

AD-A277 236



2

NAVAL POSTGRADUATE SCHOOL
Monterey, California



THESIS

DTIC
SELECTE
MAR 25, 1994
S B D

ISSUES FACING NAVY CONTRACTING ORGANIZATIONS
IN IMPLEMENTING
OFPP POLICY LETTER 92-4

by

Joseph A. Keller

December, 1993

Thesis Advisor:

Larry R. Jones

Approved for public release; distribution is unlimited.

17288



94-09253

94 3 24 085

DTIC QUALITY ASSURED 1

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE December 10, 1993.	3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE ISSUES FACING NAVY CONTRACTING ORGANIZATIONS IN IMPLEMENTING OFPP POLICY LETTER 92-4		5. FUNDING NUMBERS	
6. AUTHOR Joseph A. Keller			
7. PERFORMING ORGANIZATION NAME AND ADDRESS Naval Postgraduate School Monterey CA 93943-5000		8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME AND ADDRESS Naval Supply Systems Command 1935 Jefferson Davis Highway Arlington, VA 22241-5360		10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.			
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.		12b. DISTRIBUTION CODE A	
13. ABSTRACT (maximum 200 words) This thesis investigates the challenges faced by Navy contracting organizations as they attempt to comply with OFPP Policy Letter 92-4 (<i>Procurement of Environmentally-Sound and Energy-Efficient Products and Services</i>) which mandates that all Federal agencies give special attention to energy and environmental factors in all phases of agency operations, including procurement. The primary impact of the Policy Letter will be on contracting officers': review of specifications and source selection criteria; debriefs to unsuccessful offerors and handling of protests; and evaluation of a contractor's compliance with a contract. Impediments hindering compliance include: lack of a feeling of responsibility; lack of expertise; and lack of incentives. Recommendations to overcome these impediments include: communicating responsibility to both requirements personnel and contracting personnel; establishing and administering training courses; and providing positive organizational and personal incentives to contracting personnel.			
14. SUBJECT TERMS Environment, policy letter, contracting		15. NUMBER OF PAGES 173	
		16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UL

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)

Prescribed by ANSI Std. Z39-18

Approved for public release; distribution is unlimited.

ISSUES FACING NAVY CONTRACTING ORGANIZATIONS
IN IMPLEMENTING
OFPP POLICY LETTER 92-4

by

Joseph A. Keller
Lieutenant, United States Navy
B.S., John Carroll University, 1983


Submitted in partial fulfillment
of the requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
December 1993

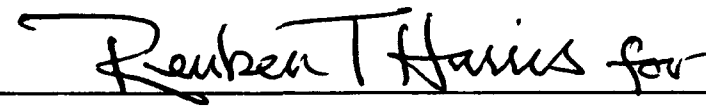
Author:


Joseph A. Keller

Approved by:


Larry Jones, Principal Advisor


Walter Owen, Associate Advisor


David R. Whipple, Chairman
Department of Administrative Sciences

ABSTRACT

This thesis investigates the challenges faced by Navy contracting organizations as they attempt to comply with OFPP Policy Letter 92-4 (*The Procurement of Environmentally-Sound and Energy-Efficient Products and Services*) that mandates that all federal agencies give special attention to energy and environmental factors in all phases of agency operations, including procurement. The primary impact of the Policy Letter will be on the contracting officer's review of specifications and source selection criteria; debriefs to unsuccessful offerors and handling of protests; and evaluation of a contractor's compliance with the contract. Impediments hindering compliance include: lack of a feeling of responsibility; lack of expertise; and lack of incentives. Recommendations to overcome these impediments include: communicating responsibility to both requirements personnel and contracting personnel; establishing and administering training programs; and providing positive organizational and personal incentives to contracting personnel.

