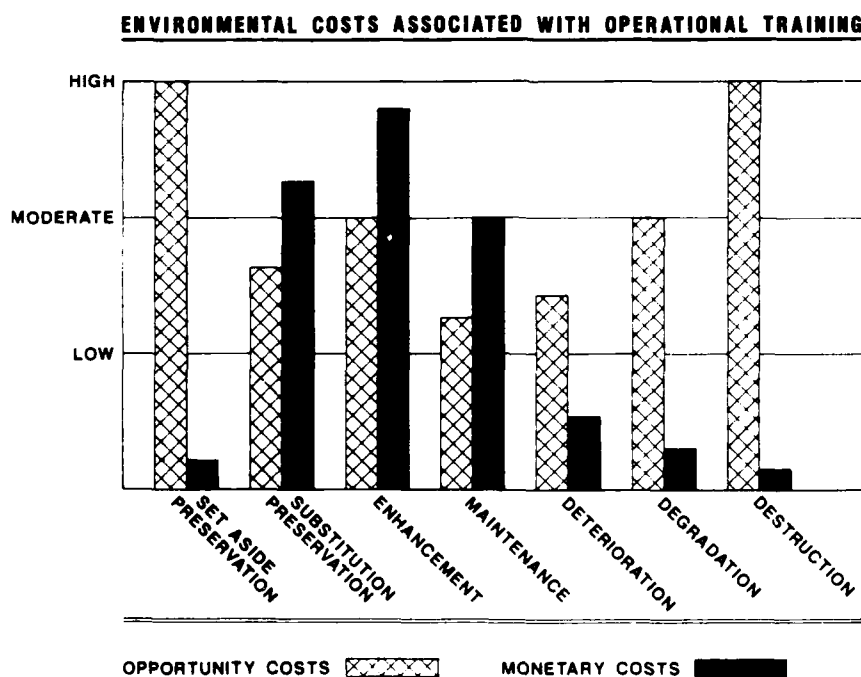
Environmental Protection Monetary Costs. One example of a monetary cost associated with environmental protection is

the expenditure of funds to clean up hazardous waste contamination on naval installations. Since toxic contamination of groundwater may represent a significant threat to water supplies both on and off the installation, its timely and effective cleanup is a necessary expenditure to "protect the environment."/16 The Department of the Navy funding level for hazardous waste cleanup during fiscal year 1989 is \$63 million dollars./17 It is estimated that the cost of cleaning up hazardous waste contamination on naval installations during the twenty-five years ending in 2005 will be between one and three billion dollars,/18 which is the equivalent of up to three aircraft carriers.

Environmental Protection Opportunity Costs. A classic example of an opportunity cost associated with environmental protection consists of the restrictions placed upon operational training in order to protect endangered plant and animal species. In an effort to reduce the threat to the nesting sites of Atlantic Loggerhead Turtles, Marine Corps Base Camp Lejeune reduces the beach frontage which may be used for amphibious assault training from five miles to one mile during the months of May to October each year./19 The 80% reduction in training beach availability represents an opportunity cost incurred in the interest of environmental protection./20

Environmental Protection Costs and Operational Training. As described above, both operational training and environmental protection generate their respective opportunity and monetary costs. The application of these cost concepts to the spectrum of environmental impacts associated with operational training (as set out in Figure 11-2 above) demonstrates that there is an interrelationship between the two types of cost at each level of environmental impact. These relationships are depicted in Figure 11-3 below.

FIGURE 11-3



At first glance, it is readily apparent that both ends of the environmental cost spectrum involve high opportunity

costs and very low monetary costs. The opportunity costs associated with "set aside preservation" are high because operational commanders are usually restricted in the way in which they may conduct training in environmentally sensitive areas (if they are not excluded from the areas all together). The monetary costs associated with "set aside preservation", on the other hand, are usually very low. They may involve only the marking of restricted areas in the field* and on maps and the establishment of a monitoring system to insure that the areas are in fact being respected. Depending upon their scope and frequency, the inspection duties could be assigned to naval personnel/civil service employees as a collateral duty, thereby incorporating the inspection costs into existing payroll. The inspection requirement may be so large, on the other hand, as to require an increase in the installation's environmental support staff to effectively manage protected resources.

At the opposite end of the environmental cost spectrum, operational training may result in the destruction of an environmental resource or a portion thereof. As such, the monetary cost associated with that destruction would be virtually nonexistent while the opportunity costs might be

*Field markings could be accomplished by signs and painted markings on boundary trees, both low cost/maintenance commitments.

considered as very high. For example, the inadvertent destruction of a critical habitat of an endangered species may threaten the continued existence of that species. As noted above*, Congress generally views the extinction of an endangered species as an unacceptable cost where the extinction arises from federal agency action.

The monetary costs associated with substitution preservation exceed its opportunity costs because the cost of the substitute parcel is off-set by the availability of additional training area. Furthermore, the preservation of the substitution parcel reduces the "societal" opportunity costs by taking steps to protect the ecological balance of the overall area. Dollars spent to both preserve a portion of the environment and to support operational training at the same time are necessarily doubly productive dollars.

The monetary costs associated with "environmental enhancement" and "maintenance" exceed the opportunity costs thereof because the money being spent to mitigate, monitor and/or maintain the training sites (the environment) provides operational training opportunities which might not otherwise be available. While there is an opportunity cost associated with the expenditure of funds for environmental protection,

*See the discussion of environmental opportunity costs in Chapter II, Part C above.

that cost may be more than offset by the increase in training site availability.

On the negative side of the environmental cost spectrum, opportunity costs far exceed monetary costs whenever operational training activities are allowed to deteriorate, degrade or destroy the environmental utility of a training site. Where sufficient efforts are not expended to effectively maintain training sites, the environmental decline of those sites may render them useless for training purposes. Accordingly, the monetary savings associated with reduced maintenance of training areas are usually illusory. Not only may the training area be rendered useless for its intended purpose; but it will probably cost more to restore the area than it would have to maintain it over a period of time.

Environmental Protection Costs Indirectly Associated With Operational Training. Some costs incurred for environmental protection only indirectly support operational training. Representative of such costs are "community service" expenditures which are required to support operational units located on a naval installation. For example, the Second Marine Division is located at Marine Corps Base, Camp Lejeune, North Carolina. A large percentage of its 16,000 enlisted and 1,000 officer personnel live on the base. They also train, maintain their tanks and artillery pieces and repair their motor vehicles there. The

presence of Second Division personnel together with those of other tenant and base commands (as well as their dependents) requires the operation of a number of environmental protection programs/facilities including but not limited to:

- (1) several sewage treatment plants to prevent water pollution,
- (2) a solid waste management program to prevent pollution from the improper disposal of solid waste,
- (3) a hazardous waste management program and storage facility to prevent pollution from the improper disposal of hazardous waste, and
- (4) a properly equipped steam generation plant for building heating and hot water generation while preventing air pollution.

The operation of these service support facilities on board Camp Lejeune provides general support to Second Marine Division and Marine Corps Base commands as well as all other installation tenants. While not directly attributable to the support of any particular training site or training exercise, the costs of these environmental protection activities do support the conduct of operational training in a general sense. Accordingly, both operational and installation commanders have a vested interest in both the monetary and the opportunity costs associated with environmental protection

required by such service support facilities on board the installation.

F. The Environmental Benefits Associated With Operational Training on Naval Installations. On occasion, naval commanders and environmentalists* find themselves adopting opposing positions with regard to how, where or when operational training should be conducted. Although these two groups may differ on the particulars of a given situation, they both have an interest in the continued existence of naval installations as training bases. While the interest of naval commanders in conducting operational training on naval installations is self-evident, that of the environmental community is not.

Private development on our Nation's coasts has grown to the point that the only major parcels of undeveloped shoreline are those owned by the United States. Several of these parcels are dedicated for use as naval installations. The preservation of coastal shoreline in its natural state on these installations both supports realistic operational training and maintains for posterity a glimpse of our Nation's natural environment as it once existed.

In addition to aesthetics, naval installations often

*The term " environmentalists" as used here includes ecologists, conservationists and environmental regulators.

provide wildlife habitats which are not otherwise available off the installation. The 1979 federal district court case of Barcelo v. Brown /21 discussed the connection between the existence of naval training areas on and around the island of Vieques, Puerto Rico and the habitat opportunities those areas provided for several species of endangered animals as follows:

The Brown Pelican. In disposing of the plaintiff's argument that aircraft noise disturbed the brown pelican's "reproductive activities", District Judge Torruella's written opinion provided in pertinent part that:

If pelicans are as susceptible to military activity as is alleged one wonders why they established a nesting colony in such close vicinity to Vieques' most active military zone.

* * *

In fact, the major disturbance to this nesting colony is brought about by visits of fishermen who go onto the cay to collect snails. By restricting the presence of humans in this area, Defendant Navy has de facto provided a refuge for the pelicans (and other wildlife). (emphasis added). /22

The Sea Turtles.* The Judge's opinion disposed of the sea turtle issue as follows:

*The endangered species of sea turtles which were the subject of the suit included leatherback turtles and hawksbill turtles. Threatened species of sea turtles which were the subject of the suit included green turtles and loggerhead turtles.

The record shows that the greatest threat to these species (of sea turtles) in Vieques, as throughout the Caribbean, has been the unrestricted fishing that has taken place. There is evidence that this fishing, although presently illegal under the Endangered Species Act, is still taking place around Vieques, together with the poaching of sea turtle eggs and nesting adults. Defendant Navy's presence on Vieques, together with the restrictive nature of its activities, has had some measure of benefit to the turtle population by precluding some of the illegal fishing and egg poaching. (emphasis added)/23

The Manatees. With regard to these marine mammals, Judge Torruella's opinion provided that:

The evidence presented demonstrates that the manatee is found in larger numbers and concentrations in Vieques than any other area of Puerto Rico except the Naval Reservation at Roosevelt Roads, across Vieques Sound. We do not deem it coincidental that both these areas are under the control of Defendant Navy. (emphasis added)/24

Navy and Marine Corps use of Vieques for amphibious landings as well as for air-to-ground, ship-to-shore and artillery training was challenged by the Governor of Puerto Rico and several private citizens. Their allegations that the operational training conducted on or near Vieques violated the Endangered Species Act and the Marine Mammal Protection act were dismissed by the District Court Judge for the substantive reasons set out above as well as for certain procedural reasons. Those dismissals were vacated on appeal and the United States Court of Appeals for the First Circuit directed that the trial judge reconsider his opinion after

the Navy had obtained "biological opinions" from appropriate federal agencies.* /25 The purposes of the biological opinions were to document the impact of the operational training on the endangered species, and, if the training jeopardized any of those species, to serve as a basis for modifying or terminating the training. The Fish and Wildlife Service biological opinion provided in pertinent part that:

Based on the Team's on-site inspection, information in the December 1979 Draft Environmental Impact Statement, reports of contractors employed by the Navy for environmental studies, and other pertinent reports, it is our Biological Opinion that naval activities associated with training at Vieques Island are not likely to jeopardize the continued existence of the manatee, brown pelican, loggerhead turtle, green turtle, leatherback turtle or hawksbill turtle, or adversely modify habitat essential to these species existence. Cumulative effects were considered in reaching this opinion but we felt they did not apply in this case. /26.

The National Marine Fisheries Service biological opinion was summarized by the Assistant Administrator for Fisheries, NMFS as follows:

The enclosed Biological Opinion supercedes our June 15, 1981 Biological Opinion. The revised opinion concludes that the identified activities are not likely to jeopardize the olive ridley sea turtle, the sperm whale, the sea whale, or the humpback whale for the reasons stated above. Although NMFS still believes that there is insufficient information concerning the biology of the loggerhead, hawksbill, leatherback, and green sea

*The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS).

turtles, the aforementioned conservation measures and precautions apparently taken by the Navy are sufficient to preclude significant adverse impacts to sea turtles found in the project area. Based upon the above, and the adoption by the Navy of the reasonable and prudent alternative provided in the Biological Opinion, NMFS believes that the identified activities would not be likely to jeopardize the continued existence of sea turtles found near Vieques. /27

The two "non-jeopardy" opinions supported Judge Torruellas's observations that the Navy's presence on Vieques did not constitute a threat to the endangered and threatened animal species living on the island or in adjacent waters.

Chapter Summary. While few would challenge the need of the naval services to conduct operational training in order to maintain naval readiness, there are some who would take issue with "how", "where" and "when" that training is accomplished. Those individuals might not fully appreciate that the naval services must continuously conduct operational training in a number of environmental settings and through numerous field and sea exercises in order to maintain an acceptable level of individual and unit readiness. As noted by von Clausewitz, the "common sense, judgment and resolution" necessary for effective, war fighting may only be fully developed in peacetime through realistic "field maneuvers". His comment applies with equal force to peacetime sea maneuvers.

While operational training is obviously crucial to the maintenance of our nation's overall war fighting capability, it is not without its monetary, opportunity and environmental costs. To these costs must be added at least a portion of the monetary and opportunity costs associated with the construction and operation of environmental protection facilities which directly affect the quality of life on board naval installations because these facilities also support (albeit indirectly) the operational training. From these costs must be deducted the "opportunity savings" which arise from increased training site availability and increased habitat availability which are attributable to the sound environmental management/environmental protection practices occurring on the installation.

Due to the considerable significance attributed to both national security and environmental protection, naval operational and installation commanders must demonstrate their concern not only with the achievement of naval readiness through operational training, but also with the protection of the environment from the adverse impacts of that training.

Finally, the growing shortage of operational training areas mandates that the naval services husband those training facilities which they already own by ensuring that they are used in an environmentally reasonable manner. The repair of damage resulting from environmental abuse at training

sites may be extremely costly and the loss of those sites may be irreplaceable.

CHAPTER III

FEDERAL ENVIRONMENTAL PROTECTION LEGISLATION, FEDERAL FACILITY COMPLIANCE AND EXEMPTION PROCEDURES

Overview. While a number of federal laws have been enacted to address environmental concerns, only certain of these statutes have the potential to significantly influence naval operational training and/or naval installation support of that training. This chapter will:

1. review that federal legislation which may generate the greatest monetary and/or opportunity costs with regard to the conduct of naval operational training or with regard to naval installation support of that training;

2. examine those statutory provisions which require that naval installations and naval personnel/federal employees comply with federal, state and local environmental legislation; and

3. address the means by which federal facilities may, on a case by case basis, seek to be exempted from compliance with certain aspects of federal environmental statutes.

A. Federal Environmental Legislation with the Potential to Influence Naval Operational Training and/or Naval Installation Support of that Training. Those federal environmental statutes which have the greatest degree of influence over how, where and when and if the Navy and the

Marine Corps conduct operational training were enacted to control pollution, to protect natural/historic resources, to control federal land use and to restore the environment. This part of chapter III will address the federal legislation concerned with six forms of environmental pollution control, six forms of resource protection, one form of land use control and two forms of environmental restoration.

Pollution Control As discussed in Chapter II, Part E above, there are a number of environmental protection costs which are indirectly associated with the conduct of operational training on naval installations.* By incurring these costs, both the quality of life and the quality of operational training on naval installations are maintained because the natural environment is not degraded by water, air or waste pollution. Those Federal statutes concerned with the control of environmental pollution which are of particular concern to the naval services are listed in Table III-1 below.

(Table III-1 on the following page)

*Such costs include, for example, the operation of sewage treatment plants, the use of emission control equipment in steam generation plants as well as the costs arising from the management of hazardous/nonhazardous waste disposal.

TABLE III-1

POLLUTION CONTROL STATUTES

STATUTE	CONCERN	ACRONYM
FEDERAL WATER POLLUTION CONTROL ACT (ALSO KNOWN AS THE CLEAN WATER ACT)	WATER POLLUTION	CWA
MARINE PROTECTION, RESEARCH, AND SANCTUARIES ACT OF 1972	OCEAN DUMPING OF WASTES/DREDGE MATERIAL	MPSA
CLEAN AIR ACT	AIR POLLUTION	CAA
NOISE CONTROL ACT OF 1972	NOISE POLLUTION	NCA
FEDERAL INSECTICIDE, FUNGICIDE AND RODENTICIDE ACT	PESTICIDE POLLUTION	FIFRA
RESOURCE CONSERVATION AND RECOVERY ACT OF 1976	HAZARDOUS AND NON-HAZARDOUS WASTE MANAGEMENT	RCRA

Water Pollution. The objective of the Federal Water Pollution Control Act (FWPCA) /1 is "to restore and maintain the chemical and biological integrity of the Nations' waters." /2 Congress intends that its objectives be achieved primarily by the following means: federal grants for the construction of public sewage treatment plants /3, the requirement that a permit be obtained before any pollutant* is discharged from a point source** into the navigable waters*** of the United States /7, the requirement that a permit be obtained before dredge material is discharged into the navigable waters of the United States /8, the establishment of a national contingency plan for the removal of discharged oil or hazardous substances from the Nation's waters /9, the requirement that marine sanitation devices be used /10, and the establishment of civil and criminal penalties as enforcement tools. /11

Ocean Dumping. The Marine Protection,

*The term "pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. /4

**The term "point source" includes pipes, ditches, rolling stock, vessels and other floating craft. /5

***The term "navigable waters" means the waters of the United States including the territorial seas. /6

Research and Sanctuaries Act of 1972 (MPRSA)/12 was enacted "to regulate the dumping of all types of materials into ocean waters and to prevent or strictly limit the dumping...of any materials which could adversely affect human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities."/13

The MPRSA proscribes the dumping of any material into the oceans without either an Environmental Protection Agency (EPA) permit/14 or a Corps of Engineers (COE) permit (the latter issued only for dredge material)./15

Air Pollution. The purposes of the Clean Air Act/16 are "to protect and enhance the quality of the Nation's air resources so as to promote public health and welfare and the productive capacity of its population" and "to encourage and assist the development and operation of regional air pollution control programs"./17 Each state is required to adopt an implementation plan to control the emission of regulated pollutants* into its air./18 The states are each divided into one or more "Air Quality Control Regions" (AQCR)./19 Each AQCR is either "in attainment" or in "non-attainment" for each of the regulated pollutants. The goal for each AQCR is to reach attainment for each

*The regulated pollutants include carbon monoxide, hydrocarbons, nitrogen oxides, ozone, particulates and sulfur oxides.

regulated pollutant by the date established by Congress for that pollutant. States strive to reach attainment by controlling the quantity of regulated pollutants emitted by each major stationary source in the state's AQCRs. The CAA contains enforcement procedures to compel compliance where necessary./20

Noise Pollution. Congress enacted the Noise Control Act of 1972 (NCA)/21 "to promote an environment for all Americans free from noise that jeopardizes their health or welfare."/22 The objective of the NCA is to be achieved through the promulgation of federal, state and local noise emission standards for "products distributed in commerce."/23 The NCA proscribes: the distributions of any product in commerce which violates the noise emission standard established for the product, any act which renders inoperative a noise suppression device, and the use of any product which has had its noise suppression device(s) rendered inoperative./24 Criminal penalties, injunctive relief and administrative orders are available to enforce the provisions of the NCA./25

Pesticide Pollution. The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)/26 was enacted by Congress to control pesticide pollution by regulating the manufacture, distribution and use of pesticides. Under FIFRA, for example, it is unlawful "to use any registered

pesticide in a manner inconsistent with its labeling"/27. By controlling distribution and application of pesticides, Congress intends to reduce the impact of pesticide pollution arising from its improper use.

Waste Management. Among the various objectives of the Resource, Conservation and Recovery Act of 1976 (RCRA)/28 are: the elimination of open dumps* and the conversion of open dumps to facilities which do not represent a threat to the environment or to health./30 the assurance "that hazardous waste management practices are conducted in a manner which protects human life and the environment"/31 and the promulgation of guidelines for nonhazardous waste "collection, transportation, separation, recovery and disposal practices and systems"/32 While recognizing that the collection and disposal of nonhazardous wastes are primarily the responsibility of state, regional and local agencies, Congress determined that the public health and environment threats associated with the improper disposal of both nonhazardous and hazardous waste made all waste disposal a matter of national concern./33 RCRA was enacted to provide an uniform approach to waste disposal on a national basis. Finally, both hazardous and nonhazardous waste regulators are provided a variety of enforcement mechanisms to compel

*The term "open dump" means any dump which is neither a sanitary land fill or a hazardous waste disposal site./29

compliance with RCRA should such action become necessary. 34

Resource Protection and Land Use Control. Resource protection and land use control statutes often directly influence operational training by severely limiting the scope of training that may be conducted in environmentally or historically sensitive areas or by precluding training in those areas all together. Those statutes providing for resource protection or land use control which are of particular interest to the naval services are listed in Table III-2 below.

(Table III-2 is on the following page)

TABLE III-2

RESOURCE PROTECTION/LAND USE CONTROL STATUTES

STATUTE	CONCERN	ACRONYM
NATIONAL ENVIRONMENTAL POLICY ACT OF 1969	ENVIRONMENTAL PLANNING, INTERAGENCY COORDINATION, RESOURCE PROTECTION	NEPA
NATIONAL HISTORIC PRESERVATION ACT	PRESERVATION OF PREHISTORIC & HISTORIC SITES/STRUCTURES	NHPA
ARCHAEOLOGICAL RESOURCES PROTECTION ACT OF 1979	PREHISTORIC ARTIFACTS INCLUDING SKELETAL REMAINS	ARPA
MARINE PROTECTION, RESEARCH & SANCTUARIES ACT OF 1979	MARINE SANCTUARIES	MPRSA
MARINE MAMMAL PROTECTION ACT OF 1972	MARINE MAMMAL PROTECTION	MMPA
ENDANGERED SPECIES ACT OF 1973	PROTECTION OF ENDANGERED/ THREATENED PLANT & ANIMAL SPECIES	ESA
COASTAL ZONE MANAGEMENT ACT	FEDERAL PROJECTS IMPACTING ON COASTAL ZONE ARE CONSISTENT WITH STATE MANAGEMENT PROGRAMS	CZMA

Environmental Planning and Interagency

Consultation. In the National Environmental Policy Act of 1969 (NEPA), 735 Congress declared that:

...it is the continuing policy of the Federal government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans. 736

Congress next delineated the responsibility of the federal government to safeguard the Nation's natural and man-made environment as follows:

In order to carry out the policy set forth in this Act, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs and resources to the end that the Nation may-

- (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- (2) assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- (3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
- (4) preserve important historic, cultural, and natural aspects of our

national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;

(5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

(6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources. /37

The Federal agencies execute their responsibilities under NEPA through the environmental impact statement (EIS) process. Whenever a major federal project/action will "significantly affect the quality of the human environment", /38 the agency which is sponsoring the project must prepare an EIS which will set out the following:

(1) the environmental impact of the proposed action,

(2) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(3) alternatives to the proposed action,

(4) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(5) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented. /39

Any federal agency "which has jurisdiction by law or special expertise with respect to any environmental impact involved" /40 must be afforded an opportunity to comment on

the project/action. Likewise, the public has the right to review and comment on EISs./41 Should a federal agency fail to prepare an EIS when one is required or fail to prepare an adequate EIS, the project may be halted by a federal injunction until an adequate EIS is prepared. Should a commenting federal agency nonconcur with the efforts which the sponsoring agency has taken to mitigate or to avoid the adverse environmental impacts of the project/action, then the commenting agency may refer to its nonconcurrence to the Council on Environmental Quality in the Executive Office of the President for its review and comment./42 NEPA has proven to be a powerful vehicle for modifying and/in some instances, terminating proposed federal projects/actions.

Historic Resources Protection. The primary purpose of the National Historic Preservation Act (NHPA)/43, is to preserve prehistoric and historic resources to the maximum extent practicable so that the Nation's "vital legacy of cultural, educational, aesthetic, inspirational, economic and energy benefits will be maintained and enriched for future generations of Americans"./44 The protection of buildings and other structures is accomplished by listing the object to be preserved on the National Register of Historic Places./45 While placement of a historic resource on the National Register does not ensure that it will be preserved intact or in place, the listing ensures that the historic

value of the object will be afforded the greatest protection practicable in a given situation.*

Archaeological Resources Protection. The purpose of the archaeological Resources Protection Act (ARPA)/46 is to protect archaeological resources** and sites located on public and Indian lands./48 Before any person may excavate or remove any archaeological resource located on public land, he or she must obtain a permit from the federal land manager who has jurisdiction over that land./49 Any person who excavates, removes, damages, or alters any archaeological resource without a permit is subject to criminal penalties./50 Anyone who sells, purchases, exchanges, transports, receives, or offers to sell, purchase or exchange any archaeological resource obtained illegally from public lands is likewise subject to criminal penalties./51

Marine Sanctuaries. The Marine Protection, Research and Sanctuaries Act of 1972 (MPRSA) not only regulates ocean dumping as was discussed above; but it also

*For example, a historic bridge may be important as a part of a public transportation network but unsafe for vehicular use. The bridge may be removed to another location or destroyed and a substitute built in its place it after the original bridge has been photographed and appropriate engineering drawings have been made to preserve its special character for posterity.

**The term "archaeological resources" includes any material remains of past human life or activities including but not limited to pottery, basketry, weapons, pit houses, rock paintings/carvings and human skeletal remains./47

provides for the establishment of marine sanctuaries.^{/52} The MPRSA authorizes the Secretary of Commerce, after consultation with certain other Departmental Secretaries (including the Secretary of Defense), to designate marine sanctuaries in the ocean waters (as far seaward as the outer edge of the continental shelf) to the extent that the establishment of such a sanctuary is "necessary for the purpose of preserving or restoring such areas for their conservation, recreational, ecological or aesthetic values."^{/53} The Secretary must then promulgate regulations to further the purpose for which the sanctuary was created. Any person violating such regulations may be subjected to a civil penalty of up to \$50,000 for each day of violation.

Marine Mammal Protection. Congress enacted the Marine Mammal Protection Act of 1972 (MMPA)^{/54} to protect certain species and population stocks of marine mammals so that they would "not be permitted to diminish beyond the point at which they cease to be a significant functioning element in the ecosystem of which they are a part."^{/55} With certain exceptions, the MMPA proscribes the "taking"* of any marine mammal on the high seas by any person subject to the jurisdiction of the United States or any such taking by any person in waters or on lands under the jurisdiction of the

*The term "take" means to harass, hurt, capture or kill or attempt to do those acts to any marine mammal.^{/56}

United States./57 The MMPA provides for both civil and criminal penalties to enforce its prescriptions./58

Endangered and Threatened Species Protection.

The purposes of the Endangered Species Act of 1973 (ESA),/59 include the conservation of ecosystems upon which endangered and threatened species* depend, the conservation of such species, and the enforcement of international treaties created to conserve fish, wildlife, and plant species facing extinction./60 Once a species has been determined to be either endangered or threatened, each federal department and agency is required to conserve the species and to use their authority in furtherance of the ESA purposes set out above./62 Specifically, Federal agencies are required to:

...insure that any action authorized, funded, or carried out by such agency...is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary (of the Interior), after consultation as appropriate with affected States, to be critical unless such agency has been granted an exemption for such action....

Absent an exemption, the ESA can present a formidable obstacle to any agency action posing the threats described above.

Coastal Zone Management. Congress enacted the

*An "endangered species" is one facing extinction while a "threatened species" is one likely to become endangered in the foreseeable future./61

Coastal Zone Management Act of 1972 (CZMA)/63 in part "to encourage the participation and cooperation of the public, state and local governments, and interstate and other regional agencies, as well as of the Federal agencies having programs affecting the coastal zone*..."./65 Federal agencies undertaking any development project in a coastal zone of a state must ensure that the project is "consistent" with approved states management programs to the "maximum extent practicable."/66 Any federal action whose affects are completely confined to federal land is not subject to the consistency requirement of the CZMA. If the affects spill over to non-federal coastal lands, however, the agency must then ensure that its actions are consistent with the state coastal management plan even though the action occurs on federal property./67

Environmental Restoration. Environmental restoration statutes provide for "response" and "remedial" actions. A "response action" is one which is taken whenever there has been a release (or there is an imminent threat of a release) of a hazardous substance into the environment. A remedial action is one taken to cleanup preexisting hazardous substance sites which pose a significant threat to the health

*The term "coastal zone" includes shorelines of the states, islands, transitional and intertidal areas, salt marshes, wetlands, and beaches. The term excludes federal lands whose use is committed by law to the sole discretion of the federal government, its officers, or agents./64

and welfare of the public.* The cleanup of private sites at public expense is often necessary because either the owner of the pollutant/site is unknown, or the owner of the site is unable to effect the cleanup due to the considerable expense involved. Cleanup of hazardous waste sites at DOD installations is also embraced by the environmental restoration statutes. The funds which must be dedicated to this purpose are considerable. In an article entitled "DOD Seeks \$500 Million for FY 1989 Cleanup, 25 Percent More Than Previous Year's Funding," The author provided in pertinent part that:

Since 1984 the Defense Department's cumulative environmental restoration account has reached \$1.6 billion for cleanup activities....(It is) estimated that by 1992 DOD would need between \$800 million and \$1 billion a year to maintain its pace of cleanups and site assessments with a total of \$11 billion to \$14 billion required over the next 25 years./68

Money expended for DOD environmental restoration is undoubtedly well spent; but it is also that money which is unavailable for other programs (including operational training and operational training support). The environmental restoration statutes of particular concern to

*Due to the large number of hazardous waste sites requiring cleanup, it is necessary to prioritize them so that the worst receive attention first. Based upon a ranking system, the EPA places those sites requiring remedial action on the "National Priority List" thereby insuring that they will receive attention before less polluted sites.

the naval services are listed in Table III-3 below.

TABLE III-3

ENVIRONMENTAL RESTORATION STATUTES

STATUTE	CONCERN	ACRONYM
COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION & LIABILITY ACT OF 1980	CONTAIN & CLEAN UP RELEASES OF HAZARDOUS SUBSTANCES	CERCLA
SUPERFUND AMENDMENT & REAUTHORIZATION ACT OF 1986 (INCLUDING THE DEFENSE ENVIRONMENTAL RESTORATION PROGRAM)	CLEANUP OF CONTAMINATION FROM PAST HAZARDOUS WASTE DISPOSAL ON DOD INSTALLATIONS	SARA (DERP)

Liability For Response and Remedial Actions.

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA)/69 was enacted to provide a source of money for expeditious responses to hazardous substance releases (or the imminent threats of such releases) and for remedial actions to cleanup inactive hazardous waste

sites.* CERCLA was enacted to make those parties responsible for the release of any hazardous substance liable for the cleanup/containment of that release. CERCLA holds liable the party who transported the hazardous substance to the release site and the party who owned the hazardous substance at the time of its release or abandonment at the disposal site./70 To the extent that the United States is the owner/operator of the facility/vessel which precipitates a CERCLA response/- remedial action, it is liable for cleanup costs to the same extent as a private citizen./71

The Federal Facilities Compliance Docket.

Congress expressed its concern that federal facilities are not proceeding with CERCLA cleanups quickly enough in the language of the Superfund Amendment and Reauthorization Act of 1986 (SARA)./72 Under SARA, federal facilities with significant hazardous waste pollution problems are to be placed upon the "Federal Facility Hazardous Waste Compliance Docket", (FFHWCD) which will be monitored by Congress to ensure that timely remedial cleanup actions are accomplished./73

*An "inactive site" is one which is not being operated as a hazardous waste treatment, storage or disposal facility (TSDF). The site may be abandoned or it may be part of a complex which was used as a TSDF at some time in the past. Active TSDFs are regulated under RCRA. Cleanup of active sites are considered to be "RCRA corrective actions" vice "CERCLA remedial actions".

The naval installations and facilities listed on the current Federal Facility Compliance Docket are numerically summarized by EPA region, state and service in Table III-4 below. 74 Individual installations are identified by name on a state by state basis in Appendix A.

(Table III-4 is on the following page)

TABLE III-4

**NUMERICAL LISTING OF NAVY AND MARINE CORPS
INSTALLATIONS AND FACILITIES ON THE FEDERAL FACILITY
COMPLIANCE DOCKET**

EPA REGION	STATE	NAVY	MARINE CORPS
1	CT	3	
	MA	2	
	ME	5	
	RI	5	
2	NJ	3	
	NY	6	
	PR	4	1
3	DC	3	
	DE	1	
	MD	12	
	PA	6	
	VA	14	2
	WV	2	
4	FL	13	
	GA	1	1
	KY	1	
	MS	2	
	NC		4
	SC	2	2
	TN	2	

EPA REGION	STATE	NAVY	MARINE CORPS
5	IL	2	
	IN	2	
	MN	1	
	OH	1	
6	LA	1	
	TX	6	
7	NE	2	
8	CO	1	
	UT	1	
9	GUAM	10	
	AZ		1
	CA	45	8
	HI	12	1
10	AK	2	
	OR	1	
	WA	10	

TOTALS:	NAVY	185
	MARINE CORPS	20
	DON	205

The Navy and Marine Corps together have a total of 205 entries on the "Docket", representing 19.6 percent of all federal facilities listed thereon.*

The Defense Environmental Restoration Program. In addition to the SARA federal facilities provisions described above, that Act also establishes the "Defense Environmental Restoration Program" (DERP).^{/75} Under DERP, the Secretary of Defense is charged with ensuring that DOD installations comply with all SARA federal facilities provisions. He is further charged with administering the "Defense Environmental Restoration Account" which was established by SARA to fund DOD hazardous waste cleanup.^{/76} The Secretary is responsible for all DOD response actions taken to cleanup hazardous waste releases from:

- each facility or site owned by, leased to, or otherwise possessed by the United States and under the jurisdiction of the Secretary.
- each facility or site which was under the jurisdiction of the Secretary and owned by, leased to, or otherwise possessed by the United States at the time of actions leading to contamination by hazardous substances.
- each vessel owned or operated by the Department of Defense.^{/77}

Finally, the Secretary must submit an annual report

*The Army has 235 entries, the Air Force has 118, the Department of Defense has 21 and the U.S. Army Corps of Engineers has 15.

to Congress describing the progress that DOD has made in implementing DERP. /78

Oil Spills. As noted above, oil spill cleanups are conducted under the National Contingency Plan which was established by the Federal Water Pollution Control Act (FWPCA). /79 While such cleanups are "response actions", they also are a form of pollution control. For that reason they are addressed under FWPCA instead of CERCLA.

B. Federal Facility Compliance With Environmental Protection Legislation. Several environmental protection statutes expressly require that federal facilities comply with their substantive and procedural requirements to the same extent as would any non-governmental entity. Those acts which contain such provisions are listed in Table III-5 and are described further in the Table's accompanying notes.

(Table III-5 is on the following page)

TABLE III-5

**FEDERAL ENVIRONMENTAL PROTECTION LEGISLATION
EXPRESSLY PROVIDING FOR FEDERAL FACILITY/
AGENCY COMPLIANCE**

TYPE	STATUTE	CITATION		TABLE NOTES
		TITLE	SECTION	
POLLUTION CONTROL	FWPCA	33	1323	1 2 3 4 5
	MPRSA	33	1413(e)	6
	CAA	42	7418	1 3 4 5
	NCA	42	4903(a)	7
	FIFRA	7	136p	8
	RCRA	42	6961	1 2 3 9
RESOURCE PROTECTION, LAND USE CONTROL	NEPA	42	4332(b)	10
	NHPA	16	470(f)	11
	ARPA	16	470(ee)	12
	MPRSA	16	1434(c)(2)	13
	MMPA	16	1382(a)	14
	ESA	16	1536(a)(2)	15
	CZMA	16	1456(c)(1) and (c)(2)	16
ENVIRONMENTAL RESTORATION	CERCLA	42	9620	17
	SARA/DERP	10	2701	18

TABLE III-5 NOTES

1. Each federal facility is "subject to, and shall comply with, all Federal, State, Interstate and Local Requirements, administrative authority, and process and sanctions...in the same manner, and to the same extent as any nongovernmental entity...."