Accession For	
NTIS GRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

TABLE OF CONTENTS

I. INTRODUCTION.....	1
A. THE NAVY IN THE DECADE OF THE ENVIRONMENT.....	1
B. AREA OF RESEARCH AND RESEARCH QUESTIONS.....	6
C. SCOPE.....	6
D. METHODOLOGY.....	8
E. BENEFITS OF RESEARCH.....	10
F. ORGANIZATION OF RESEARCH.....	11
II. BACKGROUND.....	14
A. NAVY IMPACT ON THE ENVIRONMENT.....	14
B. FEDERAL ENVIRONMENTAL LEGISLATION PERTINENT TO THE NAVY.....	16
C. EXECUTIVE ORDERS ON THE ENVIRONMENT PERTINENT TO THE NAVY.....	27
D. CONCLUDING COMMENT ON ENVIRONMENTAL LEGISLATION AND EXECUTIVE ORDERS.....	30
E. DOLLAR IMPACT OF ENVIRONMENTAL LEGISLATION ON THE NAVY.....	32
F. INCREASED MEDIA ATTENTION ON ENVIRONMENTAL ISSUES.....	38
G. NAVY ENVIRONMENTAL POLICY.....	40
III. OFPP POLICY LETTER 92-4.....	44
A. INTRODUCTION.....	44
B. OFFICE OF FEDERAL PROCUREMENT POLICY.....	44
C. HISTORY OF OFPP POLICY LETTER 92-4.....	46
D. UNIQUE REQUIREMENTS OF OFPP POLICY LETTER 92-4....	49
E. ACTION REQUIRED BY DARC AND CAAC.....	53

F. CURRENT STATUS OF OFPP POLICY LETTER 92-4.....	54
IV. FEEDBACK FROM NAVY CONTRACTING ACTIVITIES.....	56
A. INTRODUCTION.....	56
B. ORGANIZATIONS CHOSEN TO BE SURVEYED.....	58
C. PROCESS FOR SOLICITING EXPERT OPINION.....	59
D. SUMMARY OF DATA COLLECTED.....	61
E. PRELUDE TO ANALYSIS.....	75
V. INTERPRETATION AND ANALYSIS.....	77
A. INTRODUCTION.....	77
B. UNIQUE REQUIREMENTS OF OFPP POLICY 92-4.....	77
C. PRINCIPAL IMPACTS OF OFPP POLICY LETTER 92-4.....	78
D. ACTIONS THAT WOULD FACILITATE COMPLIANCE.....	90
E. CHAPTER SUMMARY.....	99
VI. CONCLUSIONS & RECOMMENDATIONS.....	102
A. INTRODUCTION.....	102
B. COMMUNICATING RESPONSIBILITY.....	103
C. TRAINING.....	107
D. POSITIVE ORGANIZATIONAL AND PERSONAL INCENTIVES.....	113
E. IDEAS FOR FURTHER RESEARCH.....	114
F. CONCLUSION.....	115
APPENDIX A (LIST OF ACRONYMS).....	117
APPENDIX B (OFPP POLICY LETTER 92-4).....	119
APPENDIX C (ORGANIZATIONS CONTACTED AT THE REQUEST OF NAVSUP).....	126
APPENDIX D (ORGANIZATIONS CONTACTED AT THE DISCRETION OF THE RESEARCHER).....	129

APPENDIX E (FORM USED DURING INFORMATION GATHERING).....	133
APPENDIX F (COVER LETTER).....	134
APPENDIX G (SURVEY).....	135
APPENDIX H (MAJOR FEDERAL ENVIRONMENTAL STATUTES AFFECTING NAVY OPERATIONS).....	142
APPENDIX I (LIST OF ENVIRONMENTAL COORDINATORS).....	144
APPENDIX J (SECNAV ENVIRONMENTAL AWARDS WINNERS LIST)....	152
APPENDIX K (ACTUAL NOMINATION FOR AWARD WRITE-UP).....	154
APPENDIX L (TERMS & DEFINITIONS).....	155
LIST OF REFERENCES.....	158
BIBLIOGRAPHY.....	161
INITIAL DISTRIBUTION.....	165

I. INTRODUCTION

A. THE NAVY IN THE DECADE OF THE ENVIRONMENT

The 1990s have been referred to as the "Decade of the Environment." [Ref 1, p. 1] Perhaps no other issue commands a higher priority with the American public. People are concerned about the air they breathe, the water they drink, and the land they live on. Beyond the pollution of these three basic environmental elements, other more esoteric environmental issues have taken center stage recently; namely, stratospheric ozone depletion and global warming.

A January 1993 NASA report confirmed that "the ozone layer that protects Earth from ultraviolet radiation has dropped to record low levels globally."¹ [Ref 2, p. 1A] In addition to the harmful effects caused by ozone-depleting substances, "soot -which is emitted: by burning wood, diesel and other fuels; by industrial processes; and plowing and burning agricultural fields- is causing up to 60,000 deaths each year." [Ref 3] The list of damage that we have done and continue to do to our environment is extensive. The list of environmental and energy issues continues to grow.