2. Each federal facility must pay reasonable service charges.

3. Each federal facility shall comply with all "requirements whether substantive or procedural (including any record keeping or reporting requirement, any requirement respecting permits or any other requirement whatsoever)."

4. Each federal facility will comply with "the exercise of any Federal, State or Local administrative authority."

5. Each federal facility is subject "to any process and sanction, whether enforced in Federal, State or Local courts or in any other manner."

6. Federal projects involving dredged material are not required to obtain an ocean dumping permit from the Secretary of the Army. However, the Secretary is authorized to "issue regulations which will require the application to (Federal) projects of the same criteria, other factors to be evaluated, the same procedures, and the same requirements which apply to the issue of permits under (other provisions of the Marine Protection, Research and Sanctuaries Act). Those regulations which pertain to federal facilities are codified at 33 C.F.R. Part 324.3(b) (1987 ed.).

7. All "Federal agencies shall, to the fullest extent consist with their authority under Federal laws administered by them, carry out the programs within their control in such a manner as to further (the Congressional policy expressed in the Noise Control Act)".

8. The Administrator of the Environmental Protection Agency "may, at his discretion, exempt any Federal....agency from any provision of (The Federal Insecticide, Fungicide and Rodenticide Act) if he determines that emergency conditions exist which require such exemption." By negative implication, absent such emergency conditions all federal agencies must comply with FIFRA.

9. Federal Facilities are subject to "any provisions for injunctive relief and such sanctions as may be composed by a (Federal or State) court to enforce such relief."

10. "In order to carry out the policy set forth in the National Environmental Policy Act), it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, function, programs, and resources to the end that the Nation may -

(1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

(2) assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings;

(3) attain the widest range of beneficial uses of the environment without degradation, risk to health or

safety, or other undesirable and unintended consequences:

(4) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;

(5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

(6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources."

11. "The head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building structure, or object that is included or eligible for inclusion in the National Register. The head of any such Federal agency shall afford the Advisory Council on Historic Preservation established under Title II of (The National Historical Preservation Act) a reasonable opportunity to comment with regard to such undertaking."

12. The Archaeological Protection Act provides that "No person may excavate, remove, damage, or otherwise alter or deface any archaeological resource located on public lands...unless such activity is pursuant to a permit (issued by the federal land manager whose Department has jurisdiction over the public land where the resources is located)."

13. The use of any marine sanctuary designated by the Secretary of Commerce under the Marine Protection, Research and Sanctuaries Act, whether by lease, permit, license or right is subject to regulation by the Secretary. Regulations pertaining to prohibited and permitted activities within marine sanctuaries are codified at 15 C.F.R. Parts 924.3 and 924.5 (1988 ed.) respectively.

14. The Secretary of the Interior and/or the Secretary of the Department in which the National Oceanic and Atmospheric Administration is operating, in consultation with any other Federal agency to the extent that such agency may be affected, shall prescribe such regulations as are necessary

and appropriate to carry out the purposes of (The Marine Mammal Protection Act)". Regulations implementing the MMPA are codified at 50 C.F. R. Parts 11-14 and 17 (1987 ed.).

15. "Each Federal agency shall, in consultation with and with the assistance of the Secretary (of the Interior), insure that any action authorized, funded, or carried out by such agency ...is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the (Endangered Species) Committee pursuant to (The applicable provisions of the Endangered Species Act). In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available."

16. Under the Coastal Zone Management Act "Each Federal agency conducting or supporting activities directly affecting the coastal zone shall conduct or support those activities in a manner which is, to the maximum extent practicable, consistent with approved state management programs." and "Any Federal agency which shall undertake any development project in the coastal zone of a state shall insure that the project is, to the maximum extent practicable, consistent with approved state management programs."

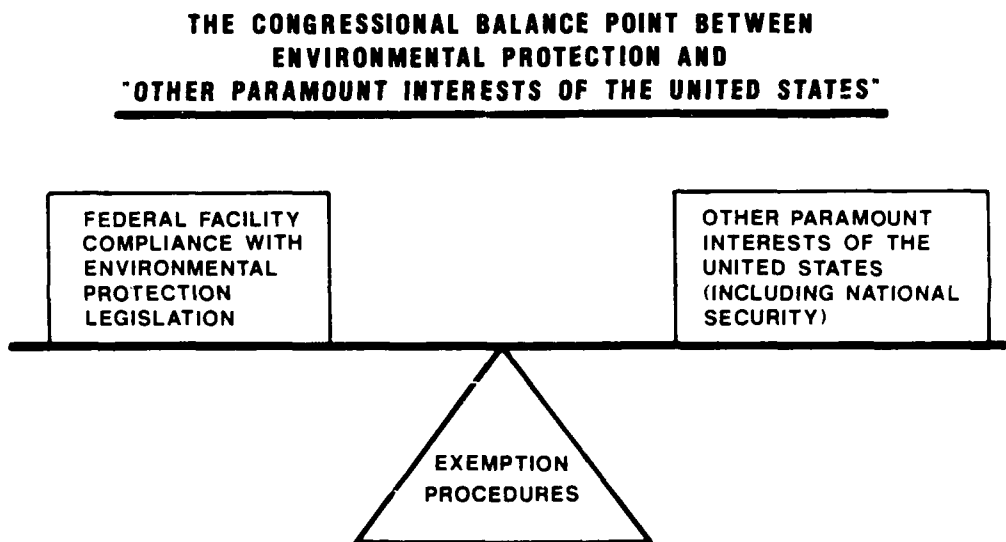
17. Each federal facility "shall be subject to, and comply with (the Comprehensive Environmental Response, Compensation and Liability Act as amended by the Superfund Amendment and Reauthorization Act) in the same manner and to the same extent, both procedurally and substantively, as any nongovernmental entity, including liability (for response/remedial actions arising from the release of hazardous substance(s) from the federal facility)."

18. SARA also establishes the DOD Environmental Restoration Program. A DOD facility is subject to the same duties and liabilities as any other Federal Facility.

C. Exemption Procedures. Congress has repeatedly recognized that there are occasions when the need for environmental protections will be outweighed by some other "paramount interest of the United States." To ensure that these other

interests receive appropriate consideration in any given situation, Congress has established exemption procedures in most of its environmental protection legislation. The role that the exemption procedures play is depicted in Figure III-1 below.

FIGURE III-1



Together with exemption procedures, Congress has created exemption authorities who are charged with striking the appropriate balance for each exemption request within their

jurisdiction. Exemption procedures and their respective exemption authorities are listed in Table III-6 and are further described in the Table's accompanying notes.

TABLE III-6

**FEDERAL ENVIRONMENTAL PROTECTION LEGISLATION
EXEMPTION PROCEDURES**

TYPE	STATUTE	CITATION		EXEMPTION AUTHORITY	TABLE NOTES
		TITLE	SECTION		
POLLUTION CONTROL	FWPCA	33	1323	PRESIDENT	1, 2, 3, 4, 5, 6, 7
	MPRSA	—	—	—	8
	CAA	42	7418	PRESIDENT	1, 2, 3, 4, 5, 6, 7
	NCA	42	4903(b)	PRESIDENT	1, 2, 3, 4, 5, 6, 7
	FIFRA	7	136p	ADMINISTRATOR EPA	9
	RCRA	42	6961	PRESIDENT	1, 2, 3, 4, 5, 7
RESOURCE PROTECTION/ LAND USE CONTROL	NEPA	—	—	—	10
	NHPA	16	470v	ADVISORY COUNCIL ON HISTORIC PRES. AND SEC. INTERIOR	11
	ARPA	—	—	—	12
	MPRSA	—	—	—	13
	MMPA	—	—	—	—
	ESA	15	1536(j)	ENDANGERED SPECIES COMM.	14
	CZMA	—	—	—	15
ENVIRONMENTAL RESTORATION	CERCLA SARA	42	9620(j)	PRESIDENT	2, 3, 4, 16, 17

TABLE III-6 NOTES

1. The President must determine that exemption is in the "paramount interest of the United States."

2. No exemption may be granted for lack of appropriation unless Congress fails to make the appropriation when expressly requested to do so.

3. The exemption period is limited to one year.

4. The exemption period may be extended in one year increments with a new Presidential determination/order.

5. The President must report all exemptions granted and the reasons therefore to Congress each January. The report covers all exemptions granted during the preceding calendar year.

6. The President may grant exemptions for uniquely military property (weapons, vessels, vehicles, aircraft...).

7. The applicable exemption procedures are contained in Executive Order 12088 (Federal Compliance with Pollution Control Standards.)

8. MPRSA as it applies to ocean dumping.

9. An exemption may be granted only for emergency conditions following consultation with the Secretary of Agriculture and the Governor of any state concerned.

10. NEPA applies to all federal projects and programs but it requires that an EIS be prepared only for "major federal projects significantly affecting the environment." (42 U.S.C. 4332 (c)).

11. Advisory Council on Historic Preservation and the Secretary of the Interior jointly issue rules which provide the procedures to exempt federal programs/undertakings.

12. ARPA exemptions are not applicable to federal facilities or federal officers, employees or agents.

13. MPRSA as it applies to the establishment of marine sanctuaries.

14. The Endangered Species Committee must grant an exemption if the Secretary of Defense finds that such an exemption is necessary for reasons of national security.

15. Federal agencies are required to conduct or support activities in "state coastal zones" consistently with state management programs to the maximum extent practicable. (16 U.S.C. 1456 (c)). By definition, "lands the use of which is by law subject solely to the discretion or or which is held in trust by the Federal government, its officers or agents" are excluded from the term "Coastal Zone". If the impact of a federal project is confined to the federal facility, the CZMA does not apply.

16. The President may exempt DOE or DOD Compliance where it is necessary to protect the national security of the United States.

17. The President must report all SARA exemptions to Congress within 30 days of their granting together with the reasons therefor. Even when a SARA exemption is granted, Congress intends that the response action at the exempted site proceed "as expeditiously as possible."

While exemption procedures are usually broadly drawn, their use is not without limit. In most instances, the exemption authority is required to periodically report to Congress the number of exemptions granted during the period together with the reason for the exemption. Such Congressional oversight raises the possibility that each exemption will become a political issue. That possibility inhibits less than a fully judicious use of the exemption process. In practice, Pollution Control and Endangered Species Act exemptions are rarely given.

The President has established the procedures which Federal agencies will follow in requesting an exemption from him in Executive Order No. 12088 (Federal Compliance with Pollution Control Statutes).^{*} Those procedures are set out in Section 1-7 (Limitations on Exemptions) of Executive Order 12088/80 as follows:

^{*}As shown in Table III-6, the President is the Exemption Authority for the FWPCA, CAA, NCA, RCRA and CERCLA/SARA.

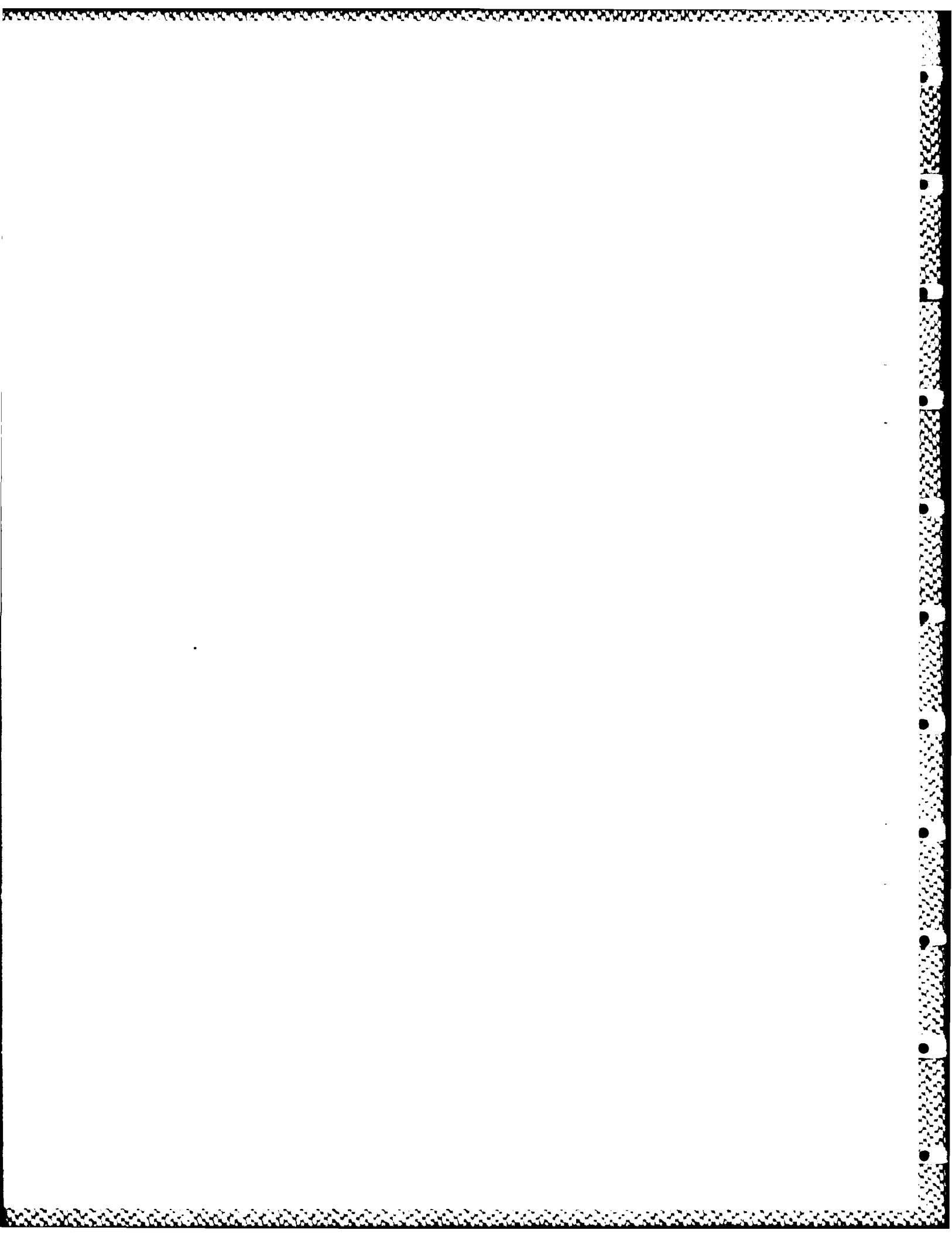
1-702 The Head of an Executive Agency may, from time to time, recommend to the President through the Director of the Office of Management and Budget, that an activity or facility, or uses thereof, be exempt from an applicable pollution control standard.

1-703. The Administrator shall advise the President, through the Director of the Office of Management and Budget, whether he agrees or disagrees with a recommendation for exemption and his reasons therefor.

1-704 The Director of the Office of Management and Budget must advise the President within sixty days of receipt of the Administrator's views.

Chapter Summary. Congress has sought to ensure that the Nation's environment is afforded sufficient protection by enacting a variety of pollution control, resource protection/land use control and environmental restoration statutes. To ensure that the federal government demonstrates positive leadership in the area of environmental protection, Congress has expressly made many of its environmental statutes directly applicable to the federal executive branch and, through its agencies, to all federal installations and facilities. On those occasions when the "paramount interest of the United States" necessitates that another national priority receive greater emphasis than environmental protection, various persons within the Executive Branch are empowered to grant exemptions from statutory and regulatory environmental protection requirements. Congress maintains its oversight of the exemption process by requiring that each

exemption authority annually identify and justify all exemptions which he or she has granted during the preceding year.



CHAPTER IV

PLAYERS, LEVERS AND HAMMERS

Overview. To effectively protect the Nation's environment under our system of law, all three branches of the federal government must exercise their individual form of constitutional authority. Congress is called upon to establish societal norms through the legislative process. The executive branch is required to give form and force to those norms by promulgating implementing regulations, by conducting regulatory oversight activities and by prosecuting those who violate the law. Finally, the judicial branch is required to resolve cases and controversies arising from the executives' rulemaking, oversight, and enforcement actions. The "players" in the federal environmental protection process are the many legislators, regulators, litigators, policy makers, judges and justices who make the day-to-day decisions which determine how and to what extent the environment is actually protected from harm.

To the federal list of players must be added a parallel list of state players. Many federal statutes allow state governments to assume the lead for environmental protection within their borders so long as the state legislation, enforcement mechanisms and judicial processes provide an environmental program at least as stringent as that of the federal

government.

To federal and state players must be added a third group, that being private citizens. Several federal environmental statutes authorize individuals to initiate "citizen suits" thereby empowering them to serve as "private prosecutors". Environmental and other public interest organizations may also file citizen suits so long as at least one of their members could have initiated such a suit in his or her own right.

Not only does federal environmental legislation involve a large number of "players", it also contains a variety of means by which those players may influence and, where necessary, force the regulated community to comply with the law. By requiring permits, record keeping and reports, by authorizing inspections, and by providing for interagency, public and state comment on federal projects; federal environmental legislation provides the "players" with the tools they need to accomplish their ends. These tools are the "levers" of federal environmental legislation. Where "levers" prove to be insufficient, regulators (both public and private) seek "weapons" to compel compliance. Congress has provided for civil penalties, fines, imprisonment and injunctive relief in several of its environmental statutes.*

*Usually only injunctive relief is available to "private prosecutors".

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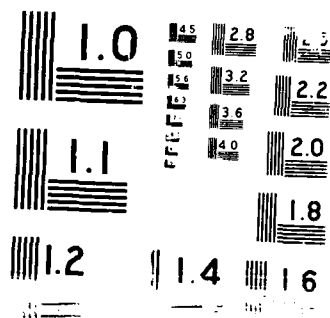
NAVAL READINESS OPERATIONAL TRAINING AND ENVIRONMENTAL
PROTECTION: ACHIEV. (U) NAVAL WAR COLL NEWPORT RI
ADVANCED RESEARCH PROGRAM J A WELLINGTON JUN 88
NAC/NRP-88-26 F/O 5/1

24

F/G 5/1

ML

[illegible]



These weapons are the "hammers" of environmental law.*

This chapter will describe the various "players", "levers" and "hammers" associated with the environmental protection statutes described in Chapter III above.

A. Players.

Key Federal Legislative Branch Players. Legislative branch players perform one of three functions with regard to environmental legislation. They are involved in enacting statutes, overseeing governmental activities based upon previously enacted statutes or conducting investigations and making reports based upon the results of those investigations.

Enacting Statutes. When the courts are called upon to interpret the purpose of a law or how Congress intends that its purpose be accomplished, first recourse is always to the law's language. When the statutory language does not clearly articulate congressional purpose or intent, the courts next turn to the law's legislative history. There they should find the committee reports which accompanied the applicable

*The difference between "levers" and "hammers" is basically one of function. Levers are used in the day-to-day regulatory processes of environmental protection to ensure compliance with applicable laws. When there are serious violations of any environmental law, hammers are used as enforcement mechanisms to punish the transgressors and/or to compel prompt compliance.

bill(s)* through the legislative process, and, via the Congressional Record,** the statements of the legislators who dealt with the bill in committee or who discussed the bill during congressional debates. By considering the statute's history, the courts give force and effect to the views of legislators who were responsible for enacting the law even though they may no longer hold office and even though they may be deceased. The legislators involved in the enactment of a law are the first group of key legislative players because the law which the executive branch is to enforce and the judicial branch is to interpret is but a reflection of those legislators' collective will. Until a statute is changed by other legislation or found to be unconstitutional by the courts, it is the "supreme law of the land."

Congressional Oversight. Congress is organized on a committee system basis. The various functions of the federal government are divided into subject areas and these subject areas are then placed under the jurisdiction of one or more

*The introduction of a bill is the first step of the legislative process which leads to the enactment of a statute. A statute may be a blend of several separate bills.

**The Congressional Record is a daily compilation of the legislative activities conducted on the floor of the House and the Senate while those bodies are in session. Legislators' comments are contained in the Congressional Record together with any report or other item they desire to make a matter of record.

congressional committees. Committees hold oversight hearings to determine the extent to which the laws within their jurisdiction are being enforced and/or followed by the executive branch.* For example, Appropriations Committees hold hearings to determine how the executive agencies have expended or how they intend to expend public funds.** Through oversight and other hearings, Congressional committees (and subcommittees) can exert considerable influence over executive agencies.

Environmental statutes often require the President or his subordinates to make periodic reports to Congress. Through these reports, Congress may gather the information it needs to bring political pressure to bear on the executive branch. Congressional review of these reports is another form of legislative oversight.

In addition to standing congressional committees,

*See e.g. U.S. Congress, House, Committee on Armed Services Environmental Restoration Panel, Defense Environmental Restoration Program to Clean Up Former Hazardous Waste Dump Sites, Hearing (Washington: U.S. Govt. Print. Off., 1986).

**To the extent that an Appropriations Committee is considering how the executive branch expended monies provided in prior legislation, it is performing an oversight function. To the extent that the same committee is considering an executive branch request for monies to be provided in future legislation, it is involved in the enactment process described above. The same Congressional committee may perform both oversight and enactment functions.

individual legislators also have an interest in those environmental issues which involve their congressional districts, their state and/or their region. Although an individual legislator may not be a member of a committee which has jurisdiction over a given environmental issue, he or she may seek to influence how the issue is resolved because of its potential impact on his or her constituents. Legislative committees and individual legislators performing oversight activities constitute the second group of key federal legislative players.

GAO Investigations/Reports. While the first group of legislative players is usually the concern of policy makers, litigators and judges and while the second group is usually the concern of DOD, Departmental, and Service Headquarters*, the third group has the potential to be of direct concern to operational and installation naval commanders. The General Accounting Office (GAO) is an independent legislative agency whose purpose is to audit other government agencies. Based upon those audits, the Comptroller General makes reports to Congress to assist that body in carrying out its oversight function. A list of selected GAO reports pertaining to environmental protection, operational training or legislative oversight is contained in Table IV-1.

* It is highly unlikely that operational or installation commanders will be called to Congress to articulate their service's position on an environmental issue.

TABLE IV-1

**SELECTED GAO REPORTS PERTAINING TO ENVIRONMENTAL
PROTECTION, OPERATIONAL TRAINING OR LEGISLATIVE
OVERSIGHT OF DOD ACTIVITIES**

REPORT NUMBER	DATE	TITLE
RCED-86-45FS	10 DEC 85	CULTURAL RESOURCES: RESULTS OF QUESTIONNAIRE ON FEDERAL AGENCY HISTORIC PRESERVATION ACTIVITIES
RCED-86-89FS	13 FEB 86	RESOURCE MANAGEMENT: INFORMATION ON THE COASTAL ZONE MANAGEMENT PROGRAM
NSIAD-86-65BR	14 FEB 86	LEGISLATIVE OVERSIGHT: CONGRESSIONAL REQUESTS FOR INFORMATION ON DEFENSE ACTIVITIES
NSIAD-86-60	19 MAY 86	HAZARDOUS WASTE: DOD'S EFFORTS TO IMPROVE MANAGEMENT OF GENERATION, STORAGE, AND DISPOSAL
NSIAD-86-94	17 JUN 86	UNIT TRAINING: HOW IT IS EVALUATED AND REPORTED TO CONGRESS
NSIAD-86-205BR	29 AUG 86	HAZARDOUS WASTE: SELECTED ASPECTS OF CLEANUP PLAN FOR ROCKY MOUNTAIN ARSENAL
NSIAD-87-87	22 APR 87	HAZARDOUS WASTE: DOD INSTALLATIONS IN GUAM HAVING DIFFICULTY COMPLYING WITH REGULATIONS
NSIAD-87-88BR	21 MAY 87	HAZARDOUS WASTE: ABANDONED DISPOSAL SITES MAY BE AFFECTING GUAM'S WATER SUPPLY
NSIAD-88-4	29 OCT 87	HAZARDOUS WASTE: TINKER AIR FORCE BASE'S IMPROVEMENT EFFORTS
RCED-88-3	15 DEC 87	CULTURAL RESOURCES: PROBLEMS PROTECTING AND PRESERVING FEDERAL ARCHEOLOGICAL RESOURCES

Of the GAO reports listed on Table IV-1, the one pertaining to Tinker Air Force Base provides the best example of a GAO investigation/audit which involves an in depth review of activities on a military installation. During that investigation, GAO audited the Air Bases' past and present hazardous waste management program. An abstract of the Tinker Air Base GAO report provides that:

In the past, Tinker Air Force Base allowed discharges of wastes that polluted its streams, generated hazardous waste unnecessarily; sold, transferred, or disposed of waste oils, fuels, and solvents rather than recycling and reusing them; underused and poorly managed its industrial waste treatment plant; and had inadequate management control over its disposal contractors and could not ensure that hazardous waste generated on base was disposed of in an environmentally safe manner. In correcting these problems, Tinker has placed more emphasis on hazardous waste management; reduced the amount of hazardous waste discharged into the streams and groundwater; reduced the amount of hazardous waste requiring disposal; resolved management and operations problems at the industrial waste treatment plant; and improved controls over hazardous waste disposal contractors and the selection of disposal sites. /1

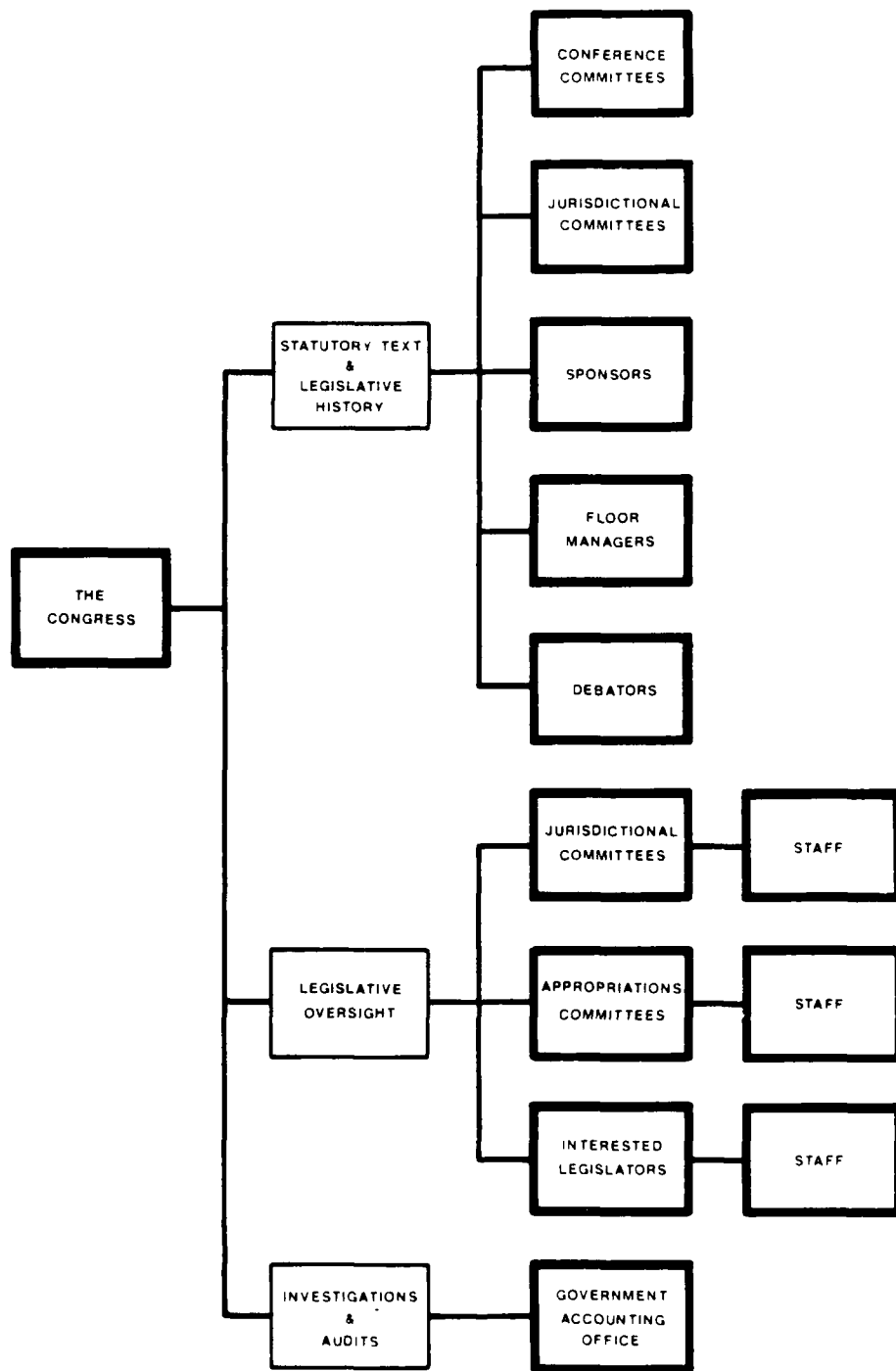
From the abstract, it is evident that Congress was provided a detailed analysis of the Tinker Air Force Base hazardous waste management program via the GAO report.

The three groups of key legislative branch players are depicted in Figure IV-1.

(Figure IV-1 is on the following page)

FIGURE IV-1

KEY FEDERAL LEGISLATIVE BRANCH PLAYERS



Key Federal Executive Branch Players. Key executive branch players consist of the President and certain of his subordinates. Those subordinates are either within the Executive Office of the President (EOP), the senior levels of the Executive Departments, the Environmental Protection Agency (an independent executive agency) or on advisory councils and committees. This subpart will address only the role of the President as a key player. His principal subordinates who may become involved in regulating activities on naval installations will be addressed in Chapter V.

The President is constitutionally charged with ensuring that the Nation's laws are faithfully executed.¹² As the administrative head of the executive branch, the President provides general guidance to his subordinates through the promulgation of Executive Orders. While it is the individual members of the executive branch who determine how the laws are actually executed, they are provided general and, in some instances, specific guidance by the provisions of applicable Presidential Executive Orders. Current Executive Orders pertaining to environmental protection are listed in Table IV-2.

(Table IV-2 is on the following page)

TABLE IV-2

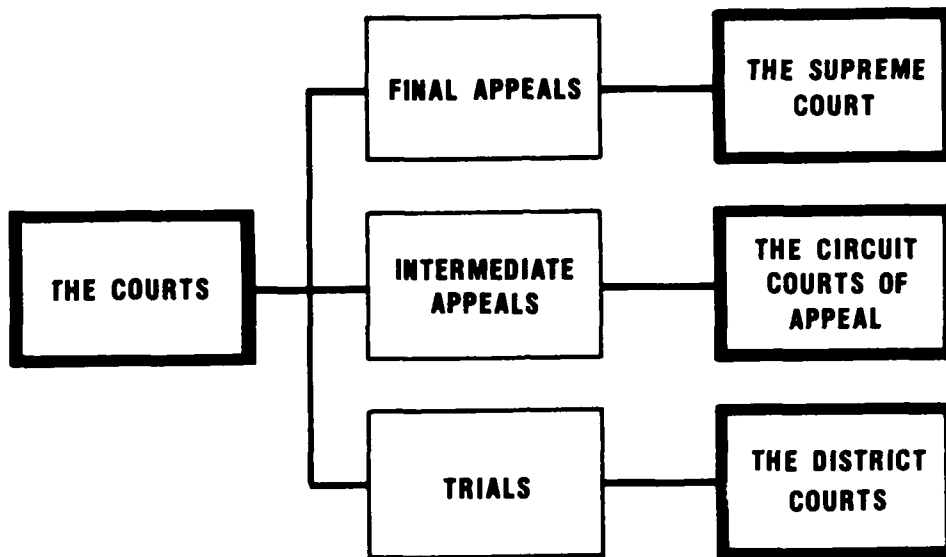
**EXECUTIVE ORDERS PERTAINING TO
ENVIRONMENTAL PROTECTION**

NUMBER	DATE	FED. REG. CITE		TITLE	PRESIDENT
		VOL.	PG.		
11514	5 MAY 70	35	4247	PROTECTION AND ENHANCEMENT OF ENVIRONMENTAL QUALITY	NIXON
11593	13 MAY 71	36	8921	PROTECTION AND ENHANCEMENT OF THE CULTURAL ENVIRONMENT	NIXON
11644	8 FEB 72	37	2877	USE OF OFF-ROAD VEHICLES ON PUBLIC LANDS	NIXON
11987	24 MAY 77	42	26949	EXOTIC ORGANISMS	CARTER
11988	24 MAY 77	42	26951	FLOODPLAIN MANAGEMENT	CARTER
11989	24 MAY 77	42	26959	OFF-ROAD VEHICLES ON PUBLIC LANDS (AMENDS 11644 ABOVE)	CARTER
11990	24 MAY 77	42	26961	PROTECTION OF WETLANDS	CARTER
11991	24 MAY 77	42	26967	RELATING TO PROTECTION AND ENHANCEMENT OF ENVIRONMENTAL QUALITY (AMENDS 11514 ABOVE)	CARTER
12088	13 OCT 78	43	47707	FEDERAL COMPLIANCE WITH POLLUTION CONTROL STANDARDS	CARTER
12114	4 JAN 79	44	1957	ENVIRONMENTAL EFFECTS ABROAD OF MAJOR FEDERAL ACTIONS	CARTER
12148	20 JUL 79	44	43239	FEDERAL EMERGENCY MANAGEMENT (AMENDS 11988 ABOVE)	CARTER
12316	14 AUG 81	46	42237	RESPONSES TO ENVIRONMENTAL DAMAGE	REAGAN
12580	23 JAN 87	52	2923	SUPERFUND IMPLEMENTATION (AMENDS 12088 ABOVE)	REAGAN

Key Federal Judicial Branch Players. Key federal judicial players include the judges of the District Courts, the judges of the Circuit Courts of Appeal and the justices of the Supreme Court of the United States. The role of these courts in resolving conflicts between operational training and environmental protection will be addressed in Chapter VI. The key federal judicial branch players are depicted in Figure IV-2.

FIGURE IV-2

KEY FEDERAL JUDICIAL BRANCH PLAYERS



Other Key Players. The role of other key players in environmental protection will be described in Chapters V and VI below. The "other key players" are depicted in Figure IV-3.

(Figure IV-3 is on the following page)

FIGURE IV-3

OTHER KEY PLAYERS ⁽¹⁾

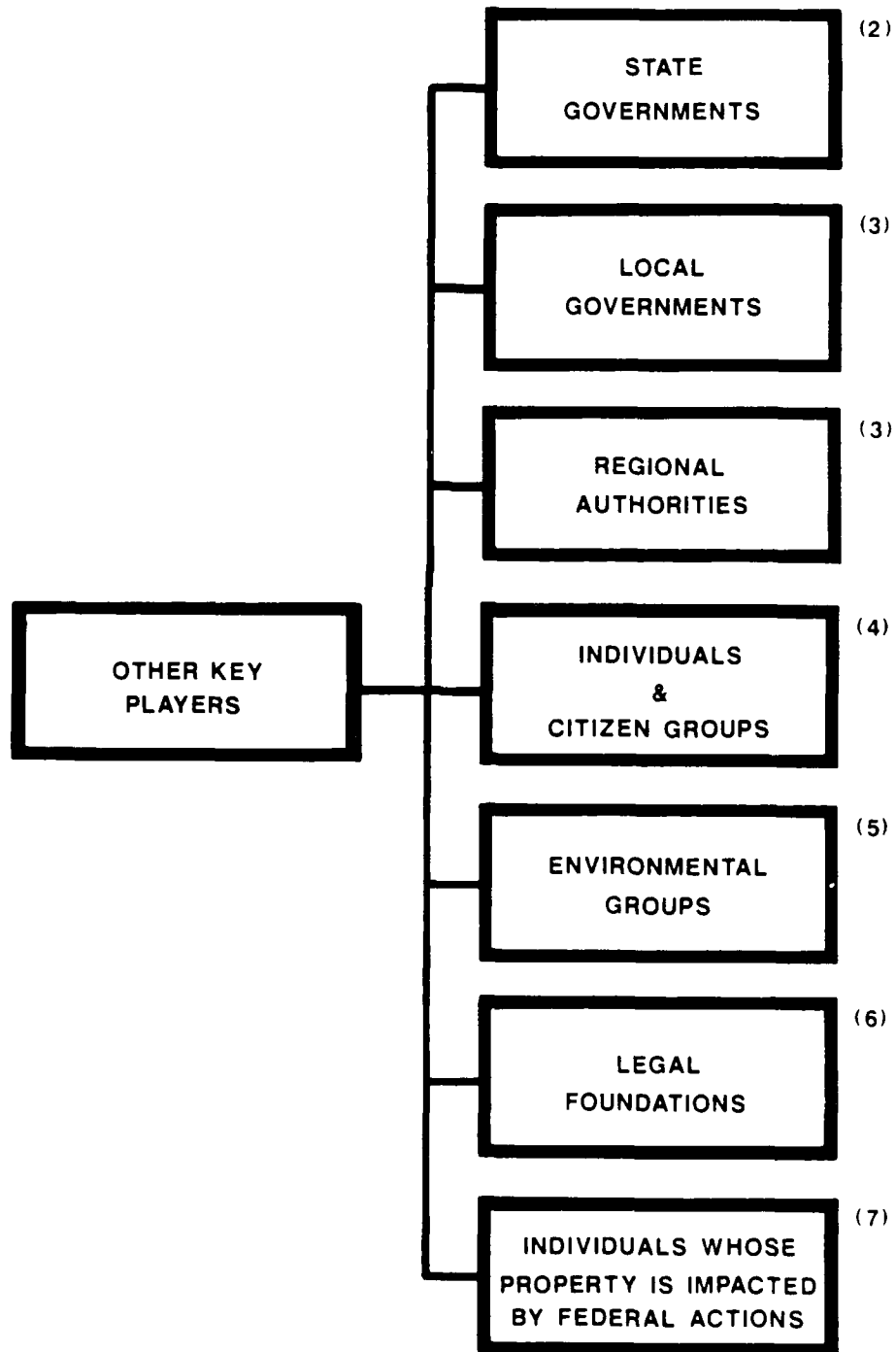


FIGURE IV-3 NOTES

1. The key players depicted in Figure IV-3 were derived from Table 4-2 (Plaintiffs from NEPA Law Suits: 1984) which is contained in the Council on Environmental Quality 16th Annual Report on Environmental Quality. /3

2. See Commander Charles W. Tucker, JAGC, USN, "Compliance by Federal Facilities With State and Local Environmental Regulations", Naval Law Review, Spring 1986, pp. 87-112 and Major Thomas M. Strassburg, JAGC, USA, "Saluting the State Flag - Federal Facility Compliance With State Environmental Requirements", The Army Lawyer, March 1978, pp. 1-6.

3. Various federal environmental statutes require federal facilities to comply with interstate as well as state and local requirements. See e.g. Section 1323 of the CWA.

4. See Commander Ralph W. Blanchard, USN, "The Protest at Snowy Beach", U.S. Naval Institute Proceedings, July 1982, pp. 118-122 and Chapter VI, Part A below for two discussions concerning a citizen group effort to preclude an amphibious training exercise.

5. See e.g., Environmental Defense Fund v Corps of Engineers, 480 F. 2d 289 (8th Cir. 1972). The Environmental Defense Fund challenged the construction of a dam on the grounds that the Corps of Engineers failed to prepare an adequate environmental impact statement is required by the National Environmental Policy Act.

6. See e.g., Costle v Pacific Legal Foundation, 445 U.S. 198, 100 S.Ct. 1095, 63 L.Ed.2d 329 (1980) where the Supreme Court reviewed a lower court's handing of a challenge to a water pollution discharge permit extension. The Pacific Legal Foundation had challenged the EPA's extension of the permit.

7. See e.g., Branning, et al v. The United States, 654 F.2d 88 (Ct. Cl. 1981), app. den. 784 F.2d 361 (Fed. Cir. 1986) where an individual land owner sought compensation for the noise impact of Marine Corps aircraft overflying his land. This case will be discussed in more detail in Chapter VI, Part C below.

B. Levers. Environmental protection "levers" are those statutory tools which key players may use to influence how

the regulated community does its business. A list of those
levers is contained in Table IV-3.

TABLE IV-3

**ENVIRONMENTAL PROTECTION LEVERS
APPLICABLE TO FEDERAL FACILITIES**

FEDERAL FACILITY ACTION REQUIRED	STATUTES														ENVIR. REST.	
	POLLUTION CONTROL						RESOURCE PROTECTION LAND USE CONTROL									
	FWPCA	MPPSA (1)	CAA	NCA	FIFRA	RCRA	NEPA	NHPA	ARPA	MPPSA (2)	MMPPA	ESA	CLMA	CERCLA	SARA	
OBTAIN PERMIT	X	X	X			X			X		X					
MAINTAIN RECORDS	X		X			X		X								
FILE REPORTS	X		X			X		X							X	
MAKE FINDINGS													X			
SUBMIT TO INSPECTIONS	X		X			X									X	
COORDINATE WITH STATES	X		X			X (4)	X	X (5)				X	X (6)		X (7)	
COORDINATE WITH OTHER FED AGENCIES COUNCILS COMMITTEES	X						X	X (5)	X	X		X			X	
PROVIDE FOR PUBLIC COMMENT							X						X		X	
OBTAIN EXEMPTION	X		X	X	X	X						X				
STATUTORY CITIZEN SUIT	X	X	X	X		X						X		X	X	
JUDICIAL REVIEW UNDER APA (3)							X	X				X	X			

TABLE IV-3 NOTES

1. The MPRSA as it pertains to ocean dumping of waste and dredged material.
2. The MPRSA as it pertains to Marine sanctuaries.
3. The Administrative Procedure Act is codified in pertinent part at 5 U.S.C. Sections 701-706 and provides for judicial review of non-discretionary federal agency actions.
4. See Ensign Lani A. Hustance, USNR, "Can Virginia Enforce its Hazardous Waste Siting Act Against Federal Facilities", Naval Law Review, Winter 1986, pp. 211-229.
5. See Charlotte R. Bell, "Protecting the Built Environment: An Overview of Federal Historic Preservation Law", Environmental Law Reporter, November 1985, pp. 10354-10369.
6. See Commander Richard Lee Kuersteiner, JAGC, USNR-R and Commander Paul M. Sullivan, JAGC, USNR-R, "Coastal Federalism: The Role of the Federal Supremacy Doctrine in Federal and State Conflict Resolution", JAG Journal, Summer 1984, pp. 39-55.
7. See Kyle E. McSlarrow, "The Department of Defense Environmental Cleanup Program: Application of State Standards to Federal Facilities After SARA", Environmental Law Reporter, April 1987, pp. 10120-10127.

C. Hammers. Environmental protection "hammers" are those weapons which key players may use to force the regulated community to comply with applicable laws. Hammers may be directed against federal facilities or against federal officers, employees and agents. Those environmental protection hammers applicable to federal facilities and federal officers, employees and agents are contained in Table IV-4 and Table IV-5 respectively.

TABLE IV-4

**ENVIRONMENTAL PROTECTION HAMMERS
APPLICABLE TO FEDERAL FACILITIES**

	STATUTES														ENVIR. REST.	
	POLLUTION CONTROL						RESOURCE PROTECTION LAND USE CONTROL									
HAMMERS	FWPCA	MPRSA (1)	CAA	NCA	FIFRA	RCRA	NEPA	NHPA	ARPA	MPRSA	MMPA	ESA	CZMA	CERCLA	SARA	
STATE CIVIL PENALTY						(2)										
LIABILITY FOR REMEDIAL/ RESPONSE COSTS DUE TO RELEASE OF HAZARDOUS SUBSTANCE FROM FEDERAL FACILITY						X								X	X	
LIABILITY FOR REMEDIAL/ RESPONSE COSTS DUE TO RELEASE OF HAZARDOUS SUBSTANCE INTO WATERS OF THE UNITED STATES	X															
ECONOMIC SANCTIONS FOR VIOLATION OF INJUNCTION CONTEMPT	X	X	X			X	X		X			X	X			
INJUNCTION	X	X	X			X	X		X			X	X			

TABLE IV-4 NOTES

1. The MPRSA as it pertains to ocean dumping of wastes and dredged material.

2. See Meyer v. Gracey, et. al., No. 86-02-CIV-2, (E.D. N.C. 19 Sept. 1986) where a federal district court held that a state may not impose a civil penalty against the United States under RCRA. See also McClellan Ecological Seepage Situation (MESS) v. Weinburger, No. CIV 5-86-475-RAR, (E.D. CA. 9 Dec. 1986) where another federal district court held that a citizen group could not seek civil penalties via a RCRA citizen suit because the United States has only waived its sovereign immunity for injunctive relief under that statute.

TABLE IV-5

**ENVIRONMENTAL PROTECTION HAMMERS
APPLICABLE TO FEDERAL OFFICERS,
EMPLOYEES, AND AGENTS**

HAMMER (3)	STATUTES														
	POLLUTION CONTROL						RESOURCE PROTECTION LAND USE CONTROL							ENVIR. REST.	
	FWPCA	MPRSA (1)	CAA	NCA	FIRRA	RCRA	NEPA	NHPA	ARPA	MPRSA (2)	MMPA	ESA	CLMA	CERCLA	SARA
CIVIL PENALTY	(4)		(5)		(6)					X	X				
FINE (7)		X	X	X					X		X	X		(8)	
IMPRISONMENT (7)		X	X	X					X		X	X		(8)	
INJUNCTION	X		X			X	X								
ECONOMIC SANCTION FOR VIOLATION OF INJUNCTION (CONTEMPT)	X		X			X	X								
COMPLIANCE ORDERS			X			(9)								(9)	(9)

TABLE IV-5 NOTES

1. The MPRSA as it applies to ocean dumping of wastes and dredged material.

2. The MPRSA as it applies to Marine sanctuaries.

3. While federal officers, employees and agents (FOEA) are usually afforded official immunity from suit for actions taken in the course of their duties, several environmental statutes expressly waive that official immunity. Furthermore, FOEA may also be held liable in their private (personal) capacities for some violations of environmental laws. See Lieutenant Colonel John L. Eider, USMCR, "Personal Liability of Military Personnel for Actions Taken in the Course of Duty", Military Law Review, vol. 113 (1986), pp. 137-161; William H. Speck, "Government Employees can be sued", The Navy Civil Engineer, Winter 1981, p. 11; and Captain W. H. Dalton, JAGC, USN, "Violations of Federal and

State Environmental Laws and Regulations", Off The Record, April 1986, p. 8 wherein that author provides:

...If a Federal Officer acts outside the scope of his official authority, his acts are considered private and he does not have the defense of official immunity".

4. The FWPCA provides that "No officer, agent or employee of the United States shall be personally liable for any civil penalty arising from the performance of his official duties, for which he is not otherwise liable..." 42 U.S.C.S. Sec. 1323(a) (1987 ed.).

5. The CAA provides the same limitation as the FWPCA cited in note 4 immediately above. Sec. 42 U.S.C.S. Sec. 7418(a) (1982 ed.).

6. See. Meyer v. Gracey cited in note 2 of Table IV-4 for an example of a federal action initiated by a state against the Commandant of the Coast Guard in both his official and his private capacity. North Carolina was seeking the payment of a \$10,000 civil penalty which it had levied against a Coast Guard facility for submitting a permit application 10 days after it was due. The case was dismissed on another ground before Admiral Gracey's liability was addressed.

7. Only a sovereign (e.g. the United States or a State) may initiate a criminal proceeding. Private citizens may usually seek only injunctive relief.

8. CERCLA provides that any "person in charge" who fails to notify the National Response Center of "as soon as he has knowledge" of reportable release of a hazardous substance can be fined or imprisoned. See 42 U.S.C.S. Sec. 9603(b) (1987 ed.).

9. The EPA cannot unilaterally issue compliance orders to federal facilities under RCRA, CERCLA or SARA. See "EPA Creates Federal Facilities Task Force to Gain Compliance with Hazardous Waste Law", Environmental Reporter, 12 June 1987, pp. 574-575; "DOD Officials Disagree over Minnesota Pact: Schaefer says EPA should Guide not Penalize", Environmental Reporter, 13 November 1987, pp. 1734-1735; and "Armed Services Panel Charges Cleanup Process' Needlessly Complicated' by EPA at Defense Sites", Environmental Reporter, 27 November 1987, pp. 1779-1780.

Chapter Summary. To approach the resolution of any environmental issue, it is necessary to know the identity of the players, their levers and/or their hammers. Players include, among others, various members of the federal legislative, executive and judicial branches, members of state and local governments, citizen groups, and private individuals. Their levers range from the requirement that federal facilities obtain environmental permits through the ability of an individual citizen to initiate a law suit in opposition to certain federal actions. Their hammers range from injunctive relief to fines and imprisonment. To lessen the potential for disruptions in mission execution, naval commanders must be sensitive not only to existing environmental standards; but also to the identity of the players who may be involved in insuring that those standards are met. Failure to effectively communicate with the appropriate players may encourage them to employ one or more of their lever(s) or hammer(s).

CHAPTER V

THE NAVAL SERVICES AS A REGULATED COMMUNITY

Overview. This chapter will address the role that certain federal and state environmental regulators play in overseeing naval activities with regard to pollution control, natural resource protection and environmental restoration. While there are a number of federal environmental oversight agencies which may interact with the Navy and Marine Corps at any given time, this chapter will focus primarily on the Environmental Protection Agency (EPA) and the Council on Environmental Quality (CEQ). The EPA is discussed because it is the lead federal regulatory agency for both pollution control and environmental restoration. The CEQ is discussed because of its oversight responsibilities with regard to the environmental impact statement (EIS) process. The EIS process ensures that all federal agencies with environmental expertise, the public, the states and interested private institutions are each afforded the opportunity to publicly comment on all major federal projects which will significantly affect the human environment should the project be implemented. Accordingly, the EIS process is the principal vehicle by which natural, historic and cultural resources of the Nation are protected. This chapter will also discuss the role of state regulators whose federally delegated authority

enables them to oversee the pollution control efforts of the naval services and to influence how those services clean up hazardous waste contamination on their installations.

A. Federal Environmental Regulatory Agencies.

Chapter III above discusses the significant environmental protection legislation which has been enacted to address the concerns of pollution control, resource protection/land use and environmental restoration. Each of those statutes has at least one federal regulatory agency which oversees how public facilities (federal, state and local) and private parties comply with the dictates of the law. Those statutes and their respective oversight agencies are depicted in Table V-1.

(Table V-1 is on the following page)

TABLE V-1

**FEDERAL ENVIRONMENTAL PROTECTION
OVERSIGHT AGENCIES**

TYPE	STATUTE	OVERSIGHT AGENCY	TABLE NOTE
POLLUTION CONTROL	FWPCA	EPA (NPDES PERMIT)	1
		COE (DREDGE/FILL PERMIT)	
	MPRSA	EPA (WASTE DUMPING PERMIT)	
		COE (DREDGE MATERIAL DUMPING PERMIT)	
	CAA	EPA (PERMIT)	
	NCA	EPA	
	FIFRA	EPA	
	RCRA	EPA (PERMITS, IDENTIFICATION NUMBERS)	
RESOURCE PROTECTION/ LAND USE CONTROL	NEPA	CEQ (EIS PROCESS)	
	NHPA	ACHP	
	ARPA	FEDERAL LAND MANAGER	2
	MPRSA	NOAA (PERMITS)	
	MMPA	USFWS/NMFS	3
	ESA	ESC (EXEMPTIONS)	4
		USFWS/NMFS (BIOLOGICAL OPINIONS)	
	CZMA	NOAA	
ENVIRON- MENTAL RESTORATION	CERCLA	EPA	
	SARA		
	DERP	DOD	

KEY	ACHP	ADVISORY COUNCIL ON HISTORIC PRESERVATION
	CEQ	COUNCIL ON ENVIRONMENTAL QUALITY
	COE	CORPS OF ENGINEERS (U.S. ARMY)
	DOD	DEPARTMENT OF DEFENSE
	ESC	ENDANGERED SPECIES COMMITTEE
	EPA	ENVIRONMENTAL PROTECTION AGENCY
	NMFS	NATIONAL MARINE FISHERIES SERVICE
	NOAA	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
	USFWS	U.S. FISH AND WILDLIFE SERVICE

TABLE V-1 Notes

1. A "NPDES" (National Pollution Discharge Elimination System) Permit allows its holders to discharge a certain type/amount of pollutant into the waters of the United States.

2. The term "Federal Land Manager" means the Secretary of the Department, or the head of any other agency or instrumentality of the United States having primary management authority over public lands.

3. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service have jurisdiction over different species of marine mammals. For example, the USFWS has jurisdiction over polar bears, sea otters, walruses, and manatees, while the NMFS has jurisdiction over whales, porpoises, seals and sea lions.

4. The Secretary of Defense can unilaterally compel the Endangered Species Committee to grant an exemption if he finds that such exemption is necessary for reasons of national security. See 16 U.S.C.S. sec. 1536(j).

Chapter IV above discusses the key federal legislative and judicial branch players who are in a position to influence how, when and/or where the naval services conduct/support operational training. That chapter also addresses the role that the President of the United States plays in ensuring that his subordinates comply with applicable laws though his promulgation of Executive Orders. In addition to the President, there are many other executive branch officials who are "key players" in the environmental protection field. These individuals are located in the Executive Office of the President, the Executive Departments, the EPA (an independent executive agency), and on advisory councils/committees. Several of these other key executive branch players are shown in Figure V-1.

(Figure V-1 in on the following page)

FIGURE V-1

KEY FEDERAL EXECUTIVE BRANCH PLAYERS

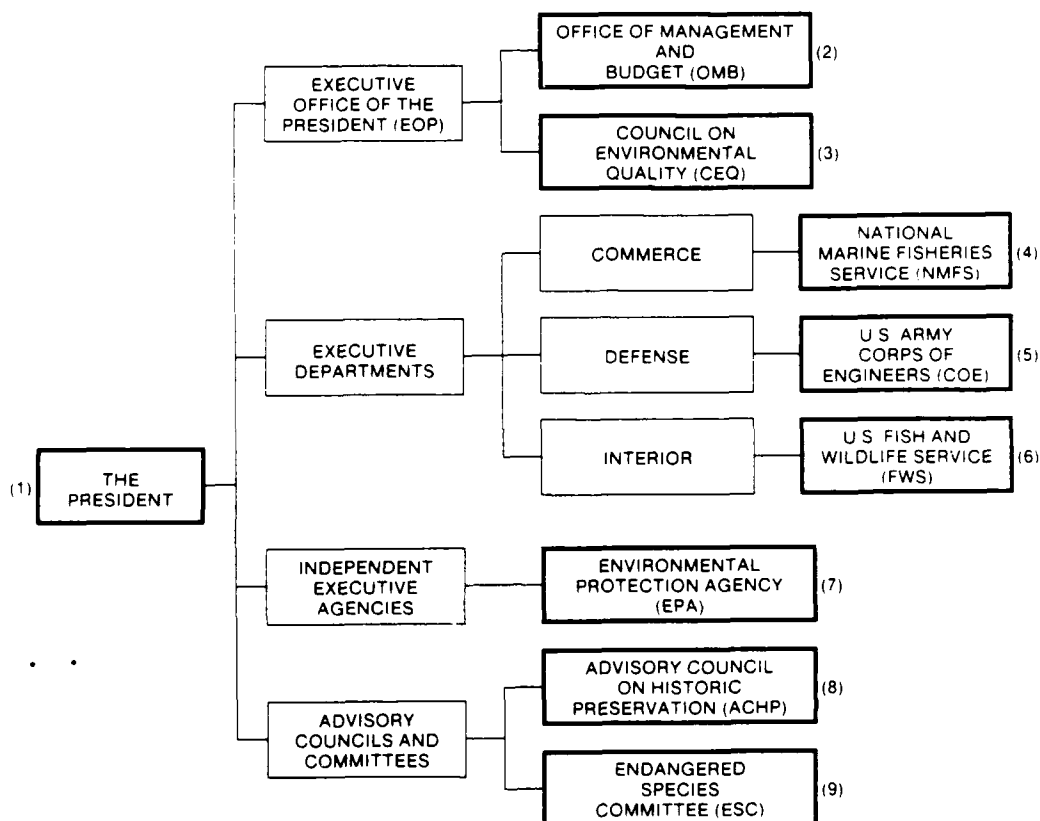


FIGURE V-1 Notes

1. The role of the President as the Chief Executive is discussed in Chapter IV, Part A above.

2. The role of the Office of Management and Budget in the resolution of inter-agency disputes is discussed in Part B of this chapter directly below.

3. The role that CEQ plays in the EIS process (to include inter-agency conflict resolution) is discussed in Part C of this chapter below.

4. The role that the National Marine Fisheries Service (NMFS) plays in rendering biological opinions in conjunction with the Endangered Species Act is demonstrated in Chapter II, Part F above. By commenting upon the potential and/or the actual impacts of federal projects on endangered-/threatened species (or the habitats of those species), the federal agency responsible for the project is advised whether it may proceed with the project or whether it must apply for an Endangered Species Act exemption before so proceeding.

5. The U.S. Army Corps of Engineers (COE) is responsible for overseeing the dredging in and the filling of the waters of the United States (to include wetlands). See Blum, "The Clean Water Act's Section 404 Permit Program Enters Its Adolescence: An Institutional and Programmatic Perspective," Ecology Law Quarterly, v. 8, p. 409 (1980) and Foretti, "Restoring the Nation's Wetlands: Can the Clean Water Act's Dredge and Fill Guidelines do the Job?" Pace Environmental Law Review, v. 1, p. 105 (1983). for a discussion of the COE dredge and fill permit program.

6. The role that the U.S. Fish and Wildlife Service (FWS) plays in rendering biological opinions in conjunction with the Endangered Species Act is demonstrated in Chapter II, Part F above. As in the case of NMFS biological opinions, FWS biological opinions provide notice of whether or not a federal project will require an Endangered Species Act exemption before the project may continue or proceed.

7. The role that the EPA plays in pollution control and environmental restoration will be addressed in Parts B and D of this chapter respectively.

8. For a detailed analysis of the oversight authority of the Advisory Council on Historic Preservation See Charlotte Bell, "Protecting the Built Environment: an Overview of Federal Historic Preservation Law," Environmental Law Reporter, November 1985, pp. 10354-13069.

9. As mentioned in note 4 to Table V-1 above, the Secretary of Defense may compel the Endangered Species Committee to grant a DOD request for an exemption under the Endangered Species Act (ESA) where that request is made in the interest of national security. A biological opinion from the FWS (and/or the NMFS) will usually be the means by which DOD is placed on notice that it should request an ESA exemption.

B. The EPA, the States and Pollution Control on Naval Installations.

The Environmental Protection Agency (EPA). The mission of the Environmental Protection Agency is described in the 1987/88 United States Government Manual /1 as follows:

The purpose of the Environmental Protection Agency is to protect and enhance our environment today and for future generations to the fullest extent possible under the laws enacted by Congress. The Agency's mission is to control and abate pollution in the areas of air, water, solid waste, pesticides, radiation, and toxic substances. EPA's mandate is to mount an integrated, coordinated attack on environmental pollution in cooperation with State and local governments.

To accomplish its mission, the EPA conducts a number of programs including those to address air and radiation, water, solid waste and emergency response, pesticides and toxic substances as well as research and development issues.

The EPA is composed of a national headquarters in Washington and ten regional offices located throughout the United States. The function of the regional offices are described in the current United States Government Manual as follows:

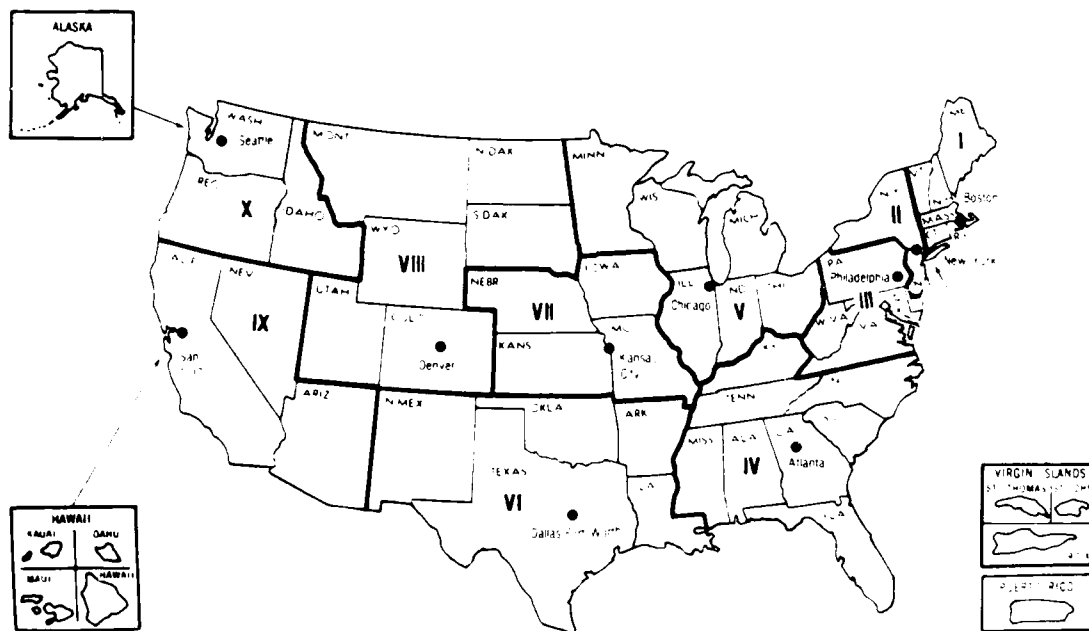
EPA's 10 regional offices represent the Agency's commitment to the development of strong local programs for pollution abatement. The Regional Administrators are the Agency's principal representatives in the regions in contacts and relationships with Federal, State, interstate and local agencies, industry, academic institutions, and other public and private groups. They are responsible for accomplishing within their regions

the national program objectives established by the Agency. They develop, propose and implement an approved regional program for comprehensive and integrated environmental protection activities. /2

The location of the EPA regional offices and their respective areas of responsibility are shown in Figure V-2.

FIGURE V-2/3

EPA REGIONS



State Pollution Control Agencies. Various federal environmental protection statutes authorize the States to assume the lead in overseeing the regulated community within their borders once the EPA has approved their pollution control program. Those statutes are listed in Table V-2.

TABLE V-2

**FEDERAL POLLUTION CONTROL LEGISLATION
AUTHORIZING STATE REGULATORY OVERSIGHT**

STATUTE	TITLE	SECTION	SECTION TITLE	TABLE NOTE
FWPCA	33	1342	STATE (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM) PERMIT PROGRAM	1
CAA	42	7410	STATE IMPLEMENTATION PLANS FOR NATIONAL PRIMARY AND SECONDARY AMBIENT AIR QUALITY STANDARDS	2
RCRA	42	6926	AUTHORIZED STATE HAZARDOUS WASTE PROGRAM	3

Even where the EPA Administrator approves a state pollution control program, both state and EPA regulators conduct inspections of the federal facilities within their common jurisdictions. The inspections are often conducted jointly.

EPA Regulation of Pollution Control on Naval Installations. The Federal Facilities Compliance Program is a stepped process designed to ensure that all federal facilities, including naval installations, are in full compliance with all federal pollution control laws. The first three steps, (compliance determination, notification of compliance problem and the establishment of a solution) are common to all uncontested EPA actions initiated to bring federal facilities into compliance with those laws. The two remaining steps (resolution of disputes and exemption) may occur whenever a federal facility opposes EPA proposed corrective actions designed to bring the facility into compliance. These five steps are described in the EPA publication Resolution of Compliance Problems at Federal Facilities /4 as follows:

Step 1 - Compliance Determination. Pursuant to Executive Order 12088, EPA monitors the compliance status of each federal facility through selective on-site inspections and reviews of the self-monitoring reports submitted by the facilities where required by regulation. EPA conducts this monitoring at a level of detail consistent with the magnitude of the facility's contribution to the pollution of the media and overall program priorities. To the maximum extent practicable, on-site inspections are "multi-media" and are coordinated with the monitoring activities of both the parent federal agency and the state and local pollution control agencies.

For a facility which is a major source of pollution, EPA performs a comprehensive inspection at least once a year and reviews self-monitoring reports upon receipt. Each

significant minor source is monitored through either a comprehensive or a cursory inspection, whichever is appropriate, at least once every two years and through the review of self-monitoring reports as they are received. All other sources are monitored through the review of self-monitoring reports and through cursory inspections when a compliance problem is suspected. A report of findings is prepared after each on-site inspection and a copy forwarded to the facility manager. Copies of the inspection reports and the self-monitoring reports are made available to the state and local pollution control agencies.

* * *

Based on information obtained through the on-site inspections and reviews of self-monitoring reports or from information provided by state and local pollution control agencies, EPA makes an assessment of each facilities' respective compliance status. In those cases where EPA determines that the facility does not meet applicable pollution control requirements, the finding of non-compliance is substantiated and documented to the same extent as EPA documents findings of non-compliance at non-federal facilities for the purpose of supporting enforcement actions. (footnote omitted)/5

* * *

Step 2 - Notification of Compliance Problem.
When a federal facility is found to be out of compliance with substantive pollution control requirements, EPA informs the facility immediately.

* * *

A federal facility must take one of two actions when notified of a compliance problem. It must either submit (a) remedial plan as requested and Step 3 is initiated, or it must dispute EPA's finding of non-compliance and the problem is dealt with at step 4./6

Step 3 - Establish Solution. Upon receipt, EPA evaluates the federal facilities' remedial plan and, if determined to be technically adequate and timely, no further action is taken and a copy is sent to the state and local pollution control agencies. If the plan is rejected, a mutually acceptable solution to the problem is negotiated with the facility and documented in a Federal Facilities Compliance Agreement.

* * *

Once the remedial plan or the Federal Facility Compliance Agreement is approved, adherence to the plan or Agreement is closely monitored in the same way that EPA would monitor compliance with a consent agreement./7

* * *

Step 4 - Resolution of Disputes. Basically, there are three points in this process where disputes may arise:

- EPA determines that a federal facility is out of compliance but the facility disagrees with that determination;
- A federal facility is found to be out of compliance by EPA and the facility agrees with the finding but disagrees with EPA as to the solution; and
- A federal facility agrees with EPA's finding of non-compliance and solution but fails to properly carry out the solution.

EPA makes every effort to resolve non-compliance disputes at the regional level. When agreement on a solution to a compliance problem cannot be reached with the federal facility within a reasonable time frame comparable to that which EPA uses in negotiating consent agreements with non-federal facilities, the EPA regional office presents the problem to the parent agency's regional office (e.g. Naval District Command). A meeting is held at that level to negotiate a

mutually acceptable solution to the problem.

* * *

Disputes which cannot be resolved by the EPA regional office are referred to (the Office of External Affairs [OEA] at EPA) headquarters with appropriate supporting data. Documentation of the disputes is similar to a litigation report.

Upon receipt of the documentation of a dispute, OEA works out a solution to the problem with the official responsible for environmental matters at the headquarters of the parent agency of the non-complying facility. If that fails, the Administrator asks the head of the parent agency to take such action as is necessary to bring the facility into compliance. If that too fails, the Administrator refers the problem to (the Office of Management and Budget for final resolution./8

* * *

Step 5 - Exemption. At any time during the process of resolving a compliance problem, a federal agency may recommend that the President exempt its facility from applicable pollution control requirements if the exemption would be in the interest of the United States.

* * *

Every effort is made to find an alternative to an exemption which is acceptable to the parent federal agency, EPA, and the state and local pollution control agencies.

* * *

If an exemption is granted to a federal facility, EPA provides assistance to that facility to correct the pollution problem as expeditiously as possible. The objective is to bring the facility into compliance prior to the expiration of the exemption to preclude the need for an additional exemption. EPA

sends a copy of the exemption to the state involved./9

State Regulation of Pollution Control on Naval

Installations. States with EPA approved pollution control programs would follow the same initial three steps as the EPA to insure federal facility (naval installation) compliance, with their laws (i.e. compliance determination, notification of compliance problem and the establishment of a solution). Should the federal facility dispute the state corrective action, the state may (1) require initial adjudication of the matter in a state administrative court if its program provides for such a hearing, (2) refer the dispute to the EPA for assistance in its resolution or (3) file a complaint in the appropriate state/federal court seeking an injunction to compel the federal facility to follow the law. The state may also issue an administrative order directing the federal facility to follow the law; but for reasons which will be discussed below, state officials seldom view administrative orders as a viable means to resolve a dispute with a federal facility.

The Office of Management and Budget and the Resolution of Federal Inter-agency Pollution Control Disputes.

Executive Order 12088 (Federal Compliance with Pollution Control Standards) provides in part that:

Each Executive Agency shall cooperate with the Administrator of the Environmental

Protection Agency, hereinafter referred to as the Administrator, and State, interstate, and local agencies in the prevention control, and abatement of environmental pollution. /10

Section 1-6 of that order is entitled "Compliance With Pollution Controls" and provides that:

1-601. Whenever the Administrator (of the EPA) or the appropriate State, interstate, or local agency notifies an Executive agency that it is in violation of an applicable pollution control standard (see Section 1-102 of this Order), the Executive agency shall promptly consult with the notifying agency, and provide for its approval a plan to achieve and maintain compliance with the applicable pollution control standard. This plan shall include an implementation schedule for coming into compliance as soon as practicable.

1-602. The Administrator (of the EPA) shall make every effort to resolve conflicts regarding such violation between Executive agencies and, on request of any party, such conflicts between an Executive agency and a State, interstate, or a local agency. If the Administrator cannot resolve a conflict, the Administrator shall request the Director of the Office of Management and Budget to resolve the conflict.

1-603. The Director of the Office of Management and Budget shall consider unresolved conflicts at the request of the Administrator (of the EPA). The Director shall seek the Administrator's technological judgment and determination with regard to the applicability of statutes and regulations.

1-604. These conflict resolution procedures are in addition to, not in lieu of, other procedures, including sanctions, for the enforcement of applicable pollution control standards. /11

By means of Executive Order 12088, the President has designated both the EPA and OMB as his agents for resolving

pollution control disputes involving federal facilities.

The Perceived Ineffectiveness of EPA and State Enforcement Actions Against Federal Facilities. As a matter of policy, the EPA is precluded from suing another federal agency. Section 1-402 of Executive Order 12146 (Management of Legal Resources) /12 provides that:

Whenever two or more Executive agencies whose heads serve at the pleasure of the President are unable to resolve ... a legal dispute, the agencies shall submit the dispute to the attorney general prior to proceeding in any court, except where there is specific statutory vesting of responsibility for a resolution elsewhere.