As is demonstrated quantitatively later in the thesis, the Department of the Navy (DoN) exerts a tremendous impact on the

¹ A complete list of acronyms used in this thesis is found in Appendix A.

environment. Similarly, environmental legislation --and the resultant programs that have been developed to comply with that legislation-- have a significant impact on the Navy. For example, in Fiscal Year (FY) 1994, the "DoD is budgeting to spend \$5.185 billion on environmental programs." [Ref 4] The Navy will account for approximately thirty percent of this, an amount equivalent to \$1.513 billion. [Ref 4] Given the significance of the mutual impact between the Navy and environmental legislation and issues, a keen concern is...How is the Navy addressing these "burning" environmental issues?

For practical purposes, the DoN views its environmental responsibilities as falling into either one of three broad categories:

- (1) Environmental Compliance;
- (2) Environmental Cleanup; or
- (3) Pollution Prevention.²

1. Environmental Compliance

The Navy defines environmental compliance projects as non-routine, nonrecurring projects (e.g., remedial actions, corrective actions, air/water pollution controls, etc.) over \$10,000, required by environmental laws or regulations, or to

² The DoD classifies its Environmental Security Programs as either: cleanup; compliance; BRAC (Base Realignment and Closure); Legacy; or SERDP (Strategic Environmental Research and Development Program). The individual branches (e.g., Army, Air Force, Navy, and other DoD agencies) reporting to DoD report their environmental activities under one of these categories with the exception of SERDP. A definition of SERDP --along with several other key terms used in this thesis-- is provided in Appendix L.

bring a facility or operation into compliance. [Ref 5, p. 3-2] The Navy is required by OMB Circular A-106 to report environmental compliance requirements in a specified format. NAVFACINST 6240.3 defines Navy procedures for complying with this requirement. The Department of Defense (DoD) reporting system for its Environmental Security Programs is designed such that environmental compliance data include the above-mentioned environmental compliance projects plus conservation and pollution prevention projects.³ Despite these reporting requirements, and for purposes of this research, it is important to treat "pollution prevention" as separate from "compliance." Perennially, the DoD spends over half of all its environmental funding in the area of environmental compliance. The same fact holds true for the Navy. In Fiscal Year 1992, the Navy spent \$655 million on environmental compliance activities. [Ref 4] This was slightly more than one-third of the total environmental compliance funds expended by the Department of Defense.

2. Environmental Cleanup

The disestablishment of the former Soviet Union, signifying the end of the Cold War, has led to a rethinking of U.S. military strategy. This new strategy no longer requires the retention of as many defense facilities and weapon systems, as was required before the disestablishment of the

³ Definitions of "conservation" and "pollution prevention" are provided in Appendix L.

Soviet Union. Hence, many DoD facilities have already begun to shut down, while many more are slated for closure. In addition to the pronounced effects that "DoD downsizing" has on the military infrastructure, defense-industrial base, financial stability of local communities, and personal lives, downsizing has brought to the forefront the environmental costs associated with base closures. The environmental cleanup costs associated with BRAC (Base Realignment and Closure) in Fiscal Year 1992 were \$522 million. [Ref 4] The Navy portion of this amounted to \$55 million. [Ref 4] DoD environmental cleanup costs associated with BRAC in Fiscal Year 1993 are estimated to be \$550 million with the Navy portion of that being \$150 million. [Ref 4] In addition to dollars spent on environmental cleanup related to BRAC, both the DoD and the DoN spend money on environmental cleanup which is unrelated to base closures. The total environmental cleanup dollars spent by the Department of Defense in Fiscal Year 1992 was \$1,651 million! [Ref 4] About eighteen percent of that (or \$295 million) was attributable to the Department of the Navy.

3. Pollution Prevention

While much attention is currently focused on cleanup costs, another movement is underway and expected to have an equally significant impact on the Department of Defense in the near future. Pollution Prevention is that movement. As expressed in greater detail in OPNAVINST 5090.1A, pollution

prevention is the preferred policy of the Department of the Navy. To minimize environmental cleanup costs and harmful infringements upon our precious environment, it only makes sense for the Navy to minimize or altogether avoid pollution wherever possible. This involves "being smart up front." One way of "being smart up front" involves considering environmental and energy factors in the procurement process; in other words, considering the impact that a potential procurement will have on the environment. The Office of Federal Procurement Policy (OFPP) Policy Letter 92-4, which was released on November 2, 1992, addresses this concept head on.⁴

OFPP Policy Letter 92-4 mandates that all Federal agency components give special attention to assuring that energy and environmental factors are considered in all phases of agency operations. Unlike guidance geared toward the DoD in the past, OFPP Policy Letter 92-4 mandates that specific actions be accomplished in the procurement process to ensure that energy and environmental factors are considered in any procurement. OFPP Policy Letter 92-4 is currently in a review process which is designed to incorporate the policy into the Federal Acquisition Regulation (FAR). Once OFPP Policy Letter 92-4 is incorporated into the FAR, it is expected to have a significant impact on the contracting process.

⁴ OFPP Policy Letter 92-4 is provided in its entirety as Appendix B.

B. AREA OF RESEARCH & RESEARCH QUESTIONS

This thesis investigates the challenges faced by Navy contracting activities as they attempt to comply with the requirements of OFPP Policy Letter 92-4.⁵

1. Primary Question

The primary question this thesis attempts to answer is: What plan, with prioritized action steps, would allow Navy contracting activities to efficiently and effectively comply with the requirements mandated by OFPP Policy Letter 92-4?

2. Subsidiary Questions

To answer the above primary question, it is necessary to address the following subsidiary questions:

- (1) What are the unique requirements of OFPP Policy Letter 92-4?
- (2) What will be some of the principal impacts of these requirements on Navy contracting activities?
- (3) What major actions should Navy contracting activities take to comply with OFPP Policy Letter 92-4?

C. SCOPE

OFPP Policy Letter 92-4 mandates that *all Federal agency components* give special attention to assuring that energy and environmental factors are considered in all phases of agency operations. "All Federal agency components" refers to a huge

⁵ Definitions of "contracting" and a "contracting activity" are provided in Appendix L.

population. The United States owns approximately "387,000 buildings located on 27,000 installations, spread over 729 million acres of land (roughly one-third the land area of the United States)." [Ref 6, p. III-1] Due to the infeasibility of exploring the impact of OFPP Policy Letter 92-4 on all Federal agency components, this thesis will only focus on one of the components of one of those Federal agencies... the Department of the Navy. In this light, OFPP Policy Letter 92-4 places new requirements on Navy contracting activities. This thesis:

- (1) delineates in detail what those requirements are;
- (2) reveals what impacts these requirements are expected to have on Navy contracting activities, using the contracting process as a framework for analysis;
- (3) accumulates a consensus on what obstacles need to be overcome in order to comply with OFPP Policy Letter 92-4; and
- (4) provides a recommended plan with prioritized action steps that, if implemented, should allow for an efficient implementation of OFPP Policy Letter 92-4.

Due to the fact that no known research exists regarding the implementation of OFPP Policy Letter 92-4, this thesis may be the first attempt at highlighting the major issues which will confront Navy contracting activities as they attempt to implement OFPP Policy Letter 92-4. This process in itself is a time-consuming endeavor. Therefore, time does not permit this thesis to explore: (1) the viewpoints of all Navy contracting activities; or (2) alternative action plans designed to overcome the identified obstacles. Therefore,

this thesis does not claim to present the optimal plan that the Navy must take to implement OFPP Policy Letter 92-4. Hopefully, the issues and obstacles identified in the course of this thesis will encourage further research by future thesis students who may in turn determine an optimal plan.

D. METHODOLOGY

This thesis utilizes a wide variety of references to gain historical information as well as current facts, figures, and expert opinions. The following paragraph describes (in chronological order) the general methodology used to gather information necessary to thoroughly answer the research questions.

Extensive bibliographies were obtained from DLSIE (Defense Logistics Studies Information Exchange) and DTIC (Defense Technical Information Center) from which specific references were chosen to provide detailed insight to environmental topics. These references, in turn, provided ideas and approaches to enhance the content of this thesis. The Congressional Research Service (CRS) was contacted to provide a chronological history of environmental legislation. Key personnel at the Office of Federal Procurement Policy, the Defense Acquisition Regulatory Council (DARC), and the Civilian Agency Acquisition Council (CAAC) were contacted to obtain background information specifically on OFPP Policy Letter 92-4. Specific figures demonstrating the Navy's

tremendous impact on the environment were obtained from the Naval Facilities Engineering Command (NAVFAC) and the Office of the Secretary of Defense (OSD). Likewise, specific data revealing the impact of environmental legislation and issues on the Navy were obtained from the Environmental Protection Agency (EPA), the Office of the CNO (Chief of Naval Operations), and the Navy Comptroller (NAVCOMPT). Given the significant relationship already existing between the Navy and environmental legislation and issues, expert opinions were obtained from a variety of organizations within the Department of the Navy as to the anticipated impact of OFPP Policy Letter 92-4 on the Navy's contracting activities. Selected Navy contracting activities were surveyed in order to:

- (1) gauge the popularity of the policy itself;
- (2) gain a consensus on the anticipated impact of the policy on the contracting process;
- (3) gain a consensus on the obstacles currently hindering implementation; and
- (4) develop a plan of prioritized action steps which would allow for the successful implementation of OFPP Policy Letter 92-4.⁶

In addition to the above information-gathering methods, other Federal agencies and departments -- such as the EPA, GSA, and DoD -- were contacted to obtain their insight and expert opinion. Throughout the research, close contact was

⁶ The Pollution Prevention Specialist at NAVSUP provided a list of organizations from which the researcher solicited expert opinion. A copy of this list is provided as Appendix C. Other activities were chosen at the discretion of the researcher. A copy of that list is provided as Appendix D.

maintained with the researcher's sponsor [Pollution Prevention Office, Naval Supply Systems Command Headquarters (NAVSUP)]. Close contact was continuously maintained via: (1) numerous phone calls; (2) written correspondence; and (3) thesis travel.⁷

E. BENEFITS OF RESEARCH

Ultimately, this thesis will benefit the Department of the Navy and the Department of Defense. This thesis provides the Navy with a plan for implementing the actions it needs to take in order to comply with OFPP Policy Letter 92-4. Specifically, this thesis identifies key issues facing Navy contracting activities as they attempt to comply with OFPP Policy Letter 92-4. Recommendations on how to address those issues will provide the Navy a plan that will facilitate successful implementation of OFPP Policy Letter 92-4. This thesis may encourage more detailed research such as cost-benefit analysis of various alternative implementation plans. This research intends to keep the Navy one step ahead of the Department of Defense and Congress, and will thus allow the Navy:

- (1) to chart, more proactively, the course of its budget programming, formulation and execution, vice reacting to DoD and congressional regulatory mandates; and

⁷ Thesis travel was performed for the purposes of: (1) attending a DoD Solid Waste Committee Meeting; (2) conducting personal interviews; and (3) gathering reference materials.

- (2) to reduce the potential sanctions and penalties associated with non-implementation.

F. ORGANIZATION OF RESEARCH

This section briefly describes the outlay of the remainder of the thesis.

Chapter II --Background-- begins by describing the tremendous impact that the Navy exerts on the environment. Next, Chapter II provides an historical sketch of federal environmental legislation and executive orders pertinent to the DoN. Chapter II then illustrates how that environmental legislation exerts a powerful influence on the Department of the Navy. Chapter II also shows that a trend of increased media attention on environmental issues is expected to exert powerful pressures on the DoN. After establishing the significance of the mutual impact existing between environmental legislation and the DoN, Chapter II concludes by stating Navy environmental policy, and provides an organization chart to illustrate the organizational structure designed to support that policy.

Chapter III --OFPP Policy Letter 92-4-- begins by providing background information on the Office of Federal Procurement Policy. Then, Chapter III describes how OFPP Policy Letter 92-4 was drafted and the procedures it underwent to arrive at its final draft. Next, Chapter III demonstrates the similarity between OFPP Policy Letter 92-4 and the Federal statutes, executive orders, and other OFPP policy letters that

preceded it (some of which were summarized in Chapter II) which will prove that --at least in intent-- OFPP Policy Letter 92-4 is really nothing new. Chapter III does, however, delineate the unique requirements of OFPP Policy Letter 92-4 that are causing such a stir in the "procurement world" of the Department of Defense (including, of course, the DoN). It is the delineation of these unique requirements that provides the answers to Research Question #1 (i.e., What are the unique requirements of OFPP Policy Letter 92-4?). Chapter III concludes by providing the current status of the Policy Letter.

Given that OFPP Policy Letter 92-4 will be incorporated into the FAR, it is expected to have a significant impact on Navy contracting activities. Chapter IV --Feedback from Navy Contracting Activities-- begins by explaining why certain organizations in particular were chosen to be surveyed as a source of expert opinion. Chapter IV then discusses the processes used to solicit expert opinion from a wide range of Navy organizations as to:

- (1) the expected impact that the Policy Letter will have on Navy contracting activities;
- (2) obstacles that need to be overcome; and
- (3) actions that will facilitate implementation of OFPP Policy Letter 92-4.