In response to a 1983 congressional inquiry concerning federal interdepartmental litigation under CERCA and RCRA, the Assistant Attorney General, Office of Legislative Affairs responded as follows:

It is generally the policy of the Department of Justice, under this Administration as well as prior administrations, that (disputes between two or more executive agencies whose heads) serve at the pleasure of the President should be resolved internally. If the dispute is legal in nature, it is the policy to proceed as required by Executive Order No. 12146. If the dispute is a matter of conflicting policies or priorities, the practice is to resolve the dispute through existing mechanisms, including the cabinet councils, if necessary. The Department believes that to involve the Judicial Branch in disputes between components of the Executive Branch would constitute a waste of judicial resources and taxpayers' money, as well as result in substantial delays in reaching appropriate and workable resolutions to such disputes. In addition, it is within the authority of the Executive to resolve such

disputes internally as a part of its Article II duty to "take care that the laws [are] faithfully executed." Finally, there is a serious question whether such disputes would, in any event, satisfy Article III's justiciability requirements.

This policy applies to disputes under CERCLA and RCRA, as well as to those raised under other statutes./13

With the hammer of federal litigation foreclosed, the EPA must use either compliance orders to compel federal facilities to follow the law or negotiated agreements to persuade federal facilities into compliance./14

Recent commentary has described the frustration of EPA, the states, and certain legislators with the unwillingness of both DOJ and federal facility operators to respect the regulators' unilateral administrative enforcement orders. In a 11 March 1988 Environmental Reporter article entitled "State Attorneys Call for More Authority to Enforce Statutes at Federal Facilities," it was reported that:

EPA recently has developed several compliance mechanisms that attempt to get around the existing limitations on its enforcement authority in response to the refusal of the Department of Justice and federal facility operators to respect its unilateral enforcement orders.

EPA has touted interagency agreements between states, federal facilities, and itself as a solution to compliance problems, and has encouraged use of sections of the Comprehensive Environmental Response, Compensation, and Liability Act, enforced through the citizen's suit provisions, as a way to bring about the agreements at federal sites on the national priorities list.

* * *

A very different perspective was presented by the state legal officers, wholly unique from that of EPA and the agencies that operate federal facilities.

"Worthless pieces of paper" was how Ohio Attorney General Anthony J. Celebrezze described the interagency agreements. He called them "toothless agreements," which stall the process. Instead he endorsed consent decrees that give the states the power to take a federal facility to court, rather than arbitration by the EPA administrator, the approach now used to reach the agreements.

"All we are asking is that the federal government comply with environmental laws," Celebrezze said. "It should be a good model. Instead it is the reverse. They are showing how bad it can be without regulation." /15

The article also discussed five bills which had been introduced in the a House for the purpose of strengthening the hand of EPA and the states in their efforts to compel federal facilities to comply with the hazardous waste management requirements contained in the Resource Conservation and Recovery Act (RCRA) and its implementing regulations.

Representative Dennis E. Eckhart of Ohio is the sponsor of House Resolution 3785 which is one of those five bills. His extended remarks accompanying the introduction of that bill are as follows:

Mr. Speaker, my colleagues and I are here today to outline for you the results of more than 7 months of hard work. the package of bills we are introducing is exceedingly

straightforward and simple. Our aim is to bring to an end the double standard that exists with respect to the application of our Nation's hazardous waste laws to Federal facilities.

* * *

The legal posture being taken by the Department of Justice and the President is to avoid the imposition of legal sanctions that other branches of the Federal government routinely use to force compliance - the imposition of civil penalties, for example, on other parties. In fact, the Justice Department argues that the failure of Federal facilities to comply with environmental standards is merely an intra-executive branch dispute immune from legal action to force that compliance.

This argument flies in the face of already enunciated congressional intent - and the bill I am introducing today will once and for all clarify that RCRA, our foremost hazardous waste disposal law, allows Federal facilities to be sued and to be held accountable for their actions.

There is simply no room for Federal agencies that put themselves above the law. My bill - in tandem with the other bills in this package - will put an end to guilty Federal agencies avoiding blame for willfully and recklessly polluting this country's environment. /16

While the ability of EPA to sue other federal agencies and to unilaterally issue administrative orders to federal facilities (including naval installations) is curtailed at present, the current DOJ position may change with the next administration or as the result of the legislative initiatives discussed above.

C. CEQ, The Environmental Impact Statement Process and the Naval Services.

The Council on Environmental Quality (CEQ). The CEQ was created by the National Environmental Policy Act (NEPA) on 1 January 1970. It consists of three members who are appointed by the President with the advice and consent of the Senate. The current United States Government Manual describes the CEQ's functions as follows:

The council develops and recommends to the President national policies that further environmental quality; performs a continuing analysis of changes or trends in the national environment; reviews and appraises programs of the Federal government to determine their contributions to sound environmental policy; conducts studies, research, and analyses relating to ecological systems and environmental quality; and assists the President in the preparation of the annual environmental quality report to the Congress.

Those who measure the importance of a federal governmental organization by its size would be misled in the case of the CEQ. While the Council and its staff total less than twenty people, its influence is felt by most executive branch agencies daily because CEQ is the oversight agency for the environmental impact statement (EIS) process. As mentioned in the discussion of NEPA contained in Chapter III, Part A, every major federal project whose environment impacts may significantly affect the quality of the human environment must be reviewed and analyzed via the EIS process before the project is implemented. Other federal agencies, the public,

the states and any other public or private organization may review and comment on a federal agency EIS. As will be discussed below, any federal agency which nonconcurs in a another agency's proposed project (as described in the latter's EIS) may refer the nonconcurrence to CEQ for its consideration and comment. Since CEQ is part of the Executive Office of the President, each referral represents an escalation of an inter-agency dispute to the highest levels of the executive branch. Finally, a federal agency may be sued by non-federal parties who (1) oppose the agency's decision to refrain from preparing an EIS or (2) challenge the adequacy of an EIS. Examples of such challenges are contained in Chapter VI, Parts B and E respectively.

The Environmental Impact Statement Process. The EIS process involves a phased, systematic analysis of a federal project to insure that its environmental impacts are fully identified and considered before the project is implemented. The sponsoring agency is required to consider alternative ways to execute the project so that its adverse impacts may be mitigated or avoided all together. In addition to considering the various way that a project may be implemented, the sponsoring federal agency must also consider the alternative of "no action", that is the alternative of not proceeding with the project at all.

While NEPA applies to all federal projects, an EIS must be prepared only for "major" projects which will "significantly effect the quality of the human environment." /17 Minor projects and those major projects which will not involve significant environmental impacts may be undertaken without preparing an EIS.

The various ways that NEPA is applied to federal projects is depicted in Figure V-3 and discussed more fully thereafter.

(Figure V-3 is on the following page)

FIGURE V-3

ALTERNATIVE NEPA PROCEDURES LEADING TO PROJECT INITIATION

TRACK	CLASS		EFFECT			DOCUMENTS							INITIATE
	MINOR	MAJOR	UNKNOWN	INSIGNIFICANT	SIGNIFICANT	SCOPING	EA	FONSI	DEIS	FEIS	ROD	SEIS	
1													
2													
3													
4													
5													
6													

KEY EA ENVIRONMENTAL ASSESSMENT
 FONSI FINDING OF NO SIGNIFICANT IMPACT
 DEIS DRAFT ENVIRONMENTAL IMPACT STATEMENT
 FEIS FINAL ENVIRONMENTAL IMPACT STATEMENT
 ROD RECORD OF DECISION
 SEIS SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

Track 1. This track represents the minor project situation. The sponsoring agency must conduct an in-house environmental analysis to insure that the project will not

significantly effect the environment, its size notwithstanding. The agency is not required to make that analysis available for comment by anyone outside its organization.

Track 2. This track represents the situation where it is not known if the environmental impacts of a federal project will significantly effect the environment. Here the federal agency may solicit public and other agency comment on the project through the scoping process to assist in issue identification. (The scoping process is used to assist the sponsoring agency in identifying all relevant issues by allowing the public and other agencies to review and comment on the project before alternatives are developed.) The sponsoring agency will then memorialize the project and memorize the results of this review in a document known as an Environmental Assessment (EA). If the project does not involve any significant effects, the agency next prepares a Finding of No Significant Impact (FONSI). With the issuance of a FONSI, the administrative record is complete and the agency may proceed with the project if its FONSI is not challenged in court. An example of a Track 2 situation is contained in in Chapter VII where the Vieques EA is discussed.

Track 3. Track 3 also involves a major project whose effects are initially unknown. It differs from Track 2 in that once the EA is complete, the agency determines that the

project will involve significant impacts. The agency then continues with the preparation of a Draft and Final Environmental Impact Statement (DEIS and FEIS) as well as a Record of Decision (ROD). These latter three documents will be discussed more fully in Track 5 below.

Track 4. This track involves a major federal project which does not have any significant environmental impacts. An example of a Track 4 project might include a decision of the Federal Highway Administration to change the color and shape of all signs on the federal interstate highway system. While such a project would be major in scope, it would be devoid of environmental impacts.

Track 5. Track 5 represents the situation where a major federal project is determined from the outset to be one involving significant environmental impacts. The EIS process in this situation begins with scoping. Once the agency has had the benefit of public, state and other agency comments with regard to issue identification, it conducts a systematic analysis of alternative ways to accomplish the project. The initial analysis is memorialized in a DEIS which is filed with the EPA and circulated to interested citizens, private groups, state agencies and federal agencies. After the close of a 45-day comment period, the agency reviews all comments made on its DEIS. Further analysis is conducted as may be necessary. The agency then publishes, files and circulates a

FEIS. The FEIS must include (1) the relevant data and analysis contained in the DEIS, (2) the results of any additional analysis conducted following the publication of the DEIS, and (3) all comments made on the DEIS together with the agency's response to those comments. Not less than 30 days following notice that the FEIS has been filed with the EPA, the decision authority who will determine whether the project will be initiated (and in what form) is provided the FEIS and all comments on the FEIS to assist him or her in making the go/no go decision. If the project is to go forward, the decision-maker's determinations must be reduced to writing in a document known as the Record of Decision (ROD). The ROD must decide which alternative is selected and how the adverse environmental impacts associated with that alternative will be mitigated. The project may be initiated following the execution of the ROD.

Track 6. Track 6 differs from Track 5 only in the existence of a time delay between (1) the preparation of a DEIS and a FEIS, (2) the preparation of a FEIS and the execution of a ROD, or (3) the execution of a ROD and the initiation of a project. In any of those cases, a supplemental EIS (SEIS) must be prepared to ensure that the environmental documentation already prepared remains valid. SEISs are also used to correct deficiencies identified in a project FEIS. A SEIS is subject to the same circulation,

filing and comment period requirements as either a DEIS or FEIS.

The CEQ and the Resolution of Federal Inter-agency EIS Disputes. The CEQ referral process is established by its NEPA regulations.^{/18} Where a federal agency disagrees with the course action which another federal agency proposes to follow as documented in the latter's FEIS, the disagreement may be referred to CEQ for its consideration and comment. In a special report entitled "Agency Referrals to CEQ," The 15th Annual CEQ report describes the referral process as follows:

A federal agency that is referring a proposal to CEQ must notify the lead agency of its intentions at the earliest possible time. If the issues have not been resolved between the agencies after publication of the final EIS, and an agency wishes to refer the proposal to CEQ, the referring agency must send a letter and statement to CEQ and the lead agency and request that no action be taken to implement the proposal until CEQ acts upon the referral. The statement accompanying the referral letter must: (1) identify the material facts in the controversy; (2) identify environmental policies or requirements that would be violated by the proposal; (3) present the reasons why the referring agency believes the proposal is environmentally unsatisfactory; (4) contain a finding that the issue raised is of national importance, (5) review the steps taken by the referring agency to resolve the matter with the lead agency prior to referral and (6) offer the referring agency's recommendations in regard to the proposed action.

The lead agency for the proposal then has 25 days to respond to the referring agency's letter and statement. Interested parties,

both in and outside of government, may deliver written views in support of the referral to CEQ no later than (when) the referral is transmitted to CEQ; parties wishing to submit written comments in support of the lead agency's position may deliver them to CEQ no later than the lead agency's response./19

That report thereafter describes the seven courses of action which are available to the CEQ as follows:

- (1) Conclude that the process of referral and response has successfully resolved the problem.
- (2) Initiate discussions with the agencies with the objective of mediation with referring and lead agencies.
- (3) Hold public meetings or hearings to obtain additional views and information.
- (4) Determine that the issue is not one of national importance and request the referring and lead agencies to pursue their decision process.
- (5) Determine that the issue should be further negotiated by the referring and lead agencies and is not appropriate for Council consideration until one or more heads of agencies report to the council that the agencies' disagreements are irreconcilable.
- (6) Publish its findings and recommendations (including where appropriate a finding that the submitted evidence does not support the position of an agency).
- (7) When appropriate, submit the referral and the response together with the Council's recommendation to the President for action. (footnote omitted)/20

CEQ is presently reviewing a Department of Interior (DOI) referral which challenges a Marine Corps plan to have jet aircraft conduct training flights in eastern North

Carolina. The Marine training program would involve overflights of the Cape Lookout Natural Seashore at low altitudes. DOI contends that the overflights will be so noisy and frequent that they will adversely affect public use of the seashore. DOI argues that the project, as it is presently designed, involves unsatisfactory environmental impacts. /21

The Marine Corps' counter-argument points out that:

(1) it has already incorporated additional mitigation into its project following DOI and public comments on its DEIS,

(2) the National Park Service has declined to suggest what additional mitigation is necessary,

(3) DOI's position is based on a misinterpretation of the project's noise data,

(4) the noise data was developed using a widely accepted noise impact model, and

(5) the proposed noise level is below the maximum level recognized by non-DOD authorities as being acceptable for outdoor recreational use of land.

While the noise issue was the primary DOI concern with the Marines project, several others were also identified. These additional concerns included possible interference with civilian use of the air space and interference with radio transmissions in the area. The Marines' response to these

issues was that they are factually unsupportable./22

The CEQ conducted a meeting to address the DOI referral on 25 January 1988. At that meeting, Mr. Keith Eastin, the Principal Assistant Secretary of the Navy for Shipbuilding and Logistics, explained the need for the Marine Corps overflights as follows:

Mr. Chairman, members of the Council, ladies and gentlemen, I am pleased to be here this morning to discuss a proposal of extreme importance to the Department of the Navy which deals with the readiness of our Marine aviators for combat. During recent years, the anti-air warfare technology available to potential adversaries has become extremely sophisticated. We have, however, developed means to counter this capability by relying on a combination of technical innovation and evasive maneuvering. Proficiency in the use of these tactics through training scenarios, which include sea to land ingress to targets, is essential to ensure mission accomplishment and survival of our aircrews.

We have tried to accomplish this needed training using existing airspace available to the Department of Defense. Due to the relative newness of these operations, most of our Special Use Air space is not configured to support this type of training, being constrained either vertically, to preclude low level high speed flight; in area, to prevent evasive maneuvering; in terrain, by not providing the visual cues for a sea-to-land ingress; in availability, due to already extensive utilization; or some combination of these factors./23

Mr. Eastin then explained that the Cape Lookout National Sea shore was the only area which met the operating requirements for the proposed training exercises within the operational range of the aircraft which could be conducting

the training.

As of late May, 1988, the DOI referral described above remains unresolved.

The Naval Services and the EIS Process. Naval commanders are provided detailed guidance concerning the EIS process in Chapter 4 of OPNAVINST 5090.1 (Environmental and Natural Resources Protection Manual), and in Chapter 3 of MCO P11000.8B (Real Property Facilities Manual, v. 5).

D. EPA, The States, The Public and Environmental Restoration on Naval Installations.

EPA Oversight of Remedial/Response Actions on Naval Installations. As discussed in Chapter III. Part A, there are 205 naval activities/installations listed on the Federal Facility Hazardous Waste Compliance Docket. The extent of which the EPA may oversee remedial actions at these facilities is open to question. As in the case of pollution control oversight, EPA is precluded from either suing another federal agency or from unilaterally issuing a compliance order to a federal facility manager for the purpose of compelling environmental restoration in a particular way or on a particular schedule. Additionally, EPA's involvement in DOD hazardous waste cleanups has been criticized by some legislators. A recent article entitled "Armed Services Panel Charges Cleanup Process 'Needlessly Complicated' by EPA at Defense Sites," provides that:

Cleaning up hazardous waste at U.S. military bases is being "needlessly complicated" by the Environmental Protection Agency, according to the chairman of a House Armed Services Committee Subpanel.

"Will the real EPA please stand up?" Rep. Richard Ray (D-GA), Chairman of the Environmental Restoration Panel of the Armed Services Subcommittee on Readiness, asked at a hearing Nov. 19 (,1987).

Ray said there appear to be "at least 10 EPAs" around the country, with each EPA region enforcing its own brand of environmental law at different Department of Defense facilities.

He said the agency should provide "comprehensive and consistent guidance" on environmental matters to the Defense Department, but should not be allowed to enforce regulations through penalties. Also, Ray said, EPA should leave remedial investigations or cleanup designs for particular sites to the military. /24

EPA use of negotiated agreements to effect hazardous waste cleanups at DOD installations has also been criticized. In another recent article the testimony of the Assistant Secretary of Defense for the Environment was reported as follows:

Carl Schafer, deputy assistant secretary of defense for the environment, testified at a hearing by the Environmental Restoration Panel, a special panel of the House Armed Services Subcommittee on Readiness, that there are several shortcomings in a cleanup agreement for the Twin Cities Army Ammunition Plant near St. Paul, Minn.

The agreement, reached by EPA, the Army, and the state, has been held up as a model by EPA for enforcement agreements at military installations under the Superfund Amendments and Reauthorization Act

Under questioning by Rep. Richard Ray (D-Ga.), chairman of the special panel, Schafer said the department would not enter into other agreements that include certain components of the TCAAP environmental compliance and cleanup plan.

In general, Schafer maintained that EPA's role in military hazardous waste cleanups should primarily involve providing "technical guidance" rather than wielding its enforcement hand.

* * *

In his testimony, Schafer identified several portions of the TCAAP agreement he did not support, including a requirement that the Army pay EPA for overseeing federal activities at TCAAP, a clause that gives EPA the ability to stipulate enforcement penalties for non-compliance with the agreement, and one that gives EPA "micromanagement" of the Army's activities at the site.

Schafer said the Army's decision to sign the TCAAP agreement was necessary to reach a compromise and avoid legal threats from the state.

* * *

"We don't mind paying for engineers and scientists, but we do mind paying for time-keepers and attorneys," he told the panel./25

How the Department of Defense and EPA will resolve the issue of EPA oversight of environmental remedial actions or DOD installations remains to be seen.

The Role of the States with Regard to Environmental Restoration on Naval Installations. Section 120(f) of the Superfund Amendment and Reauthorization Act (SARA) provides that:

(1) State and Local Participation. - The Administrator and each department, agency, or instrumentality responsible for compliance with this section shall afford to relevant State and local officials the opportunity to participate in the planning and selection of the remedial action, including but not limited to the review of all applicable data as it becomes available and the development of studies, reports, and action plans. In the case of State officials, the opportunity to participate shall be provided in accordance with section 121. (Cleanup Standards)./26

That the states will play a role in determining the scope of remedial actions on naval installations is beyond question. The extent to which the states will be able to influence the remedial action finally selected remains, as in the case of so many other environmental issues, to be seen./27

Citizen Involvement In Environmental Restoration on Naval Installations. SARA also expressly provides for public involvement in environmental restoration on federal facilities by requiring that the President (or his agent) provide the public notice of (1) proposed restoration plans, (2) a brief analysis of the plans, and (3) an opportunity to comment on those plans./28 Once the final plan is selected, the public must be provided notice of that plan before any restoration work is begun./29

SARA also provides for citizen suits. With certain limited exceptions, a citizen is authorized to:

... commence a civil action on his own behalf-

(1) against any person (including the

United States and any other governmental instrumentality or agency, to the extent permitted by the Eleventh Amendment to the Constitution) who is alleged to be in violation of any standard, regulation, condition, requirements, or order which has become effective pursuant to this Act (including any provision of an agreement under section 120, relating to Federal facilities); or

(2) against the President or any other officer of the United States (including the Administrator of the Environmental Protection Agency ...) where there is alleged a failure of the President or of such other officer to perform any act or duty under this Act, including an act or duty under section 120 (relating to Federal facilities), which is not discretionary with the President or such other officer.

Since citizens have demonstrated their willingness to sue under other environmental protection citizen suit provisions, naval commanders must anticipate that they will likewise use the SARA citizen suit provisions whenever that use would be to their benefit.

The Department of The Navy Assessment and Control of Installation Pollutants (NACIP) Program. The Department of the Navy's pre-SARA response to environmental restoration requirements are contained in its NACIP Program. The Marine Corps Real Property Facilities Manual, v. 5 describes that program as follows:

The NACIP Program consists of three major phases: two to identify the presence of hazardous wastes and evaluate effects on the environment, and a third phase to identify and program any required corrective measures./30

The three phases are thereafter described as follows:

a. Initial Assessment Study. The initial assessment will involve an extensive review and evaluation of existing records located at the activity and elsewhere, an examination of the activity's waste disposal history, and identification of any potential or existing pollutant problems at the activity. The current edition of NESSA Publication 20.2-035, "Navy Assessment and Control of Installation Pollutants (NACIP) Program: Guide for Conducting an Initial Assessment Study," provides details of the program....

b. Confirmation Study. A confirmation study will verify problems uncovered by the initial assessment study through physical and/or analytical testing and monitoring of suspected hazardous pollutants. Confirmation studies might include, but are not limited to, soil and ground water sampling and analysis. Both the initial assessment studies and confirmation studies will be funded from pollution abatement funds managed by the (Navy Facilities Engineering Command).

c. Project Identification. The confirmation study may indicate the need for remedial actions. Corrective measures will be programmed in normal appropriation accounts, utilizing NAVFACENGCOM-managed pollution abatement funds for projects of military construction scope and Marine Corps pollution abatement minor construction funds for projects of lesser scope. First priority for remedial efforts will be directed toward control of contamination migrating from Marine Corps property, when such migration threatens the health and welfare of installation personnel and/or the adjacent community./31

SARA will obviously expand the third phase of the NACIP program by requiring that the naval services obtain State, local government and public input on their remedial action plans.

Chapter Summary. The naval services are subject to

regulatory oversight by a number of federal and state environmental agencies. Chief among the federal agencies are the Environmental Protection Agency (which oversees pollution control and environmental restoration) and the Council on Environmental Quality (which oversees the federal environmental impact statement process).

While no one questions the authority of federal and state regulators to enter naval installations, to conduct inspections, and to check records; there is considerable disagreement with regard to their authority to unilaterally order that particular federal agency actions be taken or terminated. The Departments of Defense and Justice are of the opinion that disagreements between the EPA and DOD installations should be resolved administratively within the executive branch. That internal dispute resolution process would involve the Administrator of the EPA as a mediator between the States and naval installations and the Office of Management and Budget (OMB) as a mediator between the EPA and naval installations for pollution control/environmental restoration disputes. Longstanding Congressional concern with DOD hazardous waste management practices has prompted the introduction of several bills to provide the EPA/States with enforcement authority against all federal facilities. If certain portions of those bills are enacted, federal facilities will be subject to EPA initiated civil lawsuits in

federal district courts.

The NEPA environmental impact statement process provides public and private individuals with the opportunity to comment upon major federal actions which involve a significant impact on the quality of the human environment. Through the EIS process, agency actions are subject to close scrutiny to ensure that their negative effects on the Nation's natural, historic and cultural resources are minimized or avoided all together. Should any other federal agency oppose a naval project on the grounds that its environmental impacts are not adequately documented or mitigated, that agency may refer the matter to the CEQ for mediation. Since the CEQ is located within the Executive Office of the President, each such referral represents the escalation of an inter-agency dispute to the highest level of the executive branch.

Finally, the public is able to play a regulatory role in environmental protection on naval installations via its ability to (1) initiate citizen suits against federal agencies for pollution control and environmental restoration issues, (2) comment on naval service projects documented in EISs, and (3) comment on proposed environmental restoration remedial plans.

CHAPTER VI

THE NAVAL COMMANDER, OPERATIONAL TRAINING, INSTALLATION SUPPORT, AND THE COURTS

Overview. This chapter will begin with an analysis of the reason why federal courts will not review a naval commander's decision to conduct operational training. The chapter will then turn to three federal court cases involving naval operational training where either the United States, the Secretary of Defense, the Secretary of the Navy, The Chief of Naval Operations, The Commandant of the Marine Corps and/or the Commander-in-Chief, Atlantic Fleet were named defendants. In the first two cases, the plaintiffs sought to halt amphibious and weapons training on the grounds that the defendants were violating one or more environmental laws. In the third case, the plaintiffs sought compensation for the noise impact of Marine Corps aircraft training over their land. The fourth and final federal case which is discussed in this chapter involves a federal court injunction which has halted the construction of a 600 unit housing project on a naval installation for over a year. In that case the federal judge found the Navy in violation of two environmental statutes and immediately terminated all work on the multi-million dollar project. This chapter is intended to provide the reader with (1) a greater appreciation of the close connection between operational training and the environmental

protection legislation discussed in Chapter III above, (2) the considerable indirect monetary costs which may arise from the adverse environmental impacts of operational training, and (3) the power of the federal courts to unilaterally halt any federal action which is found to be in violation of environmental laws.

A. Operational Training and the Issue of Justiciability. On more than one occasion the Supreme Court of the United States has described the difference between the roles that the federal courts and the military services play in our society. In the case of Toth v Quarles,* /1 the Supreme Court expressly addressed that difference as follows:

Article III (of the Constitution of the United States) provides for the establishment of a court system as one of the separate but coordinate branches of the National government. It is the primary, indeed the sole business of these courts to try cases and controversies between individuals and between individuals and the government./2

* * *

Unlike courts, it is the primary business of armies and navies to fight or be ready to fight wars should the occasion arise. (emphasis added)/3

How the military services "fight" or get "ready to fight" is a question which is reserved for the President and

*Decided on 7 Nov 1955

for Congress. Article II, Section 2, Clause 1 of the Constitution of the United States provides in pertinent part that "The President shall be Commander-in-Chief of the Army and Navy of the United States, and of the militia of the several States when called into actual service of the United States..."⁴. Article I, Section Eight, Clauses 12 to 15 of the Constitution provide that: "The Congress shall have the power...:

* * *

To raise and support armies...;

To provide and maintain a navy;

To make rules for the government and regulation of the land and naval forces;

To provide for organizing, arming, and disciplining the militia...;⁵

* * *

Since the Constitution commits the command of the regular components of military services to the President at all times and commits their creation, maintenance and the promulgation of their rules of discipline to Congress, the federal courts are necessarily precluded from reviewing the decisions of the other two branches of the national government concerning how the military services will be trained "to fight wars."

Following the shooting of several students on the Kent State University Campus in May of 1970, their contemporaries sought "a judicial evaluation of the appropriateness of the

(')training, weaponry and orders(') of the Ohio National Guard."/6 The federal district court which heard the case was further requested to "assume and exercise a continuing judicial surveillance over the Guard to assure compliance with whatever training and operational procedures may be approved by (the) court."/7 When that case reached the Supreme Court, Chief Justice Burger began the Court's written opinion* with the following caveat:

It is important to note at the outset that this is not a case in which damages are sought for injuries sustained during the tragic occurrence at Kent State. Nor is it an action seeking a restraining order against some specified and imminently threatened unlawful action. Rather, it is a broad call on judicial power to assume continuing regulatory jurisdiction over the activities of the Ohio National Guard. This far-reaching demand for relief presents important questions of justiciability.**/8

In disposing of the student requests that the federal courts supervise the training and operations of the Guard, the Chief Justice stated in pertinent part that:

Trained professionals, subject to the day-to-day control of the responsible civilian authorities, necessarily must make comparative judgments on the merits as to evolving methods of training, equipping, and controlling military forces with regard to their duty under the Constitution. It would be inappropriate

*The case was styled Gilligan v. Morgan and its written opinion was handed down on 21 June 1973.

**Blacks Law Dictionary defines the term "justiciable" as follows: "proper to be examined in courts of justice subject to action of court of justice."

for a federal judge to undertake this responsibility in the unlikely event that he possessed the requisite technical competence to do so. (emphasis added)/9

* * *

It would be difficult to think of a clearer example of the type of governmental action that was intended by the Constitution to be left to the political branches directly responsible - as the Judicial Branch is not - to the electoral process. Moreover, it is difficult to conceive of an area of governmental activity in which the courts have less competence. The complex subtle, and professional decisions as to the composition, training, equipping, and control of a military force are essentially professional military judgments, subject always to civilian control of the Legislative and Executive Branches. The ultimate responsibility for these decisions is appropriately vested in branches of the government which are periodically subject to electoral accountability. It is this power of oversight and control of military force by elected representatives and officials which underlies our entire constitutional system. (emphasis in original on the word "always," other emphasis added)/10

The court then held that the "training, equipping and control" of the Ohio National Guard were nonjudicial, primarily because those matters were committed to discretion of the executive and legislative branches. The Chief Justice concluded the Court's opinion as he began it and that is with a caveat. His final comment was as follows:

In concluding that no justiciable controversy is presented, it should be clear that we neither hold nor imply that the conduct of the National Guard is always beyond judicial review or that there may not be accountability in a judicial forum for violations of law or for specific unlawful

conduct by military personnel, whether by way of damages or injunctive relief. We hold only that no such questions are presented in this case. (emphasis added and footnote omitted)./11

Six years following the Gilligan decision, District Court Judge Torruella handed down his opinion in the case of Barcelo v. Brown./12 The Governor of Puerto Rico, Puerto Rican fishermen and several residents of the island of Vieques sought "to enjoin (the Navy and Marine Corps) from using any portion of the lands (on) Vieques, or in the waters which surround (the) island, for the purpose of carrying out naval training operations"./13 In addressing the issue of justiciability, the judge's written opinion stated that:

Plaintiffs have contended that the training conducted at or around Vieques could be carried out at some other location or that the type of training could be changed or reduced, all without harm to the national defense.

Further in line with this position Plaintiffs have steadfastly contended that these are matters that should be considered by the court in this case.

In our view questions dealing with the level and type of training required to maintain the Navy at an adequate level of efficiency, or the determination of the relative merits of various training sites or similar issues, are purely "political" questions which are not justiciable less we are concerned with whether specific legal standards have been violated (ex., whether the level of training violates environmental laws). (emphasis added)/14

The manner in which Judge Toruella addressed the

plaintiff's allegations (which were based upon eleven federal environmental statutes, several Presidential executive orders and three state environmental statutes) will be addressed in Part C of this chapter below (Operational Training, The States and the Courts: The multi-pronged assault on Vieques). Suffice it to say for now, the District Court did not hesitate to examine the naval operational training which was being conducted on and around the Caribbean island of Vieques because the plaintiffs had alleged that the training resulted in numerous violations of various environmental laws and federal regulations. While the decisions to conduct several different forms of operational training on Vieques were in and of themselves nonjusticiable, the allegations that environmental laws were being violated during the training raised justiciable issues.

B. Operational Training, Citizen Groups and the Courts: The Opposed Landing in Operation Snowy Beach. During the summer of 1971, Navy and Marine Corps planners began work on a cold weather training exercise which was to involve 33 ships of the U.S. Atlantic Fleet and 900 Marines from the 22nd Marine Amphibious Unit (22d MAU). The operation was to be conducted over a period of ten days and would involve the first cold weather landing by the Atlantic fleet in over a decade.* /15

*The Marines were scheduled to (Note continued)

Both the landing and the follow on cold weather training were to be accomplished within the boundaries of Reed State Park in Georgetown, Maine.

Throughout the planning period, the Coordinator of the Environmental Quality Program for the Commander-in-Chief, Atlantic Fleet maintained close liaison with the appropriate state and federal environmental agencies. In addition to the Navy coordination with federal and state officials, a use permit was obtained from the Maine State Park and Recreation Commission. The State Park permit contained the following conditions:

- (1) All motor vehicles will be restricted to existing roadways;
- (2) With the exception of the designated landing and embarkation areas at Todd's Point, and if necessary at Griffith Head, the beaches, the sand dunes and the salt marshes will not be used by vehicles, helicopters or personnel;
- (3) Helicopters will land only in designated landing areas at the Todd's Point and Griffith Head parking lots, in the field at the park entrance and in the field near the center of the park;
- (4) Helicopters will descend and ascend vertically;
- (5) Portable chemical toilets will be used by all personnel;
- (6) No trees will be cut;

conduct an amphibious assault and to then remain ashore in bivouac for a period of three to four days.

(7) No live ammunition will be used;

(8) There will be no littering of the park area, which is to be left in the same condition, as near as possible, as it is at the commencement of the exercise./16

Based upon the limited scope of the planned training and the agreed upon limitations contained in the State permit, the Navy concluded that the training exercise was not a "major federal action which would significantly effect the quality of the human environment," and accordingly did not prepare an environment impact statement.*/17

In late December, 1971, various Maine newspapers began covering the pending exercise. While there was some minor concern with the impact that the training might have on the park sand dunes, the overall tenor of the coverage was favorable. In early January 1972, a number of individuals who were described as having been, active in the anti-Viet Nam war movement began to receive attention as they "protested" the use of the State Park by the Marines./18 The greatest "protest" was heard not in Maine, however. The New York Times published the following editorial on 12 January 1972:

OPERATION SNOWY BEACH

Maine's Reid State Park in Georgetown, at the mouth of the Kenebec River, is an ecological gem sensitively adapted to the diverse interests of naturalists and of

*The EIS process under the National Environmental Policy Act (NEPA) is described in Chapter V, Part C.

those who just like to splash in the ocean,
lie on the beach or wander in the woods.

The mile-long white sandy beach at Reid is the finest in Maine -- down-Easterners would argue the finest anywhere. It is framed by two rocky promontories which offer spectacular views of the Maine coast and intimate vignettes of Maine lobstermen at work hauling their traps in swirling tidal currents just below the rocks. Behind the dunes, which run the length of the beach, a large tidal pond offers bathtub temperatures to swimmers who cannot take the icy Atlantic. Surrounding the pond are salt marshes rich in marine and bird life, and spruce and pine woods through which discreet trails ramble.

In this rare natural paradise later this month, the Navy proposes to dump 1700 Marines with the equipment (unspecified) and supplies necessary for a four day bivouac in the park. Operation Snowy Beach is scheduled to sail from Norfolk next Monday with 30,000 men on 33 ships, including an aircraft carrier and a cruiser, to rendezvous a few days later off the Maine coast for sea and helicopter landings by the Marines.

This ill-considered landing is not only wholly incompatible with the purposes of the park - which was bequeathed to the people of Maine for their public benefit in perpetuity -- but it poses an appalling threat to the delicate natural balance of the entire area. The beach, the dunes, the salt marsh, the woods could all be ravaged in innumerable ways by an operation of this type and magnitude.

And to what end? The weekly Maine Times reports that only 100 miles down the coast, in Cutler, the Navy owns 10,000 acres of shore-front property. If there has to be a "snowy" landing, why not on the Navy's own already mutilated property? Why should the Navy risk fouling up one of the world's finest beaches and natural preserves, one of the few places on the long Maine coast reserved exclusively for the use and enjoyment of the public?
(emphasis added)

Not only did the Times editorial erroneously describe the number of Marines who would be landed; but it also demonstrated that neither its author or the paper's editorial board were aware of the significant steps taken to protect Reid Park by both the naval services and the state of Maine.