Chapter IV concludes by providing a summary of the data collected.

Chapter V --Interpretation and Analysis-- provides analysis of the vast array of data collected and develops answers to each of the subsidiary research questions.

Chapter VI --Conclusions and Recommendations-- provides independent conclusions drawn from the research that follow logically from the analysis of information gathered from:

- (1) "Navy contracting activities" that were formally surveyed; and
- (2) "other" activities within and outside the Department of the Navy that were solicited by means other than the formal survey method.

Chapter VI provides a recommended plan --consisting of the prioritized actions-- the Navy should follow to efficiently and effectively implement OFPP Policy Letter 92-4. Chapter VI concludes by providing suggestions for further research related to the implementation of OFPP Policy Letter 92-4.

The last section of the thesis provides appendices to supplement the thesis with detailed information useful for reading and understanding the main body of the research.

II. BACKGROUND

A. NAVY IMPACT ON THE ENVIRONMENT

In Fiscal Year 1992, the Federal Government spent \$286.6 billion on Department of Defense outlays which was 25.4 percent of all Federal budget outlays. [Ref 7, p. 3] In that same fiscal year, the Department of the Navy spent \$96.9 billion which was 33.8 percent of the DoD total outlays or 8.6 percent of the Federal outlays. [Ref 8] In Fiscal Year 1993, Navy planned outlays are \$92.3 billion. [Ref 8]. Of that amount, \$29.43 billion is attributable solely to Navy Procurement appropriations which include: Ships & Conversions; Fixed-Wing Aircraft; Helicopters; and Missiles. [Ref 8] Although the Navy buys its weapon systems using these appropriations, the Navy also spends millions of dollars buying a wide variety of other goods and services using other appropriations such as: Operations & Maintenance; Military Construction; Military Personnel; and Reserve Personnel.

In addition to the Navy exerting a tremendous impact on the environment, via the amount of goods and services it purchases, the Navy also occupies a phenomenal amount of Earth. The DoD Base Structure Report for FY 93 shows that the Department of the Navy holds environmental stewardship over 3.984 million acres of land worldwide! [Ref 9 p. 8] This acreage includes: 503 properties in the United States located

on every state in the Nation; eighteen properties on U.S. territories and possessions; and sixty-four properties on foreign areas. [Ref 9, p. 8] On these properties, the Navy operates a total of 160 installations.⁸ [Ref 9, p. 41] Of these 160 installations, 128 are located on twenty-eight of the fifty states and four are located in the District of Columbia. [Ref 9, p. 43-47] The Navy also operates twenty-three installations on foreign soil and five installations on U.S. territories and possessions. [Ref 9, p. 41, p. 48]

Vast DoD industrial activities produce in excess of a ton of toxic waste every minute, an amount greater than that produced by the top five United States chemical companies combined. [Ref 10, p. 4] The DoN accounts for a significant percentage of these industrial activities. Through the activities of its shore facilities, construction battalions, aircraft, surface ships, and submarines, the Navy operates its forces on land, in the air, on the surface of the sea, and below the surface of the sea. Quite simply, there is no part of this planet that escapes the broad footprint of the Navy.

By virtue of the facts that the Department of the Navy: (1) spends a significant share of the DoD and federal budget dollars; and (2) operates its forces in the land, sea and air environments, it is apparent that the Navy exerts a powerful

⁸ The definition of "installation" is provided in Appendix L.

influence on the environment. Similarly, environmental legislation has a significant impact on the DoN. Before that impact is illustrated, the next two sections provide an overview of environmentally-related federal statutes and executive orders pertinent to the DoN.

B. FEDERAL ENVIRONMENTAL LEGISLATION PERTINENT TO THE NAVY

Of the myriad federal environmental laws, thirteen form the basis for the programs of the EPA and are particularly pertinent to the DoN. Each of these thirteen major environmental laws are administered by the EPA. The origin and evolution of these and other environmental statutes are described in CRS Report 83-84 ENR, *Environmental Protection: An Historical Review of the Legislation and Programs of the EPA.* [Ref 11, p. 2] Eleven of these thirteen statutes are briefly described in the summaries below.⁹

1. National Environmental Policy Act (NEPA)

The National Environmental Policy Act was enacted as P.L. 91-190 on January 1, 1970. NEPA declared that it should be national policy to encourage productive and enjoyable harmony between humans and the environment. [Ref 11, p. 97] The purposes of NEPA were to:

⁹ The summaries of the Safe Drinking Water Act and the Federal Insecticide, Fungicide, and Rodenticide Act are not presented in this research. CERCLA and SARA are treated under the same summary (i.e., Summary #7).