On 13 January, 1972, the day following the Times editorial and eight days preceding the scheduled landing, two civil lawsuits were filed seeking to stop the exercise. The state suit was initiated in the Superior Court of Sagadahoe County and it contended that the State had acted improperly in granting the Navy a permit to use Reid Park. The state suit was dismissed. The second suit was filed in the federal district court in Portland, Maine. The plaintiff, Citizens for Reid State Park, was a private unincorporated association of Maine citizens and residents. They sought a temporary restraining order and a preliminary injunction on the grounds that the pending exercise posed a serious threat to the ecology of the park and thereby necessitated the preparation of an environmental impact statement. The defendants in the federal suit included the Secretary of Defense, the Secretary of the Navy and the Commandant of the Marine Corps.

An evidentiary hearing was conducted in Portland on 19 and 20 January 1972. The District Judge handed down his opinion dismissing the plaintiffs suit on 21 January, just fourteen hours before the scheduled landing. Based upon the

evidence presented, the Judge found that:

So far as the record discloses, if the conditions of the exercise are met, the only potential environmental damage, either ecological or aesthetic, to the park is: (1) that which may result from personnel walking over rocky outcroppings in the wooded upland area of the park and thereby tearing loose portions of the covering mat of lichens and mosses, and (2) that which could result from the "blowing out" of dune grasss by the wash from the helicopter propellers if in landing or taking off from the parking areas they should fly too low over a dune./19

With regard to the Navy's decision not to prepare an environmental impact statement, the judge's written opinion provided that:

As the foregoing summary of the evidence and the applicable law discloses, plaintiffs in this action have wholly failed to sustain their burden of establishing that in the planning of Operation Snowy Beach the Navy has not complied with the procedural requirements of Sections 102(1), 102(2)(A), (B) and (D) of NEPA, or of the implementing CEQ, DOD and Navy guidelines. Nor have plaintiffs made even a colorable showing that Operation Snowy Beach is a major federal action "significantly affecting the quality of the human environment" within the meaning of Section 102(2)(C) of the Act, so that the filing of an environmental impact statement was required.

* * *

The evidence presented has shown a wide-ranging and continuing assessment by the Navy of the potential environmental impact of the contemplated operation. Full good faith compliance with the substantive and procedural requirements of the Act has been shown. Furthermore, NEPA requires the filing of an environmental impact statement only in connection with proposals for legislation or "other major federal actions significantly

affecting the quality of the human environment." Section 102(2)(C). Plaintiffs here seek judicial review of the Navy's determination that no such significant effect would be occasioned by Operation Snowy Beach. The Act plainly commits this preliminary determination to the agency. The statutory language "significantly affecting the quality of the human environment" is extremely broad and not susceptible of precise definition.

* * *

The record clearly warrants the Navy's determination that any potential environmental damage to Reid State Park from Operation Snowy Beach would be insignificant. Nor is there any basis for plaintiffs' suggestion that the decision was arbitrary or reached without adequate consideration of environmental factors. /20

The plaintiff's suit was dismissed "with prejudice"* and "with costs".** Operation Snowy Beach was thereafter executed as planned.

C. Operational Training, The States and the Courts: The Multi-Pronged Assault on Vieques.

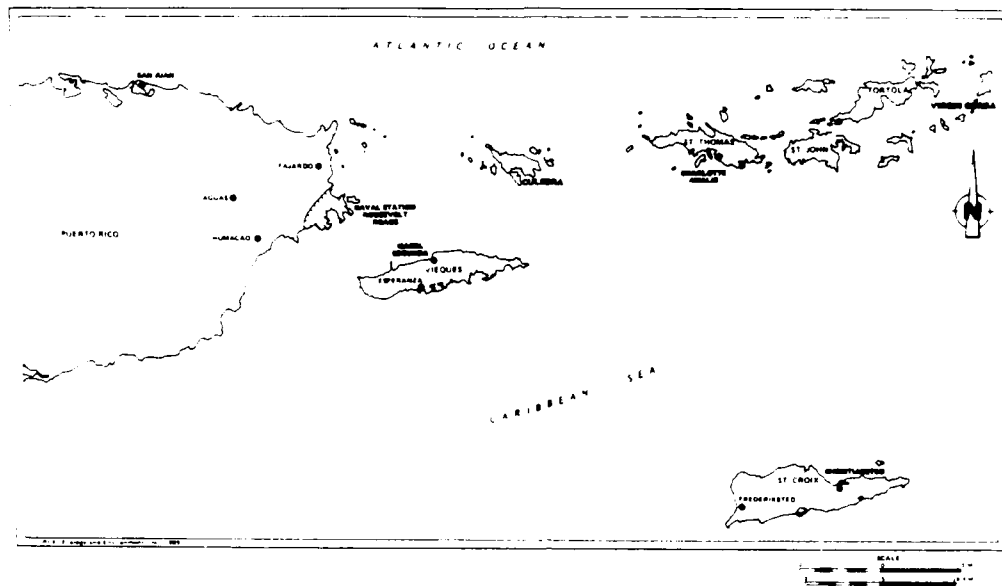
As previously mentioned in Chapter II, Part F, the island of Vieques is a principal naval training area located approximately six miles east of Puerto Rico as depicted in Figure VI-1.

*The dismissal of motion "with prejudice" means that the dismissal had the same legal effect as a full trial on the merits which was decided adversely to the plaintiffs. The trial in Reid State was limited to plaintiffs' motions and never reached a trial on the merits of their claim.

**The plaintiffs were required to pay all court costs associated with the hearing.

FIGURE VI-1/21

GENERAL LOCATION OF THE ISLAND OF VIEQUES

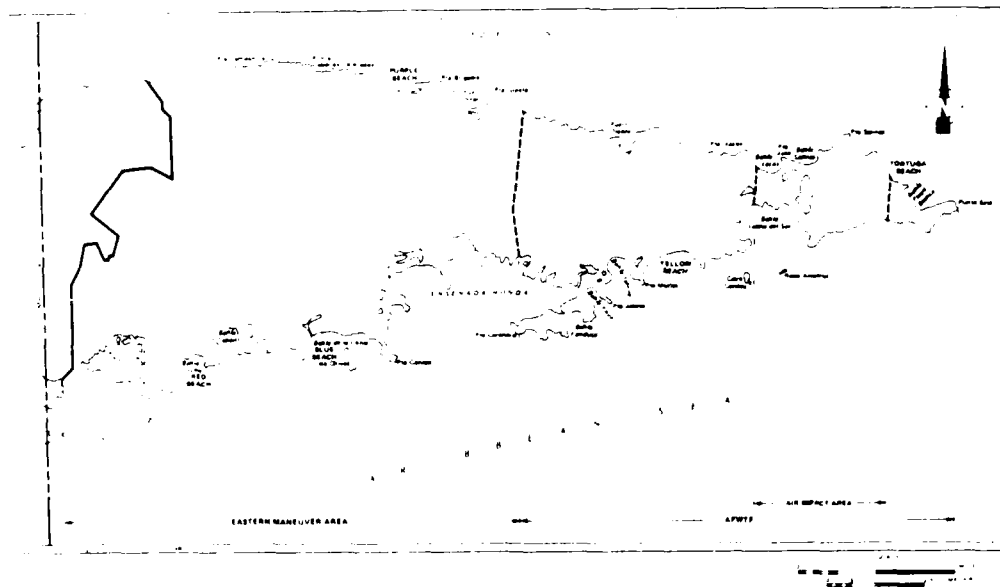


The Navy purchased 26,000 of the 33,000 total acres of Vieques during the period 1939 to 1944. The remainder of the island remains either in private ownership or is owned by the Commonwealth of Puerto Rico.

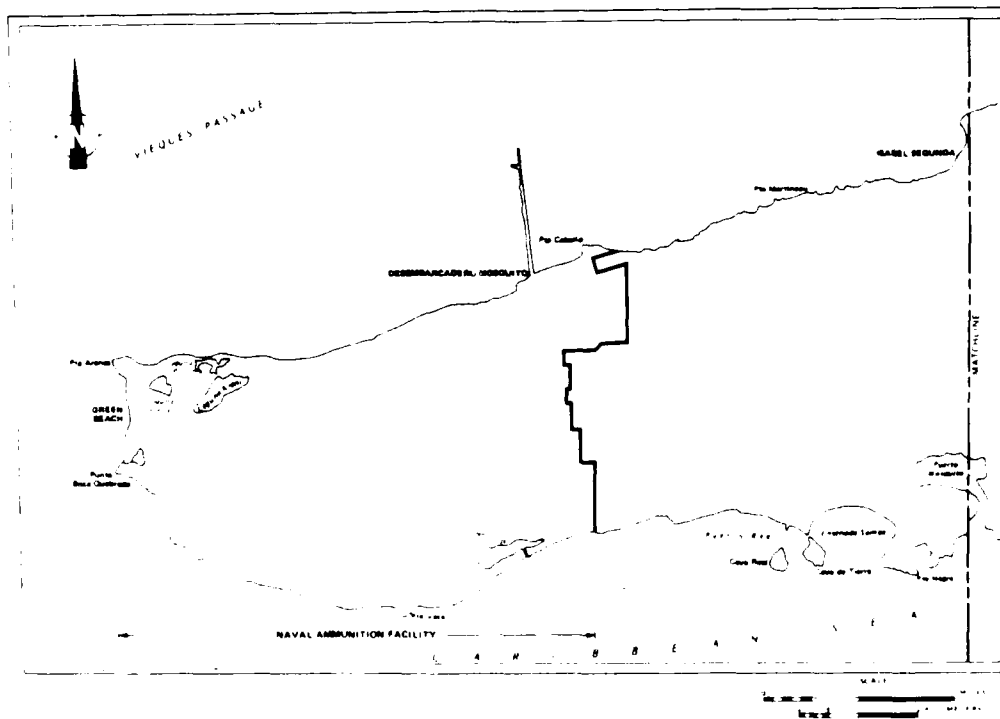
Navy land on Vieques is divided into three areas: the Naval Ammunition Facility (NAF), The Eastern Maneuver Area (EMA), and the Atlantic Fleet Weapons Training Facility (AFWTF) on the western, central and eastern portions of the island respectively. The location of these areas is depicted in Figure VI-2.

FIGURE VI-2/22

LOCATION OF EMA AND AFWTF ON VIEQUES



LOCATION OF NAF ON VIEQUES



The NAF. The NAF consists of approximately 8,000 acres and its mission is "to receive, store and issue all ordnance authorized by (Naval Station) Roosevelt Roads for the support of Atlantic Fleet units." /23 The NAF has occasionally been used for limited military training exercises and amphibious landings. /24

The EMA. The EMA consists of approximately 11,000 acres. It is used by Fleet Marine Force, Atlantic "to conduct training for (M)arine amphibious units, battalion landing teams and combat engineering units." /25 This training includes amphibious landings, small arms training, artillery and tank firing as well as combat engineer training.

The AFWTF. The AFWTF consists of approximately 3,500 acres and it is used for Naval gunfire support (NGFS) and Air-to-Ground (ATG) ordnance delivery training. The AFWTF is also used to test new weapons systems. /26

The Governor of Puerto Rico* initiated a federal civil suit in 1979 seeking "to enjoin (the) Navy from using any portion of its lands in Vieques, or in the waters which surround (that island), for the purpose of carrying out naval training operations." /27 The complaint alleged various violations of eleven federal environmental statutes, three state environmental statutes, two Presidential Executive

*Mr. Carlos Romero-Barcelo

orders, the First and Fifth Amendments to the Constitution, and other "Presidential Orders and Congressional restrictions relating to the transfer of military activities from the island of Culebra, another off-shore municipality of the commonwealth (of Puerto Rico)."/28 The statutory and regulatory basis for the Governor's complaint is summarized in Table VI-1 below. The Mayor of Vieques, and several residents of the island filed a suit which mirrored that filed by the Governor. A non-profit historical preservation corporation* also sought to intervene as a plaintiff. The named defendants in the Governor's suit included the Secretary of Defense, Secretary of the Navy, Chief of Naval Operations, Commandant of the Marine Corps and Commander-in-Chief, Atlantic Fleet. The citizens' complaint included the same defendants together with the Commandant of the Coast Guard.

TABLE VI-1

(Table VI-1 is on the following page)

*Fundacio Arqueologica, Antropologica e Historia de Puerto Rico.

TABLE VI-1

**LEGISLATIVE AND REGULATORY AUTHORITIES
FOR PLAINTIFFS' COMPLAINT IN THE
BARCELO LITIGATION**

CONCERN	LEVEL	LAW/REGULATION
		RIVERS AND HARBORS ACT OF 1899
WATER POLLUTION	FEDERAL	FEDERAL WATER POLLUTION CONTROL ACT
	STATE	WATER POLLUTION CONTROL ACT
AIR POLLUTION	FEDERAL	CLEAR AIR ACT
NOISE POLLUTION	FEDERAL	NOISE CONTROL ACT
	STATE	GENERAL NUISANCE LAW
HAZARDOUS WASTE MANAGEMENT	FEDERAL	RESOURCE CONSERVATION AND RECOVERY ACT
POLLUTION CONTROL	FEDERAL	EX.O. NO. 11752 (PREVENTION, CONTROL AND ABATEMENT OF ENVIRONMENTAL POLLUTION AT FEDERAL FACILITIES)
ENVIRONMENTAL PLANNING	FEDERAL	NATIONAL ENVIRONMENTAL POLICY ACT
	STATE	PUBLIC POLICY ENVIRONMENTAL ACT
RESOURCE PROTECTION	FEDERAL	MARINE PROTECTION, RESEARCH AND SANCTUARIES ACT
		ENDANGERED SPECIES ACT
		MARINE MAMMAL PROTECTION ACT
		NATIONAL HISTORIC PRESERVATION ACT
HISTORIC PRESERVATION	FEDERAL	EX.O. NO. 11593 (PROTECTION AND ENHANCEMENT OF THE CULTURAL ENVIRONMENT)
LAND USE CONTROL	FEDERAL	COASTAL ZONE MANAGEMENT ACT
OTHER	FEDERAL	1ST AND 5TH AMENDMENTS TO U.S. CONSTITUTION

Litigation at the District Court Level After a trial which lasted three months and involved 63 witnesses and hundreds of documents, Judge Torruella handed down his opinion on 17 September 1979. The Judge addressed each of the allegations in detail and then dismissed all but three. Before he issued his order, he discussed the propriety of

granting the plaintiffs' request for an injunction as follows:

There are various reasons why injunctive relief is not the appropriate remedy in this case.

To begin with, it is clear in our mind, as previously expounded in this opinion, that the activities of Defendant Navy are not causing any appreciable harm to the Vieques ecology.

The violations which we have found, are in substance technical violations which must be cured, but do not require the drastic treatment suggested by Plaintiffs. Furthermore, there does not appear any reason why their rectification can not be accomplished in a relatively short period of time. Nor is there any logical connection between the accomplishment of this purpose and ordering a halt to the activities of Defendant Navy, other than as punishment, a purpose for which injunctive relief is not appropriate. (citations omitted)/29

* * *

... (W)e have not the slightest doubt but that the granting of the injunctive relief sought would cause grievous, and perhaps irreparable harm, not only to Defendant Navy, but to the general welfare of this Nation. It is abundantly clear from the evidence in the record, as well as by our taking judicial notice of the present state of World affairs, that the training that takes place in Vieques is vital to the defense of the interests of the United States.

* * *

Thus, our ability to maintain a well trained and effective naval force, even in time of peace, is essential to the national welfare.

The Atlantic Fleet is responsible for

providing naval forces throughout a geographic area that extends from as far north as the Arctic, to as far south as the Antarctic, as far east as Turkey and as far west as Mexico. These naval forces include air, submarine, surface, and Marine landing forces, all of which the Atlantic Fleet must combine and integrate. Because of allocated resources, and the extensive geographical area they must protect, these forces are at best marginal, and it is thus imperative that they be kept at the highest state of training possible. (footnote omitted) /30

* * *

The island of Vieques is the only place presently available wherein the Atlantic Fleet can conduct the full range of exercises under conditions similar to simulated combat. It is the only place which possesses the potential or existing capability to conduct combined exercise involving air-to-ground ordnances delivery, Marine amphibious assaults, anti-submarine warfare, surface-to-air missiles, close support bombardment, and electronic warfare; in short everything that a battle group would undertake to secure our sea lanes from interdiction by hostile forces. Furthermore being that the ultimate mission in combat is the delivery of live ordnance to the enemy, it is an essential element of training that the personnel be fully exposed to its use, both psychologically and in terms of actual skills. Vieques is the only location presently available wherein this training can be conducted within permissible peacetime parameters.

Considering all of the above, the Court is of the opinion that under the present circumstance the continued use of Vieques by Defendant Navy for naval training activities is essential to the defense of the Nation and that the enjoining of said activities is not an appropriate relief for the correction of the cited statutory violations. Other remedy shall be fashioned. (emphasis added and citation omitted) /31

The Court's order then provided that:

Wherefore, it is ORDERED, that Defendant Navy, "with all deliberate speed", proceed to:

1. File for and seek a NPDES permit for the release of firing of ordnance into the waters of Vieques;*
2. Nominate to the Secretary of the Interior sites in Vieques that may be eligible for listing in the National Register of Historic Places, and/or seek the opinion of the secretary respecting said eligibility, and further, take appropriate action for the protection of any such prospective sites pending decision as to their eligibility; and
3. Comply with the provision of 42 U.S.C. 4332(C).**

All other claims are dismissed....

A status conference shall be held before the United States Magistrate within 20 days for the establishment of a written time table for compliance with this Order, which time table shall be subject to the approval of the Court.

IT IS SO ORDERED (citation omitted)/32

The Case at the Circuit Court of Appeals. Failing to obtain the injunction that they sought, the plaintiffs appealed the District Court's order. The United States Court

*The plaintiffs had alleged that the Navy was discharging "munitions" into the waters of Vieques in the form of shells, bombs and steel fragments from those objects when they exploded. Such "munitions" are considered to be "pollutants" which require a NPDES permit under the FWPCA.

**Prepare an EIS as required by NEPA.

of Appeals for the First Circuit heard the appeal and did not share Judge Torruella's views concerning either the urgency of the situation or the inappropriateness of granting the plaintiffs' motion for injunctive relief.

With regard to the requirement that the Navy obtain a Pollution Discharge Elimination System (NPDES) permit,* the first circuit stated in its opinion that:

Congress has prohibited "the discharge of any pollutant," which includes the Navy's dropping of ordnance into the coastal waters, unless a NPDES permit has been secured pursuant to 33 U.S.C. Sec. 1342. Whether or not the Navy's activities in fact harm the coastal waters, it has an absolute statutory obligation to stop any discharges of pollutants until the permit procedure has been followed and the Administrator of the Environmental Protection Agency, upon review of the evidence, has granted a permit. Thus, regardless of the district court's finding that the Navy dropping of ordnance caused no significant harm to the environment, it erred in failing to consider the judiciary's "responsibility to protect the integrity of the...process mandated by Congress..." (citations omitted)/33

* * *

Unlike the situation presented in Essex County Preservation Ass'n. v. Campbell, 536 F.2d 956, 960-61 (1st Cir. 1976), where the statutory violation was deemed "technical," here the Navy has utterly disregarded the statutory mandate. Thus, we vacate the district court's order on this question and

*A NPDES permit places limits upon the types and quantity of pollutants which maybe discharged by the permit holder into the waters of the United States.

remand with instructions to order the Navy to take all steps necessary to insure that no ordnance is discharged into the coastal waters of Vieques until such time as it obtains a NPDES permit. If this order significantly interferes with the Navy's preparedness, it is free to request the President to exempt it from the NPDES requirements in the interest of national security. (footnotes and citations omitted, emphasis added)/34

The Circuit Court then set aside the District Court's order with regard to the NPDES permit and sent the case back to the lower court "with instructions for further proceedings in accordance with this opinion."*/35 In essence, the District Court was directed to grant the Plaintiff's request for an injunction until the Navy obtained the NPDES permit for the discharge of ordnance from its planes, and ships.

The Case on Appeal to the Supreme Court. The Secretary of Defense appealed the Court of Appeals decision to the Supreme Court insofar as it pertained to the requirement that an injunction be granted until the Navy obtained the necessary NPDES permit. Justice White authored the Supreme Court's opinion in the case and articulated the issue as follows:

The issue in this case is whether the (FWPCA) requires a district court to enjoin immediately all discharges of pollutants which do not comply with the Act's permit requirements or whether the district court retains

*The Circuit Court also sent the case back for further action with regard to historic site preservation and endangered species biological assessments. 643 F.2d at p. 863.

the discretion to order other relief to achieve compliance. The Court of Appeals for the First Circuit held that the Act withdrew the court's equitable discretion.^{/36}

In addressing the issue, the Supreme Court's opinion provided that:

As Congress explained, the objective of the FWPCA is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters"...

This purpose is to be achieved by compliance with the Act, including compliance with the permit requirements. Here, however, the discharge of ordnance had not polluted the waters, and, although the District Court declined to enjoin the discharges, it neither ignored the statutory violation nor undercut the purpose and function of the permit system. The court ordered the Navy to apply for a permit. It temporarily, not permanently, allowed the Navy to continue its activities without a permit (citation and footnotes omitted) ^{/37}

* * *

We do not read the FWPCA as foreclosing completely the exercise of the court's discretion. Rather than requiring a district court to issue an injunction for any and all statutory violations, the FWPCA permits the district court to order that relief it considers necessary to secure prompt compliance with the Act. That relief can include, but is not limited to, an order of immediate cessation.^{/38}

The Supreme Court thereafter reversed the Court of Appeals order to the District court and sent the case back to the intermediate appellate court for "proceedings consistent with (the Supreme Court's) opinion".^{/39}

The Chronology of the Vieques Litigation. A brief look at the time frame within which the different levels of the Vieques litigation occurred demonstrates that proceedings in the federal courts may be a time consuming process. The chronology of the Vieques case is set out in Table VI-2.

TABLE VI-2

CHRONOLOGY OF VIEQUES LITIGATION

DATE	EVENT
MAR 1978	GOVERNOR OF PUERTO RICO FILES COMPLAINT
APR 1978	CITIZENS FILE COMPLAINT
11 SEP 1978-15 DEC 1978	TRIAL IN FEDERAL DISTRICT COURT
17 SEP 1979	DISTRICT COURT ORDERS NAVY TO OBTAIN NPDES PERMIT, PREPARE EIS AND CONDUCT HISTORIC SURVEY
11 SEP 1980	GOVERNOR'S APPEAL ARGUED BEFORE U.S. COURT OF APPEALS, FIRST CIRCUIT
26 JAN 1981	FIRST CIRCUIT ORDERS FEDERAL DISTRICT COURT TO ENJOIN NAVY
5 OCT 1981	U.S. SUPREME COURT AGREES TO HEAR SECRETARY OF DEFENSE APPEAL OF FIRST CIRCUIT ORDER
23 FEB 1982	SUPREME COURT HEARS ORAL ARGUMENT
27 APR 1982	SUPREME COURT REVERSES FIRST CIRCUIT

D. Operational Training, Impacted Land Owners and the Courts. The Reid State Park and Barcelo cases discussed above provide vivid examples of how citizens and state governments may seek to use environmental protection legislation to preclude naval operational training. The case of Branning v the United States /40 demonstrates that private individuals may sue the federal government and recover damages for injuries to their property arising from the noise impact of Marine aircraft overflights.

The mission of Marine Corps Air Station, Beaufort, South Carolina is, in part, to provide facilities for naval aviation training. In 1980 a neighbor of the Air Station, Mr. Cloide Branning, sued the United States on the ground that the noise from Marine Corps aircraft which overflew his property, precluded the use of that land for single family dwellings thereby significantly reducing its value./41 He alleged that the noise generated by the training overflights constituted a "taking" of his property without due process of law and without compensation in violation of the Fifth Amendment of the Constitution of the United States./42 The federal government denied that the noise from its aircraft constituted a taking because the aircraft were flying above

*The property belonged to a private partnership in which Mr. Branning was the surviving partner. The partnership was formed to develop private dwellings on the land which was the subject of the Branning lawsuit.

500' at all times during the training exercises.* Prior Supreme Court case law appeared to stand for the proposition that a landowner could not recover damages for aircraft noise if the noise was generated by aircraft flying above 500'.^{/43}

Judge Brown of the United States Court of Claims found that the Branning property was so severely impacted by the aircraft noise that it was for all practicable purposes destroyed for its highest and best use, that being residential development.^{/44} On 1 May, 1985 Mr. Branning was awarded \$2 million plus interest as compensation for the "taking" of his property by the government.^{/45} The

*The training in issue was described as follows:

One type of training conducted on and around the station consists of practice landings and takeoffs designed to simulate aircraft carrier takeoffs and landings. One type of operation is referred to as "field mirror landing practice" (FMLP). In the course of such operation, the prescribed flight pattern requires the trainees to take off from the runway on the station and then fly defendant's aircraft directly over plaintiff's property in a "racetrack pattern" at an altitude of 600 feet above ground level (AGL) and return to the runway. The pattern is repeated by each aircraft several times, the training exercise being conducted squadron-by-squadron (and virtually nose-to-tail at 25 to 30-second intervals) over a period of several days during each month in which training is conducted. Originally such training employed single-engine (A-4) and vertical takeoff (AV-8 Harrier) aircraft, but later employed twin-engine (F-4) aircraft. (Footnote omitted)^{/42}

government sought review of the Court of Claims decision which held it liable for the noise impact of the aircraft and Mr. Branning sought review of the sufficiency of his monetary recovery. The governments' appeal was denied and the amount of the award was left undisturbed by the appellate court./46 The Branning case represents a classic example of off-base use of private property encroaching on the ability of the naval services to conduct operational training./47

E. The Power of Federal Courts to Unilaterally Halt Naval Actions on Environmental Grounds. In anticipation of the homeporting of two Ammunition, Oil and Explosive (AOE) ships at Naval Weapons Station (NWS) Earle (Colts Neck, New Jersey), the Navy began to construct 200 family housing units on that station in early March 1986./48 In December of that year, a review of the construction site disclosed that the civilian contractor had filled several forested wetlands areas. The Navy ordered that the construction in the vicinity of the fills be terminated until the Army Corps of Engineers (COE) could determine whether it would authorize the fill to remain.* Construction of 160 units continued because they were not located on or near the wetland fills.

*Under Section 404 of The FWPCA (33 U.S.C.S. sec. 1344), the COE has jurisdiction over the dredging and filling of wetlands. Any fill of wetlands without a COE Section 404 permit is a violation of the FWPCA.

On 3 February 1987, the Township of Colts Neck and the Township's Board of Education brought suit in federal district court seeking to permanently enjoin the Navy from proceeding with the 200 unit construction project as well as the proposed construction of an additional 300 units on NWS Earle. The named defendants were the Secretary of the Navy and the Commanding Officer of the Northern Division, Naval Facilities Engineering Command (NFEC).*

In its complaint, the plaintiffs alleged that:

(1) the Navy violated the FWPCA by filling wetlands without a permit;

(2) the Navy violated NEPA by (a) failing to consider the impact of the project on an already overstressed aquifer which would be called upon to supply water for the units, (b) failing to consider the demands which the additional student population will have on the local civilian school system, and (c) by failing to prepare an Environmental Impact Statement (EIS);**

(3) the Navy violated the Fish and Wildlife Coordination

*NFEC was the Naval Command responsible for overseeing the construction project.

**The Navy had prepared an EIS in 1979. The EIS was updated by an Environmental Assessment (EA) in 1984. Based upon the EA, the Navy found that the project would not have a significant impact on the human environment and would not thereby require the preparation of an EIS. That finding and the decision to refrain from preparing an EIS was part of the plaintiffs' suit.

Act of 1958 749 by failing to consult with federal and state wildlife agencies before beginning construction of the housing units where it was known that the construction would destroy wildlife habitat; and

(4) the Navy violated the Endangered Species Act by destroying the habitat of endangered and threatened species with the wetland fills.

The plaintiffs sought a preliminary and final injunction to prohibit the defendants from filling wetlands on NWS Earle and from proceeding with the construction of any family housing on that station.

On 26 February 1986, the plaintiffs filed a motion to require the Navy to show why a preliminary injunction should not issue. That motion was litigated on 12 March 1987. At that hearing the "Concerned Citizens for Colts Neck, Inc." filed a complaint which was identical to the Township's complaint.* Over the opposition of the Navy's counsel, the citizens group was allowed to present argument at the motion session. On 25 March 1987 the court issued its order granting the plaintiffs' motion for a preliminary injunction. The judge prohibited all construction on the project until an EIS was prepared and also expressly retained

* The citizens group case was later consolidated with the township case to form a single action.

jurisdiction over the case.*

At the time of the Court's order, 32 of the housing units were 90 percent complete and an additional 74 units were in the process of being closed in. The scope of the Court's order was so broad that the Navy was precluded from entering the construction site for any purpose including the weatherizing of those 106 units. On 9 April 1987, the Navy filed a motion requesting that the Judge either reverse his order or modify it so that the partially completed units could be protected from the weather. The Navy also requested that it be allowed to enter the construction site to:

- (1) take steps to preclude erosion on the site,
 - (2) install fencing and lighting to protect the project from trespassers, and
 - (3) install water lines and fire hydrants to protect the project and the surrounding treed area from fire.
- The trial judge denied the Navy's motion, thereby continuing the Navy's exclusion from the area. The Navy then appealed to the United States Court of Appeals for the Third Circuit. By means of a stipulated agreement reached during the appellate process, the Navy was allowed to perform some weatherizing and soil erosion control beginning on 30 August

*The order of the Court was not a final judgement. By retaining jurisdiction over the case, the Judge was in a position to review the Navy's actions at any time.

1987. The case was returned to the District Court where, as of May 1988, it remains. The district court order remains in effect and the Navy will not be allowed to proceed with the project until the order is vacated (rescinded).

The chronology of the Colts Neck litigation is contained in Table VI-3.

TABLE VI-3

CHRONOLOGY OF COLTS NECK LITIGATION

DATE	EVENT
3 FEB 87	TOWNSHIP AND BOARD OF EDUCATION FILE COMPLAINT
12 MAR 87	HEARING ON PLAINTIFF'S MOTION FOR PRELIMINARY INJUNCTION
25 MAR 87	FEDERAL TRIAL JUDGE GRANTS MOTION AND ENJOINS NAVY
26 MAR 87	CITIZENS GROUP FILES COMPLAINT. COURT CONSOLIDATES BOTH CASES FOR SINGLE TRIAL
7 APR 87	NAVY MOVES THE COURT TO EITHER STAY (HOLD) IMPOSITION OF THE INJUNCTION OR LIMITS ITS SCOPE. (COURT THEREAFTER DENIES THE NAVY'S MOTION)
30 AUG 87	NAVY APPEALS DENIAL OF ITS MOTION. STIPULATED SETTLEMENT ALLOWS NAVY TO ENTER CONSTRUCTION SITE FOR LIMITED PURPOSES (E.G., SOME WEATHERIZING IS ALLOWED)
MAY 1988	NAVY REMAINS ENJOINED FROM ENTERING THE CONSTRUCTION SITE EXCEPT FOR LIMITED PURPOSES (E.G., FIREFIGHTING)

Chapter Summary. This chapter began with a discussion of the extent to which naval service decisions to conduct operational training are justiciable. As was shown in Part A above, the courts will review those decisions only when the operational training is violating or is likely to violate some standard such as those contained in environmental laws. The chapter then focused upon four federal lawsuits which involved naval defendants and environmental impacts arising from Navy and Marine corps operational training or the support of operational units. Those cases included Citizens for Reid State Park v. Laird; Barcelo v. Brown; Branning v. United States; and Township of Colts Neck, The Board of Education of the Township of Colts Neck, and Concerned Citizens of Colts Neck, v. Lehman. Eleven of the more significant aspects of these four cases are compared in Table VI-4.

(Table VI-4 is on the following page)

TABLE VI-4

**COMPARISON OF ENVIRONMENTAL LITIGATION
INVOLVING NAVAL DEFENDANTS**

	REID STATE PARK	BARCELO	BRANNING	COLTS NECK
PLAINTIFF(S)	CITIZENS GROUP	STATE GOVERNOR AND INDIVIDUAL CITIZENS	INDIVIDUAL CITIZEN	LOCAL GOVERNMENT AND CITIZENS GROUP
DEFENDANTS (SEE KEY)	SEC DEF, SEC NAV, CMC	SEC DEF, CNO, CMC, CINC LANT	UNITED STATES	SEC NAV, CO, NEFC, ND
NAVAL ACTION REVIEWS	OPERATIONAL TRAINING	OPERATIONAL TRAINING	OPERATIONAL TRAINING	HOUSING SUPPORT FOR OPERATIONAL UNITS
ASPECT REVIEWED	ENVIRONMENTAL DOCUMENTATION AND IMPACTS	ENVIRONMENTAL DOCUMENTATION AND IMPACTS PERMITS	ENVIRONMENTAL IMPACTS	ENVIRONMENTAL DOCUMENTATION AND IMPACTS
LEGAL STANDARD FOR REVIEW	NEPA	NEPA, FWPCA, ESA, RCRA, NCA, ETC.	5TH AMENDMENT U.S. CONSTITUTION	NEPA, FWPCA
RELIEF SOUGHT	INJUNCTION	INJUNCTION	MONETARY DAMAGES	INJUNCTION
TRIAL COURT RESOLUTION	DENIED (1972)	DENIED, OTHER FOLLOWUP ORDERED (1979)	DAMAGES AWARDED (1981)	GRANTED, OTHER FOLLOWUP ORDERED
INTERMEDIATE APPELLATE COURT RESOLUTION	N/A	REVERSED, ORDERS INJUNCTION (1981)	THE RULINGS STAND (1986)	STIPULATED SETTLEMENT
FINAL APPELLATE COURT RESOLUTION	N/A	REVERSED (1982)	N/A	N/A
DURATION OF LITIGATION	8 DAYS	3 YEARS, 11 MONTHS	4 YEARS, 8 MONTHS	1 YEAR, 3 MONTHS AND CONTINUING
IMPACT ON NAVAL ACTION	NONE	FOLLOWUP ACTION COMPLETED	US PAYS \$2 MILLION PLUS INTEREST	NAVY BARRED FROM ON-BASE SITE
KEY	SEC DEF = SECRETARY OF DEFENSE SEC NAV = SECRETARY OF THE NAVY CNO = CHIEF OF NAVAL OPERATIONS CMC = COMMANDANT OF THE MARINE CORPS		CINC, LANT = COMMANDER-IN-CHIEF, ATLANTIC FLEET CO, NFEC, ND = COMMANDING OFFICER, NAVY FACILITIES ENGINEERING COMMAND, NORTHERN DIVISION	

A review of Table VI-4, leads to the following general conclusions:

Plaintiffs. States, local governments, citizen groups and individual citizens may challenge naval operational training in federal district court if they can allege either that (1) the training violates one or more environmental standards or (2) it severely impacts on the value of their land.

Defendants. Plaintiffs in environmental litigation will often name the highest civilian and military leaders in the Departments of Defense and Navy as defendants. One inference that may be drawn from this trend is that the plaintiffs are seeking publicity or political leverage in naming such high ranking officials. Nothing precludes operational commanders and installation commanders from being named defendants (recall that the Commander-in-Chief, Atlantic Fleet was a named defendant in Barcelo).

Naval Action Reviewed. Three of the four cases (Reid State Park, Barcelo, and Branning) involved a judicial review of operational training in a general sense and the review of the applicable environmental documentation and/or the environmental impacts associated with that training in a specific sense. The fourth case (Colts Neck) involved the review of both the environmental documentation and the environmental impacts of a naval construction program which

was being undertaken to directly support naval operational units (two ADEs). The lesson to be drawn from the judicial decisions in these cases is that the courts will take a hard look at ongoing naval actions which are alleged to be in violation of one or more environmental standards even though review of these actions would otherwise be considered to be nonjusticiable.