- (1) promote efforts which will prevent or eliminate damage to the environment;
- (2) enrich the understanding of the ecological systems and natural resources important to the nation; and
- (3) establish a Council on Environmental Quality.¹⁰

NEPA is very significant for two reasons: (1) its unique requirement for preparation of EISs (Environmental Impact Statements) had a dramatic influence on Federal agency decision making; and (2) it directs that all U.S. policies, regulations, and public laws should be in accordance with NEPA, and that all Federal agencies should consider environmental values in their decision making. [Ref 11, p. 98]

2. Ocean Dumping Act

The Ocean Dumping Act, of course, has special significance to the Navy. The Act has two basic aims: (1) to regulate intentional ocean disposal of materials, and (2) to authorize related research. [Ref 11, p. 31] This Act consists of the first two titles of the Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA, P.L. 92-532). Since 1972, the basic provisions of the Act have remained virtually unchanged; however, many new authorities have been added including:

- (1) research responsibilities for EPA;

¹⁰ The Council on Environmental Quality effectively has been abolished, as all of its employees have been RIF'd (reduced in force). The move to disestablish CEQ has to be approved by Congress. [Ref 12]

(2) a 1991 ban on the ocean disposal of sewage sludge and industrial wastes; and

(3) provisions regarding medical wastes.

Four Federal agencies have responsibilities under the Ocean Dumping Act; they are: (1) the EPA; (2) the U.S. Army Corps of Engineers; (3) the National Oceanic and Atmospheric Administration; and (4) the Coast Guard.

3. Toxic Substances Control Act (TSCA)

The Toxic Substances Control Act was signed into law on October 11, 1976. The Act directs the EPA to:

- require manufacturers and processors to conduct tests for existing chemicals if: (1) their manufacture, distribution, processing, use or disposal may present an unreasonable risk of injury to health or the environment; or they are to be produced in substantial quantities and the potential for environmental release or human exposure is substantial; (2) existing data are insufficient to predict the effects of human exposure and environmental releases; and (3) testing is necessary to develop such data;
- prevent future risks through premarket screening and regulatory tracking of new chemical products;
- control unreasonable risks already known or as they are discovered for existing chemicals; and
- gather and disseminate information about chemical production, use, and possible adverse effects to human health and the environment. [Ref 11, p. 71]

The TSCA authorizes the EPA to regulate the production, processing, distribution, use, and disposal of any chemical that poses an unreasonable risk of injury to human health or the environment. Regulatory tools available to the EPA range from a total ban on production, distribution, use,

etc. to a requirement that the product containing the chemical bears a warning label at the point of sale.

4. Resource Conservation and Recovery Act of 1976 (RCRA)

The Resource Conservation and Recovery Act of 1976 established the Federal program regulating solid and hazardous waste management. [Ref 11, p. 45] RCRA's roots date back to the Solid Waste Disposal Act of 1965 (SWDA).¹¹ RCRA: (1) defines solid and hazardous wastes; (2) authorizes EPA to set standards for facilities that generate hazardous and solid wastes; and (3) establishes a permit program.

Federal solid wastes law has progressed through four major phases. In Phase 1 --SWDA of 1965-- legislation focused on research, demonstrations, and training. In Phase 2 --Resource Recovery Act of 1970-- legislation changed its focus from efficiency of disposal to reclamation of energy and materials from solid wastes. During Phase 2, the EPA was required to submit annual reports on means of promoting recycling and reducing the generation of wastes. In Phase 3 --RCRA-- the Federal Government embarked on a more active, regulatory role. In Phase 4 --Hazardous and Solid Wastes Amendments of 1984-- the Federal Government attempted to prevent future cleanup problems by:

¹¹ RCRA actually amends the Solid Waste Disposal Act of 1965, but the amendments were so comprehensive that the Act is commonly called RCRA rather than its official title.

- (1) prohibiting land disposal of untreated hazardous wastes;
- (2) setting deadlines for closure of facilities not meeting minimum standards; and
- (3) establishing a corrective action program.