Legal Standard for Review. The National Environmental Policy Act (NEPA) provided the primary standard for review in Reid State Park and was one of several environmental statutes considered in Barcelo and in Colts Neck. The Federal Water Pollution control Act (FWPCA) played a key role in Barcelo and Colts Neck. Finally, the Barcelo case involved a myriad of other federal and state environmental laws and regulations. The Fifth Amendment to the Constitution provided the standard of review in Branning.

Relief Sought. In three of the four cases (Reid State Park, Barcelo and Colts Neck) the plaintiffs were seeking to halt naval action by obtaining an injunction. Only the Branning plaintiff was seeking monetary damages.

Judicial Rulings. In Reid State Park and in Barcelo, the plaintiffs motions for injunctions were denied at the trial level. In Barcelo, however, the intermediate appellate court reversed the trial court and ordered it to enjoin the Navy's use of Vieques until the necessary pollution discharge

permit was obtained. The plaintiffs' motion for an injunction was granted in Colts Neck. The lesson to be drawn from the judicial rulings in these cases is that the federal courts will halt naval actions which are found to be in violation of environmental standards even where the injunction may have a negative impact on naval readiness. Recall the following words of The First Circuit Court of Appeals in Barcelo:

If this order significantly interferes with the Navy's preparedness, it is free to request the President to exempt it from the NPDES requirements in the interest of National Security.¹⁵⁰

In granting the plaintiff's motion for an injunction, in the Colt's Neck case, Judge Fisher stated that his memorandum opinion that:

I fully realize and have taken into consideration the fact that we are dealing here, not only with the environment and the impact upon the community, but that national security interests are involved in relocating the two AE's from Norfolk and preserving the health and well-being of a volunteer Navy. There has been no request for an injunction preventing the transfer of the two vessels from Norfolk(,) Virginia to Earle. This is of vital security interest and I would not look with favor upon an application to restrain this move. The only impact upon the Navy insofar as its personnel is concerned will be the delay an injunction would impose upon the families of the officers and men manning the two ships in question. While this factor is of considerable importance to the well-being of the Navy and its personnel, it cannot outweigh the impact already discussed on the environments, the wetlands violations and possible future violations, the danger to the

critical aquifer ... the congestion of streets and roads and the tremendous impact upon the quality of education and the financial strain imposed upon the citizens of Colts Neck./51

From the foregoing, it is evident that in a confrontation between national security and environmental interests, the courts will not in all instances give national security the higher priority.

Follow Up Action. The trial court in Barcelo ordered the Navy to prepare a EIS, to obtain a pollution discharge permit, and to take other action with regard to historic resources. In Colts Neck, the trial court enjoined the Navy from proceeding with its housing project until an EIS was prepared and until a wetlands fill permit was obtained. Court ordered followup action may be so expensive and/or time consuming that the naval services will either abandon or greatly modify their intended activity. Through such terminations/ modifications, plaintiffs may achieve their objectives even without the issuance of an injunction.

Duration of Litigation. The timing of environmental litigation is unpredictable, both as to when it will begin and as to how long it will last. In Reid State Park, the federal suit was initiated during the conduct of a training exercise and concluded just hours before a training landing was scheduled to occur. A total of eight days was consumed between the filing of the complaint and the dismissal of the suit on that case. Barcelo took nearly four years to make

its way from the Federal District Court in Puerto Rico to the Supreme Court in Washington. Branning took nearly five years to make its way through two courts. In Colts Neck, the Navy remains subject to an injunction more than a year after the initial complaint was filed.

This chapter has shown that naval commanders must be mindful of the potential costs, delays and uncertainties which are associated with litigation as they determine how and to what extent they will satisfy environmental statutory/regulatory requirements. Once the naval services are required to appear in court, be it federal or state, they cannot accurately predict how or when the litigation will end.

CHAPTER VII

AN EXAMPLE OF AN ONGOING NAVAL EFFORT TO STRIKE AN APPROPRIATE BALANCE BETWEEN ENVIRONMENTAL PROTECTION AND OPERATIONAL TRAINING: VIEQUES REVISITED

Overview. The litigation surrounding the continued use of Navy and Marine Corps training facilities on and around the island of Vieques, Puerto Rico was discussed in Chapter VI, Part C above. During the litigation at the federal district court level, the Navy began a series of studies which led to the publication of several environmental documents. These documents were prepared and published during a period of approximately six and one half years and are listed in Table VII-1 below.

(Table VII-1 is on the following page)

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NAVAL READINESS OPERATIONAL TRAINING AND ENVIRONMENTAL

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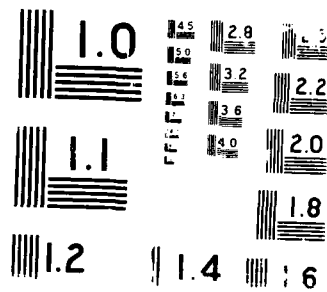


TABLE VII-1

**SIGNIFICANT ENVIRONMENTAL DOCUMENTATION
ASSOCIATED WITH THE USE OF VIEQUES AS
AN OPERATIONAL TRAINING FACILITY**

DOCUMENT	DATE	NOTE
DRAFT ENVIRONMENTAL IMPACT STATEMENT	DEC 1979	1
FINAL ENVIRONMENTAL IMPACT STATEMENT	OCT 1980	1
THE DISTRIBUTION OF MANATEES AND SEA TURTLES IN PUERTO RICO, WITH EMPHASIS ON ROOSEVELT ROADS NAVAL STATION	JUL 1985	2
SOIL EROSION CONTROL PLAN, EMA AND NAF, VIEQUES, PUERTO RICO	OCT 1985	3
SOIL EROSION CONTROL, AFWTF, VIEQUES, PUERTO RICO	OCT 1985	3
ENVIRONMENTAL ASSESSMENT OF CONTINUED USE OF THE AFWTC INNER RANGE, VIEQUES, PUERTO RICO	JAN 1986	3
LAND USE MANAGEMENT PLAN FOR NAVAL FACILITY, VIEQUES, PUERTO RICO	MAY 1986	3
CULTURAL RESOURCE MANAGEMENT PLAN FOR NAVAL STATION, ROOSEVELT ROADS, THE AFWTF, AND THE VIEQUES NAVAL RESERVATION	JUN 1986	4

AFWTF ATLANTIC FLEET WEAPONS TRAINING FACILITY
 KEY: EMA EASTERN MANEUVER AREA
 NAF NAVAL AMMUNITION FACILITY

TABLE VII-1 NOTES

1. Prepared jointly by Tippetts, Abbett, McCarthy and Straton (TAMS) and Ecology and Environment, Inc..

2. Prepared by G. Rathburn, T. Carr, N. Carr, and C. Woods of the Florida State Museum, University of Florida, Gainesville.

3. Prepared by Ecology and Environment, Inc..

4. Prepared by C. Tronolone and M. Cinquino.

Following a brief discussion of the key role that Vieques continues to play as an Atlantic Fleet training facility, this chapter will focus upon the Conservation Zone Management Plan (CZMP) contained in the May 1986 Naval Facility Vieques Land Use Management Plan./1

A. The Continued Importance of Vieques as an Atlantic Fleet Operational Training Facility. In January 1986, the Department of the Navy published an updated environmental review of its training operations on eastern Vieques./2 The review provided in part that:

Continuation of naval activities on the island of Vieques provides benefits which offset the adverse environmental effects described above. The primary purpose of naval activities on Vieques is to ensure combat readiness of the Atlantic Fleet by providing advanced training of individual air, sea, and land units and combat groups engaged in combined operations (i.e., operations carried out by a combination of air, sea and land forces). The nation depends on the Atlantic Fleet to provide strategic nuclear deterrence, maintain sea lines of communications (especially major oil routes from the Middle East and South America), and deploy forces overseas if the need arises.

The national strategy of the United States is significantly influenced by this nation's insular position on the North American continent. Because geopolitical considerations dictate a forward strategy, national security cannot be assured without a balance of maritime superiority residing in favor of the United States and its allies.

The Atlantic Fleet is one of the principle forces required to achieve and maintain maritime superiority. Continuation of naval activities on Vieques, therefore, is beneficial to the nation because it helps to ensure that the Atlantic Fleet will fulfill the mission on which the nation depends.

Training on Vieques is of the most advanced nature, and it is the last stage in the Navy's training program. The final stage in the training cycle is necessary because of the complexity of modern weapon systems themselves and the complex procedures required to utilize the systems in combat situations. More importantly, advanced training is required to mold the combined sea, land and air forces into an effective combat group capable of deterring simultaneous attacks of enemy sea, land and air forces.

To maintain combat readiness and test new weapon systems and tactics, the Atlantic Fleet units and groups alternate between training and tours of duty in the Atlantic, Gulf of Mexico, Caribbean, and Mediterranean. Because the Fleet is constantly performing its mission and is in contact with potentially hostile forces on a day-by-day basis, maintenance of combat readiness is essential. The Vieques range is the keystone in the training process. As concluded by the alternatives analyses in the DEIS (TAMS and E & E 1979) and summarized above, the range at Vieques is the best alternative in terms of operational, environmental, and cost considerations for providing advanced training for the Atlantic Fleet./3

Having articulated the crucial role that Vieques plays in the Atlantic Fleet training process, the Department of the Navy then published its Land Use Management Plan (LUMP) for all its property on that island five months later.

B. The 1986 Vieques Land Use Management Plan (LUMP). The

initial chapter of the 1986 Vieques LUMP described the purpose of and need for the plan as follows:

The United States Navy, Atlantic Fleet, conducts and intends to continue to conduct naval training exercises and ammunition storage on the island of Vieques, Puerto Rico. These activities are essential to maintaining the effectiveness and readiness of the Atlantic Fleet and the continued maritime superiority of the United States. However, the Navy also recognizes the importance of conducting such military activities in a manner that minimizes adverse impacts on environmental resources and maximizes the social and economic benefits to the civilian population of Vieques.

This Land Use Management Plan (LUMP) identifies and describes policies and procedures to protect the environmental resources on all Navy-owned properties on Vieques, while maintaining the effectiveness of the military mission and enhancing the use of such lands for joint military and civilian use. The plan reflects the Navy's recognition of the need to balance the various objectives of national defense, environmental preservation, and socioeconomic development on the island.

* * *

This LUMP provides an overall plan for the use of Navy-owned land on Vieques and identifies the specific policies and procedures that are required to implement the plan in the near-, short-, and long-term future. In addition, specific policies and implementation plans are provided for the following nine resource areas:

- Cattle and range management;
- Conservation zone management;
- Thorn scrub (mesquite) management and utilization;
- Forestry development and management;
- Wildlife and endangered species management;

- Mangrove protection;
- Water resources protection;
- Recreational uses; and
- Cultural resource protection. /4

* * *

C. The Vieques Conservation Zone Management Plan (CZMP).

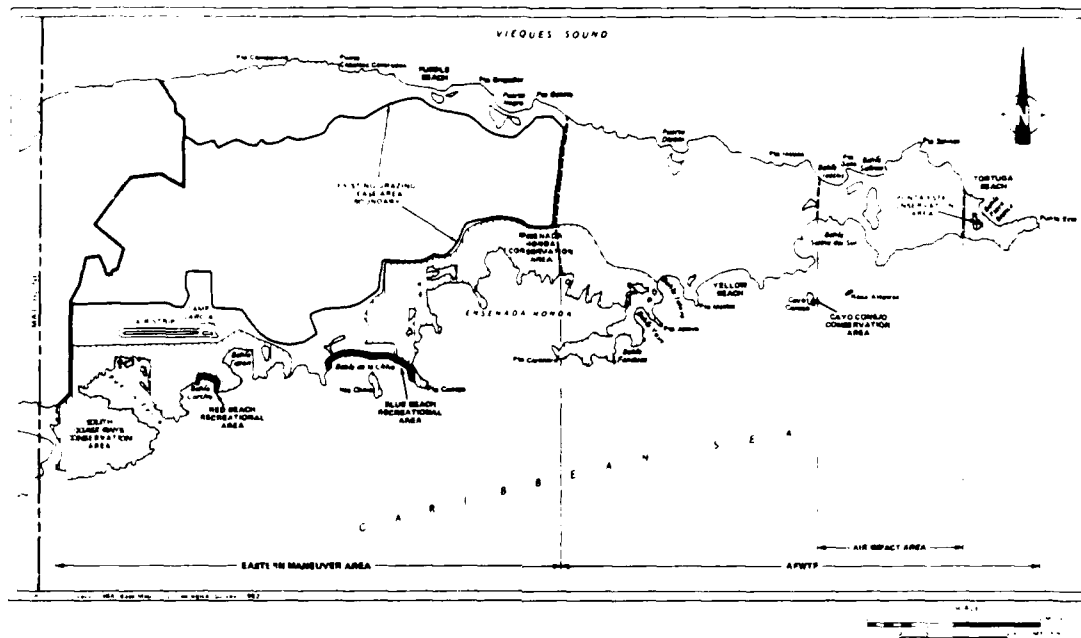
The 1986 Vieques LUMP recognizes the existence of seven conservation zones on Vieques.* These zones are located on the Navy property which comprises the eastern and the western portion of Vieques. The central portion of Vieques remains in private ownership and is not subject to Navy management.

Existing Conservation Zones - Eastern Vieques. There are three conservation zones located on the eastern portion of Vieques and one such zone located on a cay off the southern coast of that area. The four zones are depicted in figure VII-1 and are described more fully below.

(Figure VII-1 is on the following page)

* These seven conservation zones were established by the original land use plan for Vieques which was prepared in 1983 by the Commander, Naval Forces Caribbean (COMNAVFORCARIB).

EXISTING CONSERVATION AREAS -- EASTERN VIEQUES



- Punta Este. This area includes unique vegetation, consisting of upland forest scrub community, which consists mainly of drought resistant shrubs with sclerophyllous (leathery) leaves located on the dry coastal limestone uplifts, is not found in Puerto Rico except on Vieques. The other evergreen scrub communities are scattered along the southern coast of the island. Punta Este also includes an orchid (Epidendrum bifidum) identified as rare by the Commonwealth of Puerto Rico and as a candidate species for federal listing.
- Cayo Conejo. This small island in Bahía Salina del Sur (off the southern coast of the AIA) is important as a nesting habitat for the endangered brown pelican. The breeding colony that nests on the island is one of the largest in Puerto Rico.
- Ensenada Honda. This area includes extensive mangroves, as well as the best example of the

lowland forest association on the island. The lowland forest association lies just inland from Laguna Yanuel and adjacent to the OP-1 road. This open, heavily grazed forest is one of the island's last remaining stands of ucar (Bucida buceras), intermixed with cobana negra (Stahlia monosperma), which is a federal candidate species. In addition to these tree species, there are many spiphytes and flowering vines in the area.

- South Coast Bays. The South Coast Bays conservation zone includes the coastal areas directly south of Camp Garcia on the western portion of the EMA; it specifically encompasses the extensive mangroves adjacent to Puerto Mosquito, Puerto Ferro, Bahia Corcho, and Bahia Tapon, as well as one of the few ever-green scrub communities found on Vieques and in Puerto Rico in general.

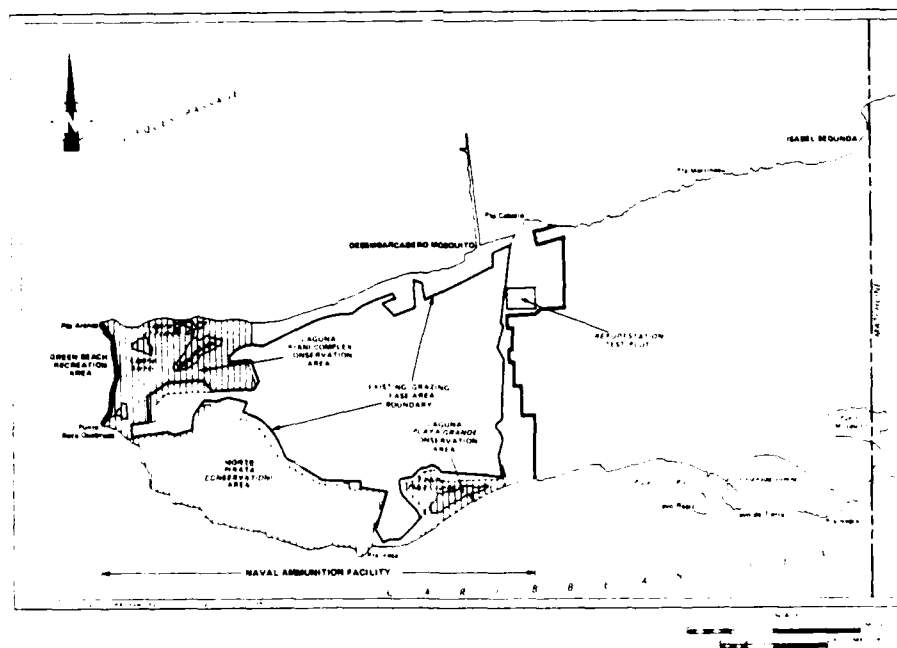
In addition, two of the bays (Bahia Tapon and Puerto Mosquito) have bioluminescent qualities. Bioluminescence is a unique phenomenon occasionally found in protected tropical bays with unique physical, chemical, and biological characteristics. The bioluminescence is caused by an accumulation of large numbers (or blooms) of the dinoflagellate Pyrodinium bahamense, a species of phytoplankton which normally occurs in near-shore tropical waters and which emits light when disturbed by boats, swimmers, fish, etc. Only 214 Bioluminescent bays have been identified worldwide. Although the factors responsible for bioluminescent bays are not fully understood, the physical and chemical conditions which result in the maintenance of blooms of Pyrodinium include a small, shallow bay with low tidal amplitudes and a narrow or shallow inlet. The low tidal amplitude and restricted exchange with the sea permit the concentration of required nutrients and the maintenance of a stable environment. The bioluminescent bays in Puerto Rico are fringed with mangroves, and the organic matter produced in the mangroves is believed to be an integral requirement for the growth and maintenance of the Pyrodinium populations. The two bioluminescent bays on Vieques both

exhibit these characteristics. Puerto Mosquito encompasses 200 acres, and has a maximum depth of about 10 feet and an average depth of about 6 feet. A narrow (400-foot), shallow (5-foot) elongated channel leads to the mouth of the bay. Puerto Mosquito is surrounded by approximately 230 acres of mangroves. Less than one-third of the upland areas adjacent to the bay are owned by the Navy. Bahia Tapon, a very shallow bay with an average depth of less than 3 feet, is approximately 80 acres in size: it is surrounded by approximately 50 acres of mangrove forest. The upland areas around Bahia Tapon are owned entirely by the Navy. /6

Existing Conservation Zones - Western Vieques. There are three conservation zones located on the western portion of Vieques. These zones are depicted in figure VII-2.

FIGURE VII-2/7

EXISTING CONSERVATION AREAS -- WESTERN VIEQUES



The western sector conservation zones are described in the CZMP as follows:

- Playa Grande. This conservation zone encompasses Laguna Playa Grande and the mangrove forests and beach areas that surround it. Located on the south coast of the NAF east of Monte Pirata, the mangrove-lagoon area provides important fishery (e.g., spawning, nursery areas) and wildlife habitat.
- Monte Pirata. The entire mountain above the 100-meter contour includes unique vegetation. Monte Pirata's slopes support the most diverse upland forest association on the island, and some of Vieques' oldest, largest, rarest, and most unusual trees. Some lowland forest also exists along the drainage on the lower slopes of Monte Pirata, and several plants identified as Puerto Rican species of concern also are located in the area (e.g., Olaga, Malpighia fucata; Pinion, Tillandsia lineatispica; Tillandsia pepersomia myrhifolia; and Calypttranthes thomasiana). T. lineatispica and C. thomasiana are federal candidate species. In addition, the conservation zone includes coastal areas that are important as brown pelican roosting sites and as sea turtle nesting and feeding habitat.
- Laguna Kiani Complex. The Laguna Kiani complex conservation zone encompasses the extensive mangrove forest areas on the north-western tip of Vieques. These mangroves provide important fishery and wildlife habitat. In addition, the zone includes remnants of the vegetation (e.g., cobana negra, Stahlia monosperma; that formerly characterized the island, and which is now regarded by the Commonwealth of Puerto Rico as potentially endangered. The conservation zone encompasses Green Beach, portions of which are used for recreational purposes by both military and civilian personnel. This beach provides turtle nesting habitat. The area around Green Beach also is used for pelican roosting. /8

Proposed Additional Conservation Zones. In addition to the seven existing conservation zones, the 1986 Vieques LUMP/CZMP proposes the establishment of new conservation zones to protect the following areas:

- Unique lowland gallery forest vegetation... located along the northern part of the EMA and which is not elsewhere on the eastern portion of the island; and vegetation in other parts of the EMA, AFWTF, and NAF which provides valuable wildlife habitat and prevents erosion;
- Natural coastal resources contained in the bays located along the north coast of the EMA and the AFWTF ...;
- Sea turtle nesting areas along the north shore beaches ...;
- Beach and mangrove resources, as well as potential turtle nesting areas, ... and a locally unique evergreen scrub community on Isla Chiva directly offshore from Blue Beach; and
- Seagrass beds along the north shore of the NAF from Mosquito Pier to Pinta Arenas. These seagrass beds provide manatee habitat and feeding areas for sea turtles./9

Current Conservation Zone Restrictions. The current conservation zone restrictions are listed in Table VII-2. The restrictions are established in the Atlantic Fleet Weapons Training Facilities (AFWTF) User's Guide (February 1985) and in a Memorandum of Understanding between the Governor of Puerto Rico and the Secretary of the Navy which is dated 11 October 1983./10

(Table VII-2 is on the following page)

TABLE VII-2/11

CURRENT CONSERVATION ZONE USE RESTRICTIONS

CONSERVATION ZONE	USE RESTRICTIONS
PUNTA ESTE	NO ATG OR NGFS ACTIVITIES
CAYO CONEJO	NO TRESPASSING BY MILITARY OR CIVILIAN PERSONNEL WITHOUT PERMISSION OF BOTH THE NAVY AND THE U.S. FISH AND WILDLIFE SERVICE NO OVERFLIGHTS OF LESS THAN 500 FEET BY AIRCRAFT CONDUCTING ATG OPERATIONS MAINTENANCE OF 1,500-FOOT VERTICAL AND 1,000-FOOT HORIZONTAL BUFFER BY HELICOPTERS
ENSENADA HONDA	NO OFF-ROAD MILITARY MANEUVERS
SOUTH COAST BAYS	NO OFF-ROAD MILITARY MANEUVERS
PLAYA GRANDE	NO OFF-ROAD MILITARY MANEUVERS
MONTE PIRATA	NO OFF-ROAD MILITARY ACTIVITIES ABOVE THE 100-METER CONTOUR. USES RESTRICTED TO EXISTING FACILITIES
LAGUNA KIANI COMPLEX	NO OFF-ROAD MILITARY ACTIVITIES

Class Designations of Conservations Zones. The 1986

Vieques LUMP/CZMP divides Conservation Zones into three classes as follows:

- Class I Conservation Zones. These zones will encompass critical habitats and environmental resources unique to Vieques. No military field training activities will be permitted in these areas. Limited recreational uses (e.g., sunbathing, swimming) will be allowed, with access using the existing road networks. Development that is not environmentally compatible will be prohibited.

- Class II Conservation Zones. Class II conservation zones will be designated to protect various environmentally sensitive, but not critical, habitats and natural areas. The preservation of these areas has been identified as important, but military maneuvers and

other civilian uses will be permitted, with certain restrictions.

- Class III Conservation Zones. These zones will encompass areas with important vegetation that prevents soil erosion and provides habitat for wildlife. The zones have been identified based on vegetative type (e.g., lowland forest), and encompass various locations on Navy property. No cutting of vegetation will be permitted in Class III zones, or within 100 feet of such zones without the prior approval of the Navy's Land Manager. Military maneuvers and other civilian uses will be permitted, subject to certain restrictions. /12

The seven preexisting conservation zones described above are all Class I zones. /13

Interagency Coordination in the Designation of Class I, II and III Conservation Zones. Recognizing the necessity of inter-agency coordination at the federal and federal-state level, the 1986 Vieques LUMP/CZMP provides that specific designations of any Class I, II or III Conservation Zone by the Department of the Navy will be coordinated with the Puerto Rico Department of Natural Resources, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. /14

General Restrictions on the Use of all Class I, II and III Conservation Zones. The 1986 Vieques LUMP/CZMP provides that the following activities will be prohibited in all Class I, II and III Conservation Zones:

1. The cutting of trees and vegetation, other than thorn scrub (i.e., Prosopis and

Acacia species), will be prohibited. Many of the species within the conservation areas are locally unique, are designated as Puerto Rican species of concern, or provide important wild-life habitat.

2. Except for offloading and backloading of amphibious landing craft, vehicles will continue to be prohibited from all beaches and beach scrub areas. Specific areas for parking will be set back at least 100 feet from beach scrub areas and away from mangrove forests. This restriction will be necessary to insure the protection of beach scrub vegetation, which assists in stabilizing beach areas and preventing erosion.

3. Grading of beaches after amphibious operations is prohibited.

4. Off-road military and civilian activities are prohibited.

5. No incompatible development is allowed; any plans for development adjacent to a conservation zone must be approved by the Vieques Management Advisory Committee.

6. Civilian vehicle trails will be blocked and abandoned. /15

Restrictions Applicable to Only One Class of Conservation Zone. The 1986 Vieques LUMP/CZMP provides additional conservation zone restrictions as follows:

Within all Class I conservation zones; except Cayo Conejo, the following restrictions will apply in addition to the general use limitations:

1. Military maneuvers on Class I beaches will be prohibited.

2. Non-essential military roads will be abandoned.

3. Recreational uses will be limited to

beach-oriented activities and fishing. No hunting or land crabbing will be permitted.

The existing restrictions concerning Cayo Conejo will continue to apply. No military or civilians will be permitted on the cay, and aircraft overflights must be at a minimum of 500 feet. Helicopters must maintain separations of 1,500 feet vertically and 1,000 feet horizontally.

In Class II areas, military maneuvers will be permitted, in accordance with the general use restrictions. In addition, vehicles will be prohibited from the North Coast Quebradas conservation zone, which includes sensitive vegetation.

In and within 100 feet of class III areas, the cutting of any vegetation including thorn scrub (i.e., Prosopis and Acacia species) will be prohibited without the prior approval of the Navy Land Manager. Vehicles will not be permitted in Class III areas except on designated roads through the zones; however, military maneuvers involving foot soldiers will be allowed in off-road areas./16

Caveats Concerning the Effectiveness and the Orientation of the Vieques Conservation Zone Management Plan (CZMP). The 1986 Vieques LUMP/CZMP provides the following caveats with regard to the management of Vieques Conservation Zones:

- The overall designation of the seven conservation zones has had a positive effect on the protection of environmentally sensitive resources on Navy lands on Vieques, primarily as a result of the limitation of military activities within such zones. Restrictions on civilian uses, however, have not been as effective, and adverse impacts from such activities continue to occur./17
- The future effectiveness of the conservation zones in preserving and enhancing sensitive environmental resources on Vieques depends on

the establishment and enforcement of specific guidelines for the protection and use of each area by both military and civilian personnel. These management guidelines must be clearly defined in the AFWTF Range Manual and must be communicated to all users of Navy lands, including troops, grazing area lessees, fishermen, and recreationists. /18

- All conservation zones will continue to be managed to insure the maximum long-term protection and enhancement of environmental resources. Immediate activities will center around the elimination of impacts that are presently occurring to environmental resources within the zones and the use of methods to educate both military and civilian personnel about the conservation zones and the uses prohibited therein. The short- and long- term objectives for the conservation zones will involve the implementation and enforcement of management guidelines. /19

Chapter Summary Because the training facilities on and near Vieques are so important to the maintenance of Atlantic Fleet operational readiness, and because that island contains several environmentally sensitive areas, the Department of the Navy has been required to strike a balance between environmental preservation and national security in its use of that Caribbean island. Through various resource management plans, the Navy has articulated the steps that it will take to protect sensitive areas from the adverse impacts which might arise during the conduct of otherwise unrestricted operational training.

One means which the Department of the Navy uses to protect particularly vulnerable environmental resources on Vieques is the creation and management of conservation

zones. The opportunity costs associated with the establishment of the conservation zones is offset both by the protection afforded special resources and by the lessened administrative burdens associated with operational training outside those zones. By avoiding conservation zones, Naval commanders are free to devote more time to training than would otherwise be available were they required to identify and provide special protection for particularly sensitive environmental resources in every training exercise.

The creation of conservation zones on Vieques represents a classic example of set aside preservation* which supports both environmental protection and national security. On the one hand, sensitive environmental resources are afforded considerable protection and, on the other, naval commanders face less opposition to their continued use of the Vieques training facilities because that use no longer poses a threat to the special natural resources located in the island.

*The concept of set-aside preservation was discussed in Chapter III, Part D above.

CHAPTER VIII

DEPARTMENT OF THE NAVY ENVIRONMENTAL PROTECTION POLICY

Overview. Chapters IV to VI describe various groups of non-DOD/DON individuals who may seek to influence or who may actually influence how naval commanders execute their missions through environmental protection actions. Chapter VII addresses how the Department of the Navy reconciled resource protection and operational training issues in one significant instance. This chapter will focus on Department of the Navy (DON) environmental protection policy and the persons responsible for enforcing that policy by:

- (1) discussing current Department of the Navy directives promulgated to address pollution control, resource protection/management, and environmental restoration; and
- (2) discussing how the Secretary of the Navy has responded to a recognized shortfall between DON policy and actual practice with regard to hazardous waste management.

A. DON Environmental Protection Policy. The Secretary of the Navy has articulated his policy with regard to environmental protection and resource management in two directives: a Secretary of the Navy Instruction (SECNAVINST)

and U.S. Navy Regulations.

SECNAVINST 6240.6E. The Secretary's instruction pertaining to environmental protection is entitled (Assignment of Responsibility for) Department of the Navy Environmental Protection and Natural Resources Management Programs.... /1

Purpose. The purpose of the instruction is:

... To implement (relevant) Department of Defense Directives and Instructions ... by providing broad policy and assigning responsibilities to the Navy and Marine Corps for the protection of the environment and conservation of natural resources. /2

Policy. the Secretary's policy provides in pertinent part that:

a. The Navy and Marine Corps will actively protect and enhance the quality of the environment, through strict adherence to all applicable regulatory standards, by initiating planning and programming actions, and by executing such actions in accordance with appropriate environmental legislation and Executive Orders.

b. Navy and Marine Corps shore activities will cooperate with Federal, State, and local environmental organizations and:

(1) comply with the applicable pollution abatement standards and criteria promulgated by such agencies; and

(2) establish an integrated, multiple-use program for the management of renewable natural resources.

* * *

e. Consistent with (Executive Order 11752), it is not required that Navy or Marine

Corps facilities comply with state or local administrative procedures with respect to environmental protection and pollution abatement except as such compliance is required by specific environmental laws.

f. Where resources to accomplish pollution control are limited, priority of effort will be in accordance with the following order:

(1) those situations which constitute a direct hazard to the health of man;

(2) those situations having significant economic implications; and

(3) those situations which affect the recreational and esthetic value of our natural resources.

* * *

h. (Executive Order 11752) states that heads of agencies shall not use for any other purpose any of the funds appropriated and apportioned for corrective measures necessary to meet the requirements of the Executive Order. Accordingly, all funds appropriated and apportioned for the prevention, control, and abatement of environmental pollution shall not be used for any other purposes.

i. The naval natural resources program includes soil and water conservation, fish and wildlife management, forestry management, outdoor recreation, and natural beauty. In consonance with Federal programs for the conservation and management of natural resources, to the maximum extent practicable and consistent with operational requirements and availability of resources, it is the policy of the Department of the Navy to restore, improve, develop, preserve, and properly use natural resources on Navy and Marine Corps shore activities. Implementation of this program shall emphasize the objective of a balanced multiple-use program through the conscious coordinated management of the

various resources. Maximum compatibility shall be achieved between naval actions and ecological factors, and a conscious and active concern for the values of natural beauty will be considered in all Navy and Marine Corps plans and programs. (emphasis added) /3

* * *

Responsibility. The Secretary has made the Chief of Naval Operations and the Commandant of the Marine Corps, responsible (within their respective services) for:

(1) Assuring that all activities under their command comply with applicable policy, guidelines, and criteria respecting environmental protection and quality enhancement.

(2) Issuing necessary instructions and directives to assure, and assist in, such compliance.

(3) Establishing and administering the procedures for the preparation, review, and submission of environmental impact assessments and statements for those actions which will have significant environmental impact or be environmentally controversial.

(4) Policy and procedures for administration, execution, and continuation of DOD and Department of the Navy natural resources and pesticide programs. /4

Required Action. The Chief of Naval Operations and the Commandant of the Marine Corps are required to:

(1) Maintain a comprehensive instruction, in manual form, which will provide for overall Navy and Marine Corps administrative direction for the environmental protection, pesticides, and natural resources programs. The promulgation of each of these manuals, and the continuing maintenance thereof, will be a significant management tool for those charged with the administration of the Department of the Navy environmental

programs. Each manual shall provide in particular for comprehensive implementation of the (relevant DOD environmental protection and natural resource management directives).

* * *

(3) Maintain a focal point for the coordination of the Department of the Navy Environmental Protection Program with other agencies of the Federal government regarding environmental quality matters./5

The naval service chiefs are also required to "coordinate (the) implementation of (SECNAVINST 6240.6E) to ensure a basically uniform approach in developing environmental policies."/6

Article 0765, U.S. Navy Regulations. Article 0765 of the U.S. Navy Regulations is entitled "Environmental Pollution" and provides that:

The commanding officer shall cooperate with local, state and other governmental authorities in the prevention, control and abatement of environmental pollution to the extent resources and operational considerations permit. He shall be aware of existing policies regarding pollution control and he should recommend remedial measures when appropriate./7

Naval Service Environmental Protection Regulations, Instructions and Orders. Table VIII-1 depicts the naval service regulations, instructions and orders which pertain to the various statutes discussed in Chapter III. The table notes which follow that table describe other Navy and Marine Corps directives which pertain to resource protection/land

use. Appendices B and C contain the chapter and subchapter titles for the Navy and Marine Corps Directives cited in Table VIII-1.

TABLE VIII-1

**DEPARTMENT OF THE NAVY ENVIRONMENTAL
PROTECTION REGULATIONS, INSTRUCTIONS
AND ORDERS**

TYPE	STATUTE	OPNAV INST 5090.1 CHAPTER	MCO P11000.8B CHAPTER	TABLE NOTES
POLLUTION CONTROL	FWPCA	5, 10, 12.1, 12.5 AND 13.2	2.5, 4.3	1, 2
	MPRSA	14		1, 2
	CCA	6	4.2	1, 2
	NCA	8	4.4	1, 2
	FIFRA	9		1, 2
	RCRA	7, 11, 12.4, 12.6	4.5, 4.6	1, 2
RESOURCE PROTECTION LAND USE CONTROL	NEPA	4	3	2
	NHPA	15.2, 15.3		3
	ARPA	15.2, 15.3		3
	MPRSA	15.3		
	MMPA	15.3		
	ESA	15.3		4
	CZMA	15.3	2.5	5, 6
ENVIRON- MENTAL RESTORATION	CERCLA	11.2		
	SARA	13.3, 13.4	4.6	
	DERP			

TABLE VIII-1 Notes

1. See also U.S. Navy Department, U.S. Navy Regulations (Washington: 1973), Article 0765 (Environmental Pollution) above.

2. See also U.S. Navy Department, Department of the Navy Environmental Protection and Natural Resource Management Program, Assignment of Responsibility for, SECNAVINST 6240.6E (Washington: 1977).

3. See also U.S. Marine Corps, Archaeological and Historic Resources Management, MCO 11000.19 (Washington: 1986).

4. See also U.S. Marine Corps, The Endangered Species Act of 1982, MCO 11015.4 (Washington: 1987).

5. See also U.S. Marine Corps, Coastal Barrier Resources, MCO 11015.6 (Washington: 1984).

6. See also U.S. Marine Corps, Encroachment Control, MCO 11011.22 (Washington: 1985) and U.S. Navy, Air Installations Compatible Use Zones (AICUZ) Program, OPNAVINST 11010.36 (Washington: 1979).

The Navy and Marine Corps directives set out in Table VIII-1 and Table VIII-1 Notes (excepting notes 1 and 2) contain the environmental protection policies of the Chief of Naval Operations the Commandant of the Marine Corps, and, in turn, task their subordinates with specific tasks to implement those policies.

From the foregoing, it is evident that the senior leadership of the Department of the Navy requires that the naval services fully comply with all environmental protection laws and that their respective services will take such steps as are necessary to protect natural and historic resources located on naval installations.

B. An Apparent Shortfall Between Policy and Practice in the Area of Hazardous Waste Management. In his 29 April 1988

memorandum to the Chief of Naval Operations and the Commandant of the Marine Corps, the Secretary of the Navy expressed his concern that the naval services had a poor reputation with regard to their management of hazardous waste. In that regard, he stated that:

... According to a recent review of federal facilities compliance, EPA regions indicated that the Navy has one of the worst compliance records.

* * *

I am concerned that at least part of our poor environmental reputation stems from the inability of our commanding officers and area coordinators to comply with environmental responsibilities, particularly hazardous waste management.

* * *

We no longer have the long lead times afforded under earlier environmental laws such as the Clean Air Act and the Clean Water Act - the public, Congress and EPA want action now. We also cannot afford to subject our commanding officers and other personnel to potential criminal and civil lawsuits./8

* * *

In that same memorandum, the Secretary discussed the bills introduced in the House last December to provide EPA and the States with the enforcement tools they deem necessary to force federal facilities into compliance with hazardous waste

management legislation and regulations.* He described the potential impact of those bills as follows:

Specifically, the (proposed) legislation before the Subcommittee:

- would establish a special counsel at EPA who would be empowered to suspend or revoke any permit issued by a State or EPA pursuant to RCRA and thereby be able to shut down operations at a Navy facility;
- would prohibit any federal agency from contracting with a person or affiliate of a person who has been convicted of any offense under RCRA (however minor), thereby eliminating from consideration companies such as Westinghouse and General Electric;
- and would significantly broaden the potential exposure for personal liability, both criminal and civil, by waiving "any immunity" including qualified immunity for federal officials acting within the scope of their employment.... This is in addition to our commanding officers already being subject to criminal prosecution for intentional violation of the statutes, including those situations in which the commanding officer chose to spend his limited O&M funds on problems other than environmental. /9

The Secretary's memorandum also identified several actions that the naval services might take to improve their environmental compliance record. He suggested that the Navy and the Marine Corps:

- (1) provide their commanders adequate technical and legal resources to:

*These bills were discussed in Chapter V, Part B above.

- (a) assist them in complying with hazardous waste management and clean up, and
 - (b) negotiate with federal, state and local environmental regulatory agencies;
- (2) obtain funding under the Defense Environmental Restoration account "for salaries for those individuals working directly on cleanup of old hazardous waste disposal sites under (SARA)";
- (3) insure that naval installations identify the pollution abatement projects they need in the Navy Pollution Control Report so that the projects can be funded; and
- (4) insure that naval installations identify their funding and personnel requirements necessary "to ensure that the day-to-day management of hazardous waste is in compliance with the law." /10

The memorandum concludes with the caveat that:

The bottom line is the Navy must do it right from the start because the law requires it and we are under intense scrutiny. /11

Chapter Summary. The Secretary of the Navy and his service Chiefs have articulated their policies with regard to environmental protection and natural resources management in a number of directives. These policies are in consonance with environmental protection legislation in that they

require naval commanders to fully comply with all applicable laws.

A significant shortfall between policy and practice was recently identified by the Secretary of the Navy, and he has communicated directly with his service Chiefs to highlight the seriousness with which he views the problem. There should not be doubt in anyone's mind that the senior leadership of the Department of the Navy expects all naval commanders and their subordinates to comply with applicable environmental protection laws to the utmost of their ability while they are accomplishing their assigned missions.

CHAPTER IX

A PROPOSED STRATEGY FOR ACHIEVING AN APPROPRIATE BALANCE BETWEEN ENVIRONMENTAL PROTECTION AND NAVAL SERVICE MISSION ACCOMPLISHMENT

Overview. While there are any number of ways that naval commanders may strive to achieve an acceptable level of compliance with environmental protection laws while simultaneously working to accomplish their mission, the following ten suggestions are offered to assist commanders in striking the appropriate balance between environmental protection and mission accomplishment (including operational training and naval installation support of that training). The suggestions are divided into two groups which describe seven internal and three external considerations respectively. Internal considerations pertain to those actions which may be accomplished within the Department of the Navy or at a single installation. External considerations pertain to those interactions with federal, state, and local regulatory authorities or between naval installations.

A. Internal Considerations. Seven internal considerations which should be considered by naval commanders include:

1. ensuring commander and command familiarity with the requirements of applicable environmental protection laws (to include regulations, orders, and instructions);

2. making compliance with environmental protection laws a command watchword;
3. ensuring that there is a unity of command and control with regard to both operational and environmental protection matters;
4. insuring the availability of specialized legal and technical advice concerning environmental protection;
5. organizing for effective environmental protection/resource management and maintaining adequate manning levels;
6. ensuring adherence to land use management plans, and
7. conducting environmental audits.

Knowledge of the Law. A well-known legal caveat provides that "ignorance of the law is no excuse". This caveat is the usual judicial response to a defendant who seeks to defend himself on the ground that he did not know that his conduct was in violation of the law. Commanders should:

- (1) familiarize themselves with the environmental protection laws which pertain to how they accomplish their mission,
- (2) promptly seek legal advice whenever an environmental issue is raised with regard to

- how they accomplish their mission, and
- (3) ensure that their staff and subordinate commanders are sensitive to the ways that environmental protection laws impact on command mission accomplishment.

By becoming personally familiar with applicable environmental laws and by ensuring that their subordinates are also so familiar, naval commanders will have taken a significant step toward the resolution of environment issues which presently confront their commands and toward the avoidance of such issues in the future.

Compliance as a Command Watchword. Environmental protection is no different than any other form of naval activity. If it receives sufficient command emphasis, an environmental protection program will be successful. Conversely, where a commander's subordinates perceive either disinterest or hostility toward such a program, the program is doomed to almost certain failure within that command.

The Secretary and his service Chiefs should continually emphasize the importance of environmental protection within the Department of the Navy. If naval commanders are fully informed of the importance and pitfalls of environmental protection legislation and regulations as suggested in the first internal consideration discussed above, and if they are aware of the importance which their seniors place on

environmental protection, they will almost certainly be more inclined to adopt "environmental compliance as their watchword". The Secretary of the Navy memorandum discussed in Chapter VIII above provides an example of how this internal consideration may be approached to demonstrate top-down command emphasis.

Unity of Command and Control. Naval installations which provide field/sea operational training facilities should be placed within the chain of command of the principal operational commander whose units use that training facility on a recurring basis. Operational and installation commands are inclined to develop an "us versus them" mentality so long as they do not have a common superior commander. Operational units may complain that installations place too many limitations on their training activities while their installation counterparts may complain that the operational units which use their facilities are insensitive to the environmental protection regulations which must be obeyed to avoid enforcement actions by federal, state or local regulators. Where operational and installation commanders have a common operational superior, their complaints could be referred to, considered by, and resolved by a single individual. Legal accountability for those resolutions should also be held by the same individual so that his authority and responsibility are commensurate. For example,

by combining the authority to determine the appropriate balance between environmental protection and operational training with the legal accountability for the adverse effects of that training, the result achieved should go a long way to eradicating the "it's a base problem" or the "us versus them" mentalities.

Availability of Specialized Legal and Technical Advice. The Secretary's 29 April memorandum to his service Chiefs provides in pertinent part that:

I am concerned that at least part of our poor environmental reputation stems from the inability of our commanding officers and area coordinators to comply with environmental responsibilities particularly hazardous waste management. We must provide them with adequate technical and legal resources to fulfill their responsibilities for hazardous waste management, clean up, and negotiation with federal, state and local environmental regulatory agencies. (emphasis added)./1

The complexities associated with the vast body of environmental protection legislation/regulations requires that naval commanders have access to legal counsels and environmental engineers with specialized training/experience so that the commanders may receive expert advice and assistance in negotiations with environmental regulators.

The Marine Corps began a test program designed to provide specialized legal advice to its installations in California and Arizona on 29 January 1988./2 The Western Area Counsel Office Test Program is intended to provide

Marine commanders in those states with access to judge advocates and to civilian counsel from the Office of the Navy General Counsel who have advanced training and/or experience in environmental, land use, contract and labor law. The test program is scheduled to conclude on 30 September 1988. If it proves successful, the Area Counsel Program may be implemented Marine Corps-wide as early as 1 January 1989.

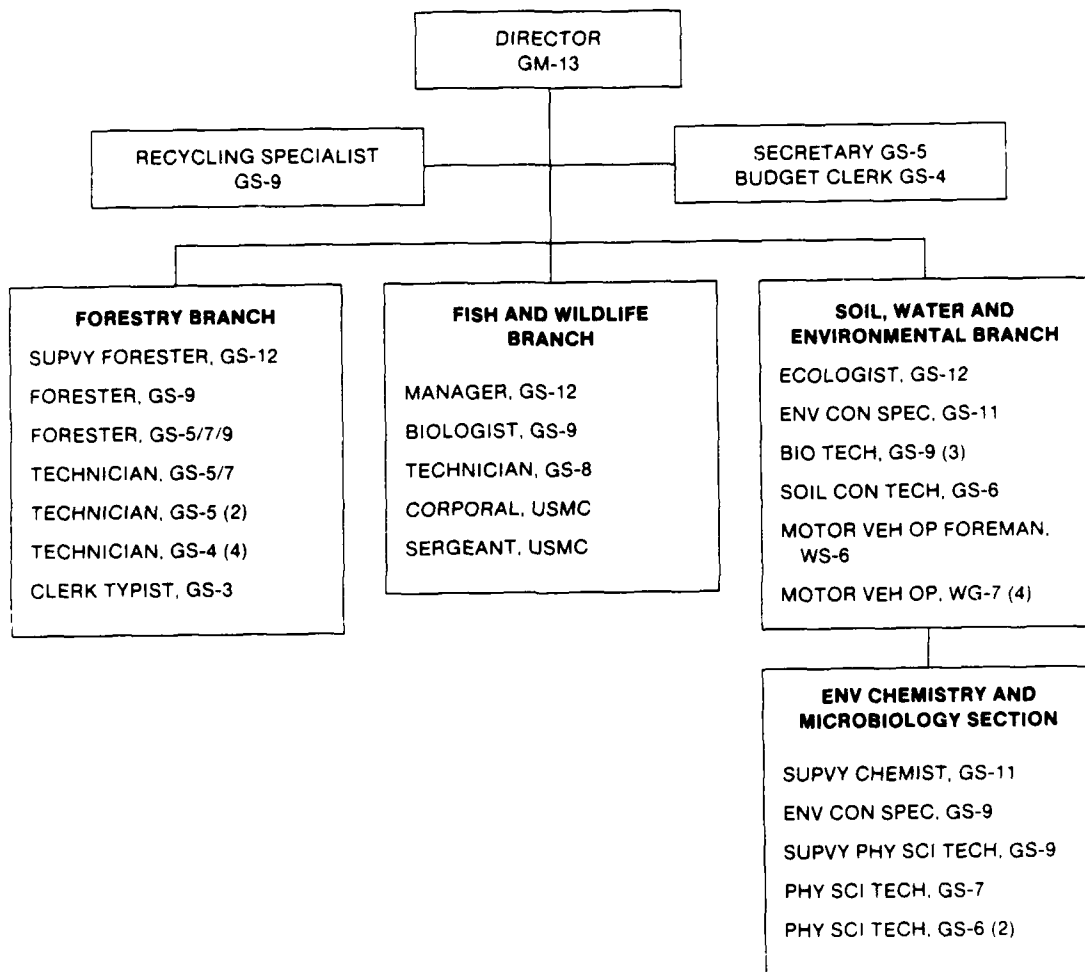
The Navy Facilities Engineering Command (NAVFAC) is also contemplating a reorganization to provide specialized environmental legal and technical advice to naval commands on a regional basis. The NAVFAC program is still in the conceptualization phase.

Organization and Manning Levels. Naval commands should ensure that their environmental support staff is task organized and adequately manned to address the environmental issues which they must confront. Figure IX-1 depicts the task organization and manning level for the largest amphibious training base in the world, Marine Corps Base Camp Lejeune, North Carolina. /3

(Figure IX-1 is on the following page)

FIGURE IX-1

**NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS DIVISION,
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA**



The staff organization shown in Figure IX-1 is necessary to effectively oversee the base hazardous waste management plan, oil spill contingency plan, waste oil disposal plan as well as several significant natural resource management plans.

Land Use Management Plans. Chapter VII, Part B describes in detail the Conservation Zone Management Plan contained within the 1986 Naval Training Facility Vieques Land Use Management Plan. (1986 Vieques LUMP). In addition to conservation zones, the 1986 Vieques LUMP addresses cattle and range management, thorn scrub management and utilization, forestry development and management, wildlife and endangered species management, mangrove protection, water resource protection, recreational uses, and cultural resources protection. Every naval installation used for field operational training should maintain and use a land use management plan similar to the 1986 Vieques LUMP to maximize training areas availability while simultaneously protecting environmentally sensitive areas.^{/4} The use of such plans comports with the policy of the Secretary of the Navy that "(m)aximum compatibility shall be achieved between naval actions and ecological factors, and a conscious and active concern for the values of natural beauty will be considered in all Navy and Marine Corps plans and programs."^{/5}

Environmental Audits. Anyone possessing even a passing familiarity with military life is aware of the key

role that inspections play in the day-to-day operations of our armed forces. Naval operational and installation commanders should ensure that their subordinates are in compliance with environmental protection regulations by conducting periodic environmental audits (inspections)./6 For example, operational commanders should ensure that their subordinates are not violating installation orders pertaining to endangered species restricted areas during training exercises by having their staff physically check the areas during the training. The installation commander should also have his staff check such restricted areas periodically to ensure that they are not being used improperly. Similarly, installation commanders should have trained hazardous waste management inspectors check operational unit handling of hazardous waste at the locations where the waste is generated to ensure that the operational units are complying with installation, federal and state hazardous waste management regulations. Where the installation inspectors find discrepancies, the discrepancies should be reported to the responsible operational unit via its chain of command. Where an environmental audit system provides for inspections, follow-up action and reinspections, environmental problems may be identified and resolved before they become serious or before they become the subject of a regulatory enforcement action by a federal or state agency.

B. External Considerations. Three external considerations which should be addressed by naval commanders include:

1. conducting intra-service coordination on a regional basis;
2. selecting a qualified command spokesman; and
3. requesting necessary exemptions.

Intra-Service Coordination on a Regional Basis. Since EPA regulators are organized on a regional basis (see Figure V-2 for the 10 EPA regions), all naval installations within an EPA region will be regulated by the same federal facility compliance staff. Likewise, all naval installations within a state will be regulated by the same state staff. Unless all DON installations within the same EPA region/state communicate and coordinate with one another, there exists the very real possibility that two of them may adopt diametrically opposed positions concerning the same environmental protection issue. Federal and state regulators could then use the inconsistency to undermine either or both installation positions. In addition to avoiding "defeat in detail", intra-service coordination would encourage installations to seek resolution of their differences by their service headquarters instead of waiting to respond to initiatives by federal/state regulatory staffs. Since intra-service communication is one key element in operating "proactive" vice "reactive" environmental protection

programs, this rationale would also support inter-service communication within a given EPA region/state.

Selection of A Qualified Command Spokesman. In communicating with key players external to the naval community, operational and installation commanders should ensure that their spokesmen are technically competent, articulate and possess sound judgment. While they are trained to be command representatives with the news media, public affairs officers are not trained to negotiate with federal/state regulators. Environmental engineers, on the other hand, may possess the necessary technical expertise to conduct such negotiations; but may lack the communication skills of the public affairs officer. Regardless of who is selected to be a command spokesman, that person should facilitate the resolution of existing problems and not be the source of additional ones. Inter-agency and federal/state differences can be exacerbated if a command spokesman is less than fully qualified by training and temperament to perform that sensitive duty.

Request Necessary Exemptions. Naval commanders should request an exemption from environmental protection legislation whenever they will be unable to accomplish their mission without being in noncompliance with applicable environmental protection law. Exemption requests should be supported by factual data showing the steps that have been

taken to come into compliance with the law, and the impact that a denial of the exemption request will have on the ability of the requestor to accomplish his mission.

Recognizing that his requests will be subject to close scrutiny by the exemption authority and by Congress, naval commanders should provide ample justification to support those requests.

Chapter Summary. This chapter has suggested a ten part strategy designed to assist commanders in their implementation of naval service environmental protection policies. By being sensitive to the seven internal and three external considerations suggested above, naval commanders may enhance their command's level of compliance with environmental laws, improve their relations with external regulatory agencies, avoid the difficulties associated with being the target of regulatory enforcement actions, and thereby have more time to devote to the other key aspects of accomplishing their missions.

CHAPTER X

CONCLUSION

Overview. This paper is intended to provide the reader with sufficient information to answer the following questions:

1. Why must the naval services conduct operational training in different geographic areas and on a recurring basis?
2. What environmental laws apply to operational training and installation support of that training?
3. How can civilians outside the Department of Defense influence the way that the naval services conduct operational training or the way that naval installations support that training?
4. How has the Department of the Navy approached the challenge of achieving an appropriate balance between environmental protection and operational training?
5. What strategy should the naval services adopt to ensure that they can conduct critical operational training in a realistic manner and on a timely basis when challenged by legislators, regulators, governors, interested citizens and/or other "key players" in the environmental protection arena?

This chapter summarizes the authors answers to these questions based upon the preceding nine chapters.

A. Why must the Naval Services Train? Chapter II addresses the reasons why the naval services must conduct operational training in a variety of settings and on a recurring basis. With the realization that the naval services must be prepared to respond to a number of scenarios in virtually every corner of the world comes an understanding why ground training must be conducted in forests, deserts and jungles on beaches and mountains as well as in snow and ice. That same realization also makes clear the reasons why sea training must be conducted on all the oceans and major seas of the world as well as in coastal waters. Since the air arms of the naval services must possess an all weather, day/night capability, naval aviators must be trained to accomplish their missions in good weather and bad as well as during daylight hours and during darkness. The requirement that the naval services be prepared to respond to a variety of contingencies in different geographic locations and in different weather conditions mandates that operational training also be performed in different geographic locations and under varying weather conditions.

Chapter II also points out that the technology of contemporary weapons systems, and the complexities of conducting three dimensional warfare in an electronic age gave new meaning (and continued vitality) to the Clausewitzian concept of "friction in war." That chapter

provides that realistic "peacetime maneuvers" are the only means of exposing naval personnel to the negative affects of such friction so that they will be better prepared to deal with it in actual combat.

Finally, Chapter II identifies personnel turbulence and the perishability of combat skills as the reasons why both individuals and units must be trained on a recurring basis if they are to maintain the necessary level of individual and unit operational readiness and unit cohesion.

B. What Environmental Laws apply to Operational Training?

While there are a number of significant environmental laws, they do not all apply to every training or training support situation. To determine which statute or regulation applies in any given situation, one must first determine how the training (or training support) will impact (or has impacted) on the environment. Chapter II describes the spectrum of environmental impacts associated with operational training and its support together with descriptions of the type of costs associated with avoiding or mitigating those adverse effects.

Once the potential adverse effect(s) of operational training have been identified, those effects must analyzed to determine if they are subject to pollution control, resource protection, or land use control legislation. Chapter III describes twelve different federal environmental statutes

which fall into one or more of the three categories listed immediately above. It also addresses the extent to which those laws have been made applicable to naval installations as federal facilities.

Finally, Chapter III sets out the environmental legislation exemption procedures which could be used by a naval installation/operational commander to request that his command be excused from full compliance with a particular law if the exemption would be in the "paramount interest of the United States."

C. How Can Non-DOD/DON Personnel Influence Naval Service Training? Chapter IV describes the various individuals who may be "key players" in determining the way that the naval services conduct operational training. Those "key players" are identified as being members of the federal legislative, executive and judicial branches (although the discussion of the executive branch in Chapter IV is limited to the President.) In addition to legislators, GAO investigators, judges and justices, Chapter IV also identifies state governments, local governments, regional authorities, private individuals, citizen groups, environmental groups, legal foundations and individuals whose property is impacted by federal actions as "key players." Chapter IV concludes with a discussion of the various "levers" that players can use to influence how the naval services comply with environmental laws and the various

hammers that they can use to force compliance should that become necessary. The roles that selected federal agencies, councils and committees (such as the Environmental Protection Agency, and the Council on Environmental Quality) play in overseeing how the naval services manage their installations are described in Chapter V.

The role that the courts play in striking the balance between operational training and environmental protection are developed in Chapter VI. That chapter also addresses the power of the federal courts to unilaterally halt naval projects as well as the delay which may be associated with litigation in federal and state courts. Finally Chapter VI shows how encroachment by neighbors of naval installations may result in litigation over the impact which operational training has on their property.* Chapters IV to VI address the host of non DOD/DON individuals who may influence how operational training is conducted.

D. How have the Naval Services Achieved an Appropriate Balance Between Environmental Protection and Operational Training? Chapter VII provides one example of the way that the Department of the Navy has balanced the protection of sensitive environmental areas with the use of key naval

*Such as the noise impact of naval aircraft overflying a neighbor's property as part of operational training exercises.

training facilities on and near the island of Vieques, Puerto Rico. By establishing conservation zones and by regulating the extent to which those zones may be used for operational training (and for other purposes), the significant environmental resources located within the zones are protected from the adverse effects of operational training. Naval commanders who train their units outside the conservation zones may expect to face less opposition because federal regulators, state regulators and interested citizens are aware that the training does not pose a significant threat to the particularly vulnerable resources on and near Vieques.* The 1986 Naval Facility Vieques Land Use Management Plan (LUMP) provides a concrete example of how and where the Department of the Navy has established a series of balance points between environmental protection and operational training.

E. What Strategy Should the Naval Services Adopt to Ensure That They can Continue to Conduct Realistic Operational Training? Chapter IX points out that any environmental strategy adopted by the naval services should address both internal and external considerations. The first internal consideration suggests that commanders should become

*Naval commanders must continue to be sensitive to significant natural, cultural and historic resources regardless of their location.

familiar with environmental laws which pertain to how they accomplish their mission and that they ensure that their key subordinates are also familiar with those laws. The second consideration suggests that the naval services adopt a proactive, vice a reactive, stance with regard to environmental protection. In other words, the naval services should acquire and maintain the reputation that they accord environmental protection its due by striving to fully comply with the many statutory and regulatory provisions designed to protect the environment from pollution and from damage to its sensitive natural and historic resources. Other internal considerations contained in Chapter IX include the suggestions that naval installations be incorporated into operational command and control structures, that naval commanders be provided ready access to specialized legal and technical expertise to assist them in determining appropriate balance points between environmental protection and mission essential activities (such as operational training), that naval installations establish and maintain an adequate environmental protection staff, and that naval commanders conduct environmental audits (inspections). Turning to external considerations, Chapter IX provides three additional suggestions to enhance both the environmental compliance posture of the naval services and the relations between naval commands and key external "players". First, naval commanders

should coordinate their activities which are subject to regulatory control by external agencies to ensure that they do not adopt inconsistent positions with a common regulator. Second, naval commanders should ensure that each spokesman who represents their command is articulate, competent to address environmental issues and of sound judgement. Finally, where full compliance with applicable environmental laws would significantly impede mission accomplishment, naval commanders should request that the appropriate authority exempt their command from such compliance. The request for exemption should be broad enough to remove the impediment to mission accomplishment; but not so broad as to be viewed as an attempt to end-run the law. By responding favorably to the seven internal and three external considerations set out above, naval commanders may well find that they are better able to accomplish their missions (including attaining and maintaining operational readiness through realistic operational training) due to improved environmental problem solving capabilities within their command, and improved communication with a regulators and other external authorities.

Closing Remarks. In his message to Congress concerning the Sixteenth Annual report of the Council on Environmental Quality (1985)/1, President Reagan stated in part that:

The United States has by far the most

comprehensive legislation of any nation on earth aimed toward environmental protection and natural resource conservation. This legislative umbrella continues to undergo modification in order to refine and redirect the nation's programs to best serve the American people. These efforts are having an effect. By all accounts our nation's air and water are getting cleaner. Likewise, our natural resource heritage is generally being preserved adequately and managed well.

* * *

However, this report also makes clear that despite these positive trends, programs and policies governing environmental protection and natural resource preservation are in need of change. The potential to devote virtually infinite resources to any of a number of environmental problems with diminishing benefits requires approaches that strike balances. This report suggests mechanisms for better striking those balances./2

The President concluded his message with the following caveat:

We can be proud of our environmental achievements. Also, we can look forward to a future of an enhanced national environmental heritage combined with economic prosperity, if, as a nation, we move forthrightly to deal with complex environmental issues in a thoughtful, analytical manner, striking appropriate balances between competing social values./3

This paper will have achieved its intended purpose if it assists naval commanders and their staffs to forthrightly, thoughtfully and analytically strike an appropriate balance between environmental protection and operational training and if it also provides civilian policy makers, environmental

regulators and interested citizens with an appreciation of the crucial need for the naval services to conduct realistic operational training on a recurring basis.

CHAPTER NOTES

Chapter I

1. U. S. Laws, Statutes, etc., "An Act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes," United States Statutes at Large, Chapter 425, 55th Congress, 3d sess. (Washington: U.S. Govt. Print. Off., 1889), v. 30, sec. 13, at p. 1152.

2. U. S. Laws, Statutes, etc., "An Act to protect navigation from obstruction and injury by preventing the discharge of oil into the coastal navigable waters of the United States," United States Statutes at Large, Public Law 68-238, 68th Congress, 1st sess. (Washington: U.S. Govt. Print. Off., 1925), v. 43, pt. 1, pp. 604-606.

3. U. S. Laws, Statutes, etc., "An Act to amend the Federal Water Pollution Control Act," United States Statutes at Large, Public Law 92-500, 92d Congress, 2d sess. (Washington: U.S. Govt. Print. Off., 1973), v. 86, sec. 101, at p. 816.

Chapter II

1. The President of the United States, National Security Strategy of the United States, (Washington: 1987), p. 4.

2. Michael Howard and Peter Paret, ed. On War, Princeton, New Jersey: Princeton University Press, 1984.

3. Id., Book One, Chapter Seven (Friction in War), pp. 119-121 and Chapter Eight (Concluding Observations on Book One), pp. 122-123.

4. Id., pp. 119-120.

5. Id., p. 119.

6. Id., p. 120-121.

7. Id., p. 122.

8. Joint Chiefs of Staff, Department of Defense Dictionary of Military and Associated Terms, JCS Pub. 1, (Washington: 1987).

9. U. S. Navy Dept., Economic Analysis Handbook, NAVFAC P-442 (Washington: 1980), p. G-7.

10. Id., at G-7.

11. Id., at G-8.

12. U. S. Congress. House. Committee on Merchant Marine and Fisheries, The Endangered Species Act of 1973. H. R. Rep. No. 93-412 (Washington: U.S. Govt. Print. Off., 1973), pp. 4-5.

13. Telephone Conversation with Mr. Julian Wooten, Director, Natural Resources and Environmental Affairs Division, Facilities Department, Marine Corps Base Camp Lejeune, North Carolina.

14. See Scott Hamilton Jr., "Navy Sponsors Two Ecological Areas," The Navy Civil Engineer, Winter 1984-85, pp. 18-19 for a recent example of a substitution preservation action taken by the Navy in Guam. The Navy created two Ecological Reserve Areas (ERAs) to compensate for the loss of 14 acres of prime coral reef habitat caused by dredging associated with the construction of an ammunition wharf.

15. U. S. Laws, Statutes, etc. "The Water Resources Development Act of 1986", United States Statutes at Large Public Law 99-662, 99th Congress, 2d Sess. (Washington: U.S. Govt. Print Off., 1986), Section 601, v. 100, p. 4138 which provides in pertinent part that:

Tennessee-Tombigbee Waterway Wildlife Mitigation, Alabama and Mississippi: Report of the Chief of Engineers, dated Augst 31, 1985, at a total cost of \$60,200,000. The Secretary is authorized to acquire from willing sellers in a timely manner at fair market value 88,000 acres of land for mitigation of wildlife losses resulting from construction and operation of the project for the Tennessee-Tombigbee Waterway, Alabama and Mississippi. Such lands shall be in addition to, and not in lieu of, lands currently owned by the United States in the project area which are designated as wildlife mitigation lands for such project.

* * *

Emphasis shall be placed on acquisition of lands which are predominately flood plain forest.

except that the 34,000 acres of bottomland hardwood lost as a result of the construction of the navigation project shall be replaced in-kind.

16. See Joseph Kaminski and LT. Gary Minck, CEC, USN, "How the Navy Cleaned up Toxic site Contamination", The Navy Civil Engineer, Spring 1984, pp. 11-13. See also, Philip Shabooff, "Settlement is set in vast cleanup of Toxic Waste-Army and Shell Oil will pay up to one billion", The New York Times, 2 February, 1988, p. A10. That article provides in pertinent part that:

The Army and the Shell Oil Company agreed today to jointly pay as much as \$1 billion to clean up the Army's Rocky Mountain Arsenal, one of the most contaminated toxic waste sites in the country.

* * *

The 27-square-mile arsenal, next to Denver's Stapleton airport, is contaminated by the residues of nerve gas and other chemical weapons made by the Army at the site from the early 1940's until the late 1960's and by wastes from the production of pesticides by Shell Oil on land leased by the company.

The chemicals have seeped into underground water supplies in the area. Justice Department officials said the chemical trichlorethylene had been found in the drinking water of "a few" homes near the site but not in amounts large enough to pose a serious threat to the health of residents.

* * *

Under a formula described in the agreement, the Army and Shell will split the first \$500 million of the costs evenly. For any amount from \$500 million the Army will pay 65 percent and Shell 35 percent, and for any amount over \$700 million the Army will pay 80 percent and Shell 20 percent.

The goal under the agreement is to complete the cleanup by the year 2000.

* * *

For a detailed and illustrated discussion of the Rocky Mountain Arsenal cleanup See Karen B. Wiley and Steven L. Rhodes, "Decontaminating Federal Facilities, the Case of the

Rocky Mountain Arsenal", Environment, April 1987, pp. 16-20 and 29-33.

17. Telephone conversation with Lieutenant Commander Daniel Speigelburg, CEC, USN, Environmental Quality Division, Naval Facility Engineering Command Headquarters, Alexandria, Virginia.

18. Id.

19. See. Marine Corps Box, Camp Lejeune, North Carolina, Sea Turtle Protection Program, BO 11015.7A (Marine Corps Base, Camp Lejeune, NC: 1987).

20. See Colonel Gerald H. Turley, USMC (Ret), "Our Dwindling Training Areas", Marine Corps Gazette, July 1982, pp. 28-32 and Blair Chase, "Maneuver Training Areas, An Endangered Species", Air Defense, April-June 1982, pp. 31-34.

21. Barcelo v. Brown, 478 F.Supp. 646 (D. Puerto Rico F.2d 1979), rev'd sub nom. Romero-Barcelo v. Brown, 643 F.2d 835 (1st Cir. 1981), rev'd sub nom. Weinburger v. Romero-Barcelo, 456 U.S. 305, 102 S.Ct. 1798, 72 L.Ed.2d 91 (1982).

22. 478 F. Supp. at 689.

23. Id. at 690.

24. Id. at 691.

25. 643 F. 2d. at 858.

26. Letter from Kenneth E. Black, Regional Director, Region 4, Fish and Wildlife Service, Department of the Interior to Mr. C. D. Moore, Director, Installation Planning Division, Naval Facilities Engineering Command, Atlantic Division, 16 May 1980, p. 2.

27. Letter from William G. Gordon, Assistant Administrator for Fisheries, National Marine Fisheries Service, Department of Commerce to Commander E. P. Fucile, Naval Facilities Engineering Command, Atlantic Division, 18 December 1981, p. 2.

Chapter III

1. U.S. Laws, Statutes, etc. "Federal Water Pollution Control Act, U.S. Code Service, Title 33, 1987 ed., (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 1251-1376.

2. 33 U.S.C.S., (1987 ed.), sec. 1251.
3. Id., sec. 1281-1299.
4. Id., sec. 1362(b).
5. Id., sec. 1362(14).
6. Id., sec. 1362(7).
7. Id., sec 1311 and 1342.
8. Id., sec. 1344.
9. Id., sec. 1321.
10. Id., sec. 1322.
11. Id., sec. 1319.
12. U.S. Laws, Statutes, etc., "Marine Protection, Research and Sanctuaries Act of 1972," U.S. Code Service, Title 33, 1987 ed., (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 1401-1445.
13. 33 U.S.C.S., (1987 ed.), sec. 1401(b).
14. Id., sec. 1412.
15. Id., sec. 1413.
16. U.S. Laws, Statutes, etc., "Clean Air Act", U.S. Code Service, Title 42, 1982 ed., (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 7401-7642.
17. 42 U.S.C.S., (1982 ed.), sec. 7401(b)(1) and (4).
18. Id., sec. 7410.
19. Id., sec. 7407.
20. Id., sec. 7413.
21. U.S. Laws, Statutes, etc., "Noise Control Act of 1972," U.S. Code Service, Title 42, 1982 ed., (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 4901-4918.
22. 42 U.S.C.S., (1982 ed.) sec. 4901(b).

23. Id., sec. 4905.

24. Id., sec. 4909(a).

25. Id., sec. 4910.

26. U.S. Laws, Statutes, etc, "Federal Insecticide, Fungicide, and Rodenticide Act", U.S. Code Service, Title 7, 1987 ed. (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 136-136y.

27. 7 U.S.C.S., (1987 ed.), sec 136j (a)(2)(g).

28. U.S. Laws, Statutes, etc., "Resource Conservation and Recovery Act", U.S. Code Service, Title 42, 1982 ed., (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 6901-6987.

29. 42 U.S.C.S., (1982 ed.), sec. 6903(14).

30. 42 U.S.C.S., (May 1987 ed.), sec. 6902(a)(3).

31. Id., sec. 6902(a)(4).

32. Id., sec. 6902 (a)(8).

33. 42 U.S.C.S., (1982 ed.), sec. 6901(a)(4).

34. 42 U.S.C.S., (May 1987 ed.), sec. 6928 and 6973.

35. U.S. Laws, Statutes, etc., "National Environmental Policy Act of 1969", U.S. Code Service, Title 42, 1982 ed., (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 4321-4370.

36. 42 U.S.C.S. (1982 ed.), sec 4331(a).

37. Id., sec. 4331(b).

38. Id., sec. 4332(c).

39. Id..

40. Id..

41. Council on Environmental Quality Regulations, Code of Federal Regulations, Title 40--Protection of Environment, (Washington: Office of the Federal Register, National Archives and Records Administration, 1 July 1987), chp. V, pt. 1506.6 (Public Involvement).

42. Id., pt. 1504 (Predecision Referrals to the Council of Proposed Federal Actions Determined to be Environmentally Unsatisfactory).

43. U.S. Laws, Statutes, etc., "National Historic Preservation Act of 1966," U.S. Code Service, Title 16, May 1987 ed., (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 470-470w-6.

44. 16 U.S.C.S., (1987 ed.), sec. 470(b)(4).

45. Id., May (1987 ed.), sec. 470A.

46. U.S. Laws, Statutes, etc., "Archaeological Resources Protection Act of 1979", U.S. Code Service, Title 16, May 1987 ed., (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 470aa-470ll.

47. 16 U.S.C.S., (May 1987 ed.), sec. 470bb(1).

48. Id., sec. 470aa.

49. Id., sec. 470cc.

50. Id., sec. 470ee.

51. Id..

52. U.S. Laws, Statutes, etc. "Marine Protection, Research and Sanctuaries Act of 1972," U.S. Code Service, Title 16, (1984 ed.), (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 1431-1434.

53. 16 U.S.C.S. (May 1987 ed.), sec. 1433-4.

54. U.S. Laws, Statutes, etc., "Marine Mammal Protection Act of 1972," U.S. Code Service, Title 16, (1984 ed.), (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 1361-1407.

55. 16 U.S.C.S. (1984 ed.), sec. 1361.

56. Id., sec. 1362(12).

57. Id., sec. 1372(a)(1) and (2) respectively.

58. Id., sec. 1375.

59. U.S. Laws, Statutes, etc., "Endangered Species Act of 1973", U.S. Code Service, Title 16, (1984 ed.), (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 1531-1543.

60. 16 U.S.C.S. (1984 ed.), sec. 1531.

61. Id., sec. 1532(6) and (20) respectively.

62. Id., sec. 1531(c).

63. U.S. Laws, Statutes, etc. "Coastal Zone Management Act of 1972," U.S. Code Service, Title 16, (1984 ed.), (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 1451-1464.

64. 16 U.S.C.S., (1984 ed.), sec. 1453(1).

65. Id., sec. 1452(3).

66. Id., sec. 1456(c).

67. See. Commander Richard Kuersteiner, JAGC, USNR-R and Commander Paul Sullivan, JAGC, USNR-R, "Coastal Federalism: The Role of Federal Supremacy Doctrine in Federal and State Conflict Resolution," The JAG Journal, Summer 1984, pp. 39-55.

68. "DOD Seeks \$500 Million for FY 1989 Cleanup, 25 Percent More Than Previous Years' Funding," Environmental Reporter, 25 March 1988, v. 18, No. 48, p. 2366.

69. U.S. Laws, Statutes, etc., "Comprehensive Environmental Response, Compensation, and Liability Act of 1980," U.S. Code Service, Title 42, (1982 ed.), (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 9601-9657.

70. 42 U.S.C.S. (1982 ed.), sec. 9607.

71. Id., sec. 9620 and 9607.

72. U.S. Laws, Statutes, etc., "Superfund Amendments and Reauthorization Act of 1986," U.S. Code Service, Title 42. (May 1987 ed.), (Rochester, New York: The Lawyers Co-Operative Publishing Co.) sec. 9609, 9616-9626, 9658-9662, 9671-9675 and "Defense Environmental Restoration Program," U.S. Code Service, Title 10, (May 1987 ed.), (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 2701-2707.

73. 42 U.S.C.S. (May 1987 ed.), sec. 9620(c).

74. Environmental Protection Agency, "Federal Agency Hazardous Waste Compliance Docket," Federal Register, 12 February, 1988, pp. 4280-4304.

75. 10 U.S.C.S. (1987 ed.), sec. 2701-7.

76. Id., sec. 2703.

77. Id., sec. 2701(c).

78. Id., sec. 2706.

79. 33 U.S.C.S. (1987 ed.), sec. 1321 (Oil and Hazardous Substance Liability) and sec. 1321(c) (Removal of Discharged Oil or Hazardous Substances: National Contingency Plan).

80. U.S. President, Executive Order 12088, "Federal Compliance with Pollution Control Standards," Federal Register, 13 October, 1978 p. 47707.

Chapter IV

1. United States General Accounting Office, Reports Issued in December 1987, (Washington: 1988), p. 6.

2. U.S. Constitution, Article II, Section 3. That Section provides in pertinent part that: "(The President) shall take care that the laws be faithfully executed."

3. Council on Environmental Quality, Sixteenth Annual Environmental Quality Report, (Washington: 1985).

Chapter V

1. Office of Federal Register, National Archives and Records Administration, (The) 1987/1988 United States Government Manual (Washington: 1987), p. 525.

2. Id. at pp. 527-528.

3. Source: Appendix A, 1987-1988 U.S. Government Manual, p. 782.

4. Environmental Protection Agency, Federal Facilities Compliance Program: Resolution of Compliance Problems at Federal Facilities, (Washington: 1984).

5. Step 1 is set out at Id., pp. 10-12.

6. Step 2 is set out at Id., pp. 12-13.
7. Step 3 is set out at Id., p. 14.
8. Step 4 is set out at Id., pp. 15-16.
9. Step 5 is set out at Id., pp. 17-18.
10. U.S. President, Executive Order, "Federal Compliance With Pollution Control Standards," Federal Register, 17 October 1978, sec. 1-201, p. 47707.
11. Id., sec. 1-601 to 1-604.
12. U.S. President, Executive Order, "Management of Federal Legal Resources," Federal Register, 20 July 1979, p. 42657.
13. Letter from Robert A. McConnell to John D. Dingell, 11 October 1983.
14. Last year the Department of Justice assumed the position that EPA could not unilaterally issue administrative orders to federal facilities. See "Justice Department Nixes EPA Plan to Issue Administrative Orders at Federal Facilities," Environmental Reporter, 1 May 1987, pp. 7-8 and "EPA Creates Federal Facilities Task Force To Gain Compliance With Hazardous Waste Law," Environmental Reporter, 12 June 1987, pp. 574-575.
15. "State Attorneys Call for More Authority to Enforce Statutes at Federal Facilities," Environmental Reporter, 11 March 1988, pp. 2283.
16. "Extension of Remarks concerning H.R. 3785, Eckart Bill Amending The Solid Waste Disposal Act to Clarify the Application of Certain Requirements and Sanctions to Federal Facilities", Congressional Record, 18 December 1987, p. E4878.
17. See 42 U.S.C.S. (1982 ed.) sec. 4332(c).
18. 40 C.F.R. Part 1504 (1987 ed).
19. Council on Environmental Quality, Fifteenth Annual Report of the Council on Environmental Quality, (Washington: 1985), p. 524.
20. Id., p. 523.

21. Letter from Donald Paul Hodel to Brigadier General James M. Mead, USMC of 4 December 1987.

22. Letter from Mr. Keith E. Eastin to Mr. A. Alan Hill of 31 December 1987.

23. Opening Remarks to the Council on Environmental Quality by Mr. Keith Eastin concerning the proposed establishment of Cherry 1 and CORE Military Operating Area which were made on 25 January 1988.

24. "Armed Services Panel Charges Cleanup Process 'Needlessly Complicated' by EPA at Defense Sites," Environmental Reporter, 27 November 1987, p. 1779.

25. "DOD Officials Disagree over Minnesota Pact; Schafer Says EPA Should Guide, Not Penalize," Environmental Reporter, 13 November 1987, p. 1734.

26. 42 U.S.C.S. (1987 ed.), sec. 9620.

27. See Kyle E. McSlarrow, "The Department of Defense Environmental Cleanup Program: Application of State Standards to Federal Facilities After SARA," Environmental Law Reporter, April 1987, pp. 10120 to 10127.

28. 42 U.S.C.S. (1987 ed.), sec. 9617(a).

29. Id., sec. 9617(b).

30. U.S. Marine Corps, "Real Property Facilities Manual, v. 5," MCD P11000.8B, (Washington: 1983), pp. 4-46 to 4-47.

31. Id., p. 4-47.

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1. Toth v. Quarles, 350 U.S. 11, 76 S.Ct. 1 (1955).

2. Id., 76 S.Ct. at 4.

3. Id., 76 S.Ct. at 5.

4. U.S. Constitution, Article II, Section 2, Clause 1.

5. U.S. Constitution, Article I, Section 8, Clause 12 to Clause 15.

6. Gilligan v. Morgan, 413 U.S. 1, 93 S.Ct. 2440, 2443, 37 L.Ed.2d 407 (1973).

7. Id., 93 S.Ct. at 2443-4.
8. Id., 93 S.Ct. at 2443-5.
9. Id., 93 S.Ct. at 2444-5.
10. Id., 93 S.Ct. at 2446.
11. Id., 93 S.Ct. at 2446-7.
12. Barcelo v. Brown, 478 F.Supp. 646, (D. Puerto Rico), rev. sub. nom. Romero-Barcelo v. Brown, 643 F.2d 835 (1st Cir. 1980); rev. sub. nom. Weinburger v. Romero-Barcelo, 456 U.S. 305, 102 S.Ct. 1798, 72 L.Ed.2d 91 (1982). The District Court opinion was 66 double-columned printed pages in length and included two additional pages of maps.
13. Id., 478 F. Supp. at 651.
14. Id., 478 F. Supp. at 701.
15. See Commander Ralph W. Blanchard, USN, "The Protest at Snowy Beach", U.S. Naval Institute Proceedings, July 1972, pp. 118-122 for a detailed narrative concerning operation Snowy Beach from a public affairs perspective.
16. Citizens For Reid Park v. Laird, 336 F.Supp. 783, 785-6, (S.D. Maine: 1972).
17. Id., 336 F.Supp. at 788.
18. Blanchard, cited at note 15 above, at p. 120.
19. 336 F.Supp. at 786.
20. Id., at 788-9. See also Donald N. Zillman, "Environmental Responsibility for the Military: Citizens for Reid State Park v. Laird," Military Law Review, Summer 1972, v. 57, pp. 203-215.
21. Ecology and Environment, Inc., "Land Use Management Plan For Naval Facilities, Vieques, Puerto Rico", May 1986, Figure 1-4, p. 1-13, and Figure 1-2, p. 1-7 respectively.
22. Id., Figure 1-5 at p. 1-17 and Figure 1-5 cont at p. 1-19.
23. Id., at p. 1-12.
24. Id..

25. Id., at p. 1-11.
26. Id., at p. 1-4.
27. Barcelo v. Brown, 478 F.Supp. 646, 651 (D. Puerto Rico: 1979).
28. 478 F.Supp. at p. 651.
29. Id., at pp. 706-7.
30. Id., at p. 707-8.
31. Id..
32. Id..
33. Romero-Barcelo v. Brown, 643 F.2d 835, 861-2 (1st Cir., 1981).
34. 643 F.2d at pp. 861-2.
35. Id., at p. 683.
36. Weinburger v. Romero-Barcelo, 456 U.S. 305, 102 S.Ct. 1798, 1800, 72 L.Ed.2d 91 (1982).
37. 102 S.Ct. at 1804-5.
38. Id., at 1804-5.
39. Id..
40. Branning v. United States, 654 F.2d 88 (Ct. Cl. 1981), app. den. 784 F.2d 361 (Fed. Cir. 1986).
41. 654 F.2d at 91.
42. Id..
43. See Captain Charles Gittins, USMC, "Branning v. United States: The Sound of Freedom or Inverse Condemnation," Naval Law Review, Winter 1986, pp. 109-121 for a detailed discussion of the aircraft noise case law and legislation which preceded Branning.
44. 654 F.2d at 102.
45. 784 F.2d at p. 363.

46. 784 F.2d at pp. 363-4 and pp. 364-365 respectively.

47. For further information concerning the impact of encroachment on naval installations see Mel Jones, "Corps Feels Land Pinch - Encroachment Problem Grows Around Bases," Navy Times, 4 April 1988, p. 1; Lieutenant Commander Janes C. Haug, CEC, USN, "Encroachment - How Would You - the Collateral Duty PAO Deal With It?," The Navy Civil Engineer, Winter 1983, pp. 29-30; Commander Joseph J. Gawarkiewicz III, CEC, USN, "Encroachment", The Navy Civil Engineer, Winter 1977, p. 4; and U.S. Marine Corps, Encroachment Control, MCO 11011.22, (Washington: 1985).

48. The factual basis for this part of Chapter VI is derived from the Plaintiffs' complaint, the Court's memorandum opinion, the Plaintiffs' memorandum in support of its motion to show cause, the Defendants' memorandum in opposition to the Plaintiffs' motion to show cause and/or the Defendant's motion for stay pending appeal in the Case of Township of Colts Neck, the Board of Education of the Township of Colts Neck, Concerned Citizens of Colts Neck, Inc. and Donahue v. Lehaman and Bone, Civil Action No. 87-471, 87-908 (District of New Jersey: 1987).

49. U.S. Laws, Statutes, etc, "Fish and Wildlife Coordination Act", U.S. Code Service, Title 16, (1978 ed.), (Rochester, New York: The Lawyers Co-Operative Publishing Co.), sec. 661-667e.

50. 643 F.2d. at p. 862.

51. Judge Clarkson Fisher, Memorandum Opinion, Civil Action No. 87-471, 87-908, United States District Court for the District of New Jersey, 25 March 1987, p. 11.

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1. Ecology and Environment, Inc., Land Use Management Plan for Naval Facilities, Vieques, Puerto Rico, (1986), (hereinafter cited on the 1986 Vieques LUMP.

2. Ecology and Environment, Inc., Environmental Assessment of Continued Use of the Atlantic Fleet Weapons Training Facility Inner Range, Vieques, Puerto Rico, (1986).

3. Id., at pp. 9-1 to 9-2.

4. 1986 Vieques LUMP at pp. 1-1 to 1-2.

5. Source: Id., Figure 3-8 cont. at pp. 3-55 to 3-56.
6. 1986 Vieques LUMP at pp. 3-52 to 3-58.
7. Source: Id., Figure 3-8 at pp. 3-53 to 3-54.
8. 1986 Vieques LUMP at pp. 3-58 to 3-59.
9. Id., at pp. 3-61 to 3-62.
10. Id., at p. 3-60. See also Appendix A of the 1986 Vieques LUMP.
11. Source: Id., Table 3-5 at p. 3-60.
12. 1986 Vieques LUMP at pp. 3-62 to 3-63.
13. Id., at p. 63.
14. Id.,
15. Id., at pp. 3-63 to 3-64.
16. Id., at pp. 3-64 to 3-65.
17. Id., at p. 3-59.
18. Id., at p. 3-61.
19. Id., at p. 3-65.

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2. Id., para. 1, p. 1.
3. Id., para. 5, pp. 2-4.
4. Id., para. 6c, p. 6.
5. Id., para. 7a, p. 6.
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7. Department of the Navy, "U.S. Navy Regulations," (Washington: 1973), Article 0765, p. 25.

8. Memorandum from the Secretary of the Navy to the Chief of Naval Operations and the Commandant of the Marine Corps, "Resources in Support of Environmental Compliance," of 29 April 1988.

9. Id., pp. 1-2.

10. Id., p. 1.

11. Id., p. 2.

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1. Memorandum from the Secretary of the Navy to the Chief of Naval Operations and the Commandant of the Marine Corps, "Resources in Support of Environmental Compliance," of 29 April 1988. p. 2.

2. U.S. Marine Corps, "Western Area Counsel Office Test Program," MARCORBUL 5400, (Washington: 1988).

3. Source: Manual Corps Base Camp Lejeune FY-88 Annual Operation Plan (AOP).

4. See Jerry Thomas, "GAC: A New Approach for Improving Management of Navy Lands," The Navy Civil Engineer, Spring 1987, pp. 21-24.

5. SECNAVINST 6240.6E, para. 5j, p. 4.

6. See Arthur D. Little, Current Practices in Environmental Auditing, 68-01-6160, (Arthur D. Little, Inc.: 1984), and Environmental Protection Agency, Annotated Bibliography on Environmental Auditing, 5th ed., (Washington: 1984).

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APPENDIX A

DEPARTMENT OF THE NAVY FACILITIES LISTED ON THE FEDERAL FACILITY HAZARDOUS WASTE COMPLIANCE DOCKET

STATE (EPA REGION) AND FACILITY (CITY) Alaska (10)

1. Naval Artic Research Lab
2. Adak Naval Station

Arizona (9)

1. Marine Corps Air Station, Yuma

California (9)

1. Civil Engineering Laboratory (Port Hueneme)
2. Dept of Defense Housing Facility (Novato)
3. Fleet Antisubmarine Warfare Training Ctr (San Diego)
4. Marine Corps Base (Camp Pendleton)
5. Marine Corps Air Station (Tustin)
6. Marine Corps Air Ground Combat Ctr (Twentynine Palms)
7. Marine Corps Logistics Base (Barstow)
8. Marine Corps Mountain Warfare Training Center
9. Marine Corps Recruit Depot (San Diego)
(Bridgeport)
10. Naval Weapons Station (Seal Beach-Fallbrook)
11. Naval Air Facility (El Centro)
12. Naval Air Logistics Force (Crows Landing)
13. Naval Air Station (Alameda)
14. Naval Air Station (Lemoor)
15. Naval Air Station (Miramar)
16. Naval Air Station (Moffett Field)
17. Naval Air Station (North Island, San Diego)
18. Naval Amphibious Base (Coronado, San Diego)
19. Naval Communication Station (Stockton)
20. Naval Communications Station (Imperial Beach)
21. Naval Construction Battalion Ctr (Ventura)
22. Naval Facilities Engineering Command (San Diego)
23. Naval Hospital (San Diego)
24. Naval Ocean Systems Center (Azusa)
25. Naval Petroleum Reserve #1 (Fupman)
26. Naval Postgraduate School (Monterrey)
27. Naval Regional Medical Center (Oakland)
28. Naval Security Group Activity (Skaggs Island)
29. Naval Shipyard (Hunters Point)
30. Naval Shipyard (Long Beach)
31. Naval Shipyard (Mare Island, Vallejo)
32. Naval Station (Long Beach)

(California continued)

33. Naval Station (Treasure Island, San Francisco)
34. Naval Submarine Base (San Diego)
35. Naval Supply Center (Oakland)
36. Naval Supply Center (Oakland-Alameda Fac)
37. Naval Supply Center (Point Loma Annex, San Diego)
38. Naval Supply Center Oakland-Pt. Molate Ste (Richmond)
39. Naval Training Center, Camp Nimitz (San Diego)
40. Naval Training Center, (San Diego)
41. Naval Weapons Station, (China Lake)
42. Naval Weapons Station, (Concord)
43. Naval Weapons Station, (Fallbrook Annex)
44. Navy Public Works Center, (San Francisco-Oakland)
45. Pacific Missile Test Center (Point Mugu)
46. Point Sur Naval Facility (Big Sur)
47. Public Works Center (San Diego)
48. Singer Education Division (Imperial Beach)
49. Triple A Shipyard-Hunters Point Div (San Francisco)

Colorado (8)

1. Anvil Points (Rifle)

Connecticut (1)

1. Naval Submarine Base, New London (Groton)
2. Naval Underwater Systems Center (New London)
3. Naval Underwater Systems Center (East Lyme)

Washington, D.C. (3)

1. Naval Research Laboratory
2. Naval Security Station
3. Naval Shipyard

Delaware (3)

1. Navy Facility (Lewes)

Florida (4)

1. Naval Air Station Jacksonville
2. Naval Air Station Cecil Field (Jacksonville)
3. Naval Air Station (Key West)
4. Naval Air Station (Richmond Perrine)
5. Naval Air Station Trumbo Pt (Key West)
6. Naval Air Station Whiting Field (Milton)
7. Naval Coastal Systems Ctr. (Panama City)
8. Naval Station (Mayport)

(Florida continued)

9. Naval Supply Center Fuel Depot, (Jacksonville)
10. Naval Training Center (Orlando)
11. Naval Underwater Systems Center (Palm Beach)
12. US Naval Air Station (Pensacola)
13. USN Naval Underwater Systems Center (Fort Lauderdale)

Georgia (4)

1. Marine Corps Logistics Base, (Albany)
2. Navy Submarine Base, (Kings Bay)

Guam (9)

1. Naval Magazine (Guam)
2. Apra Harbor Naval Complex (Piti)
3. Naval Air Station (Agana)
4. Naval Comm Area Master Sta West Pacific
5. Naval Facil (Guam)
6. Naval Hospital (Guam)
7. Naval Ship Repair Facility (Guam)
8. Naval Station (Guam)
9. SASA Valley Fuel Depot (Piti)
10. U.S. Naval Magazine (Santa Rita)

Hawaii (9)

1. Barbers Point Naval Air Station
2. Barbers Point Navy Public Works Ctr.
3. Kaneohe Bay Marine Corps Air Station
4. Naval Magazine LuaLualei (Westloch)
5. Naval Shipyard Pearl Harbor
6. Naval Submarine Base (Pearl Harbor)
7. Pacific Missile Range Facility (Kekaha)
8. Pearl Harbor Naval Sta
9. Pearl Harbor Naval Supply Center
10. Pearl Harbor Navy Public Works Center
11. Shore Intermediate Maintenance Activity (Pearl Harbor)
12. USN Fleet Training Group (Pearl Harbor)
13. Waiawa Shaft (Pearl Harbor)

Illinois (5)

1. Naval Training Center (Great Lakes)
2. Glenview Naval Air Station

Indiana (5)

1. Naval Avionics Center (Indianapolis)

(Indiana continued)

2. Naval Weapons Support Center (Crane)

Kentucky (4)

1. Naval Ordnance Station (Louisville)

Louisiana (6)

1. Naval Air Station (New Orleans)

Massachusetts (1)

1. Boston Naval Shipyard
2. Naval Air Station (South Weymouth)

Maryland (3)

1. David W. Taylor Naval R&S Yard (Annapolis)
2. NAS Patuxent River
3. National Naval Medical Center (Bethesda)
4. Nav Ord Station (Indian Head)
5. Naval Academy (Annapolis)
6. Naval Air Facility (Camp Springs)
7. Naval Communication Unit Washington (Clinton)
8. Naval Electronic Sys Eng Activity (Saint Inigoes)
9. Naval Research Lab Launch (Waldorf)
10. NAVSUPFAC Thurmont (Thurmont)
11. NSWC White Oak
12. USN Bloodsworth AR (Chapelago)

Maine (1)

1. Brunswick NAS
2. Naval Security Group Activity (Winterharbor)
3. US Naval Sec Grp Operations Site (Corea)
4. USN Naval Communications Unit (Cutler)
5. USN Portsmouth Naval Shipyard (Kittery)

Minnesota (5)

1. Naval Ind. Reserve Ordnance Plant (Fridley)

Mississippi (4)

1. NAS (Meridan)
2. Naval Construction Battalion Ctr (Gulfport)

North Carolina (4)

1. Marine Corps Air Station (Cherry Point)
2. Marine Corps Air Station New River (Jacksonville)
3. Marine Corps Auxilliary Landing Field (Bogue Field Morehead City)
4. Marine Corps Base Camp Lejeune (Jacksonville)

Nebraska (7)

1. Naval Reserve Center (Lincoln)
2. Naval Support Activity (Omaha)

New Jersey (2)

1. Earle Naval Weapons Station
2. Naval Air Engineering Center (Lakehurst)
3. Naval Air Propulsion Center (Trenton)

New York (2)

1. Naval Air Station (Fallon)
2. Naval Air Station Brooklyn (East Meadow)
2. Naval Underwater Systems Center (Fisher's Island)
3. Naval Weapons Industrial Reserve Plant (Bethpage)
4. Naval Weapons Industrial Reserve Plant (Calverton)
5. Supervisor of Shipbuilding (Brooklyn)

Ohio (5)

1. US Air Force Plant 85, (Columbus)

Oregon (10)

1. LSC Marine Inc/USNS Wilkes T-AGS, (Portland)

Pennsylvania (3)

1. NADC (Warminster)
2. NAS (Willow Grove)
3. Naval Regional Medical Center (Philadelphia)
4. Naval Station Philadelphia
5. Navy Aviation Supply Office (Philadelphia)
6. Navy Ships Parts Control Center (Mechanicsburg)

Puerto Rico (2)

1. Camp Garcia #1 (Vieques)
2. Naval Ammunition Facility (Vieques)
3. Naval Station Ceiba (Ceiba)

(Puerto Rico continued)

4. Naval Station Roosevelt Roads (Miramar)
5. U.S. Naval Security Group Activity (Sabana Seca)

Rhode Island (1)

1. Charlestown NAS
2. Naval Air Station Quonset Point (North Kingstown)
3. Naval Construction Battalion Ctr. Davisville (North Kingston)
4. Navy Marine Corps Reserve Center (Cranston)
5. US Naval Education and Training Center (Newport)

South Carolina (4)

1. Marine Corps Air Station (Beaufort)
2. Marine Corps Recruit Depot (Parris Island)
3. Naval Hospital (Beaufort)
4. Naval Shipyard (Charleston)
5. Naval Weapons Station (Charlestown)

Tennessee (4)

1. Naval Air Station Memphis (Millington)
2. Naval Weapons Industrial Res Plant (Bristol)

Texas (6)

1. Naval Air Station Chase Field (Beeville)
2. Naval Air Station (Corpus Christi)
3. Naval Air Station Dallas (Grand Prairie)
4. Naval Air Station (Kingsville)
5. Naval Weapons Ind Res Plant, Dallas (Grand Prairie)

Utah (8)

1. Naval Ind Reserve Ordnance Plant Hercules Inc (Magna)

Virginia (3)

1. Dod Armed Forces Exper Training Activity (Williamsburg)
2. Marine Corps Battalion HQ, (Arlington)
3. NC Devel & Education Comm. (Quantico)
4. Naval Air Station, Norfolk
5. Naval Air Station, Oceana (Norfolk)
6. Naval Amph Base (Little Creek)
7. Naval Base, (Norfolk)
8. Naval Communication Area Mas (Suffolk)
9. Naval Hospital, Portsmouth
10. Naval Shipyard Norfolk (Portsmouth)

(Virginia continued)

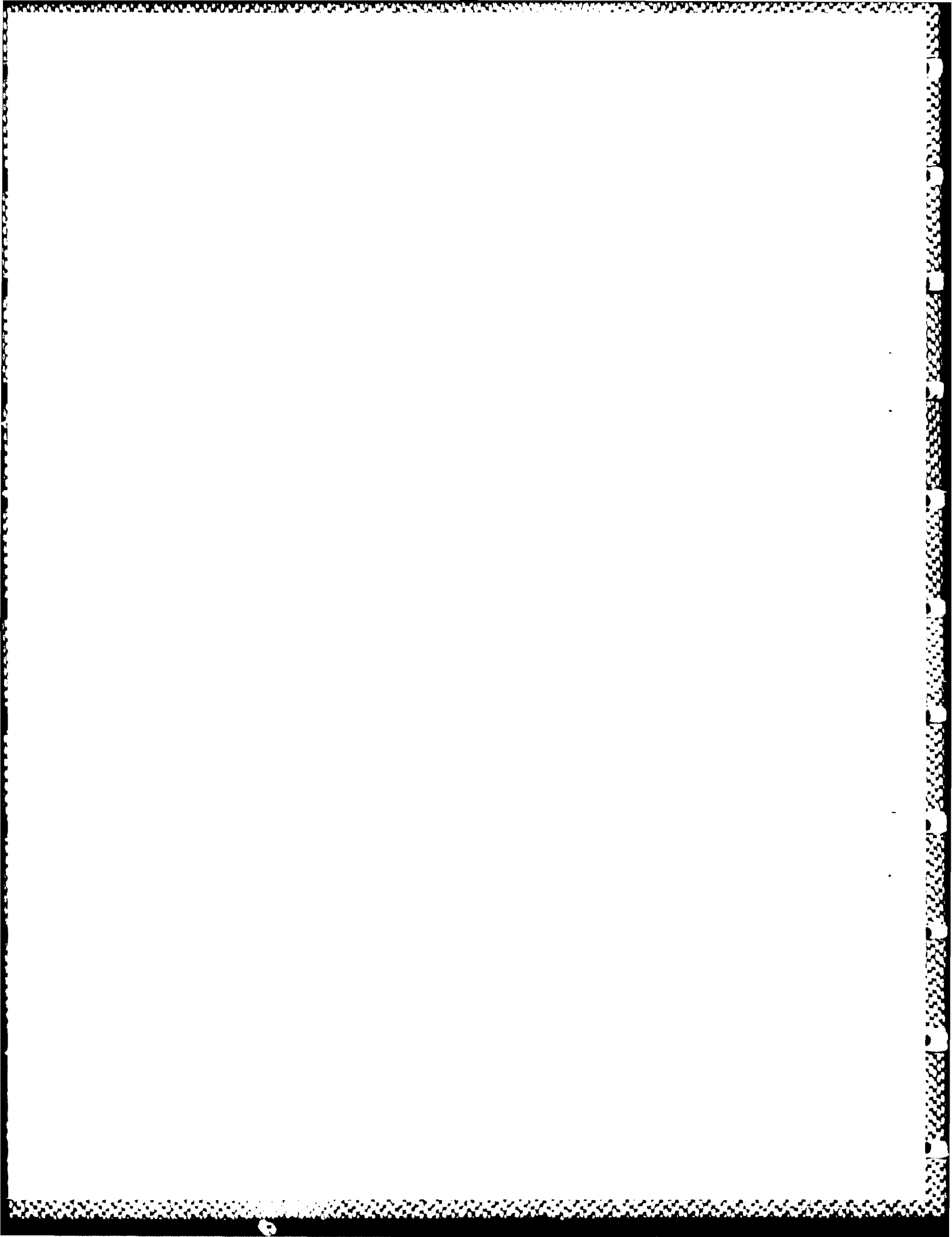
11. Naval Supply Center (Norfolk)
12. Naval Supply Center (Yorktown)
13. Naval Surface Weapons Ctr. Dahlgren
14. Navy and Marine Corps Reserve (Roanoke)
15. NWS (Yorktown)
16. USN Auxiliary Landing Field (Chesapeake)

Washington (10)

1. Naval Air Station Whidbey Island (Oak Harbor)
2. Naval Shipyard Puget Sound (Bremerton)
3. Naval Undersea Warfare Eng Stat, (Keyport)
4. Naval Undersea Warfare Eng Stat, Indian Island (Hadlock)
5. Seattle Naval Station
6. US Navy Jackson Park Ldfl (Bremerton)
7. US Navy - Camp Wesley Harris Marine Fac (Bremerton)
8. US Navy Naval Supply Center Puget Sound (Bremerton)
9. US Navy Bangor Submarine Base

West Virginia (3)

1. Nav Comm Area (Sugar Grove)
2. USN Allegheny Ballistics Lab (Rocket Center)



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- 3. Environmental Assessments
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- 4. Environmental Impact Statements
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- 5. Recommended Procedures for Conducting
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- 3. Groundwater Protection
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6. Solid Waste
7. Noise Abatement
8. Pollution From Floating Drydocks

CHAPTER 13. OIL AND HAZARDOUS SUBSTANCE RELEASE
CONTINGENCY PLANNING

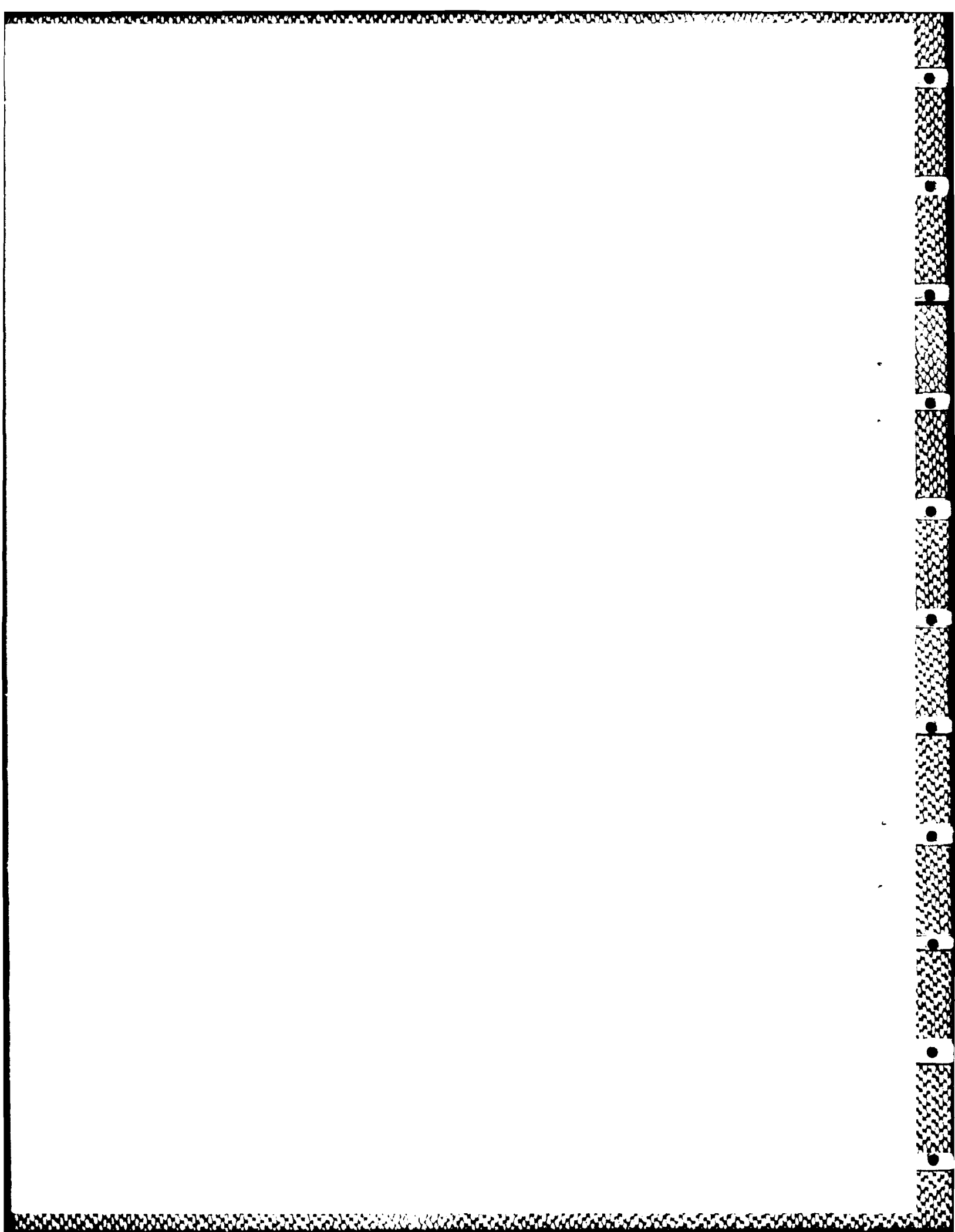
- PART 1. Navy Organizational Aspects for the
Removal of Oil and Hazardous Substances
(HS)
2. Navy Oil Discharge Response
 3. Navy HS Release Response
 4. Salvage-Related Oil and HS Spills

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