5. Environmental Research, Development, and Demonstration Authorization Act (ERDDA)

In 1976, Congress enacted ERDDA (P.L. 94-475). Although authority to conduct basic research and demonstrate new technologies is conferred by Congress in the context of thirteen different environmental protection laws, ERDDA requires annual authorization of appropriations for most of the EPA's Research and Development (R&D) activity in a single statute.

ERDDA requires the EPA to prepare and submit a five-year environmental R&D plan to Congress annually. ERDDA of 1978 (P.L. 95-155) assigned the EPA the lead role in coordinating all federal environmental R&D. ERDDA also requires the EPA to maintain discrete programs of continuing, long-term research within each R&D activity, and to dedicate at least fifteen percent of funds appropriated for each activity to such long-term research. [Ref 11, p. 93]

6. Clean Water Act of 1977 (CWA)

The Clean Water Act of 1977 (P.L. 95-217) has its roots dating back to the Federal Water Pollution Control Act of 1948. Amendments in 1972 "spelled out ambitious programs for water quality improvement that are still being implemented

by industries and municipalities." [Ref 11, p. 23] The objective of the CWA is the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Two goals were also established by the 1972 legislation: (1) zero discharge of pollutants by 1985; and (2) water quality that is both "fishable" and "swimmable" by mid-1983. While those dates have passed, the goals remain, and efforts to attain the goals continue. The CWA demands that industry use the "best available technology" (BAT) that is economically achievable in order to expedite pollutant cleanup.

This Act, like many other environmental laws, embodies a philosophy of Federal-State partnership in which the Federal Government sets the agenda and standards for pollution abatement while states carry out day-to-day activities of implementation and enforcement. [Ref 11, p. 25] Under the CWA, water must be designated by states as either recreation, water supply, industrial, or other. Different quality standards apply to the various designations. The Act and its subsequent amendments address both "point source pollution" (i.e., wastes discharged from discrete, identifiable sources such as pipes) and "nonpoint source pollution" (e.g., stormwater runoff from agricultural lands and urban areas).

7. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or Superfund and SARA

CERCLA (P.L. 96-510) was enacted on December 11, 1980 and created the Superfund hazardous substance cleanup program. CERCLA was enlarged and reauthorized by the Superfund Amendments and Reauthorization Act of 1986 (SARA, P.L. 99-499). Together, CERCLA and its Amendments authorize the Federal Government to respond to spills, releases, and threatened releases of hazardous substances, as well as to leaking hazardous waste dumps. Response is also authorized for releases of "pollutants or contaminants" which are broadly defined to include virtually anything that can threaten the health of "any organism." [Ref 11, p. 55]

The fund is not to be used for responding to:

- (1) releases of naturally occurring unaltered substances;
- (2) releases from products which are part of the structure of residential buildings, businesses, or community structures; or
- (3) releases into drinking water supplies due to ordinary deterioration of the water system.

Under CERCLA, there are two types of Government responses:

- (1) responses to short-term removals where emergency action is required; and
- (2) long-term remedial actions taken on sites on the National Priority List (NPL).

EPA has developed a Hazardous Ranking System (HRS) to construct the NPL, which scores such factors as the quantity and nature of hazardous wastes present; the likelihood of contamination of ground water, surface water, and air; and the

proximity of the site to population and sensitive natural environments. [Ref 11, p. 58] As of October 1992, the NPL contained 1,236 sites of which only 126 were Federally owned. [Ref 11, p. 62] As of August 25, 1993, the DoD has forty-three sites on the NPL of which thirty belong to the DoN. [Ref 13]

Another important feature of CERCLA is that it made Federal agencies subject to the law in the same way as any nongovernmental entity. This includes liability and financial responsibility which could translate into a very costly venture for a violating DoN activity. In general, waste generators and operators are liable for response costs and for damage to the environment. In addition, EPA enforcement costs are collectible. Of significant note is that there are no limits to liability if the hazardous substance release is due to misconduct or negligence.

A provision of CERCLA that is uniquely relevant to the DoD is found in section 211 (Department of Defense Restoration Program). In addition to making the DoD's existing Installation Restoration Program a matter of statutory law, this provision establishes a research program for military hazardous wastes and the health effects of exposure to them. It also creates a special transfer account to be reprogrammed for the removal of unsafe buildings or debris at former DoD sites. [Ref 11, p. 62]

The Community Environmental Response Facilitation Act (P.L. 102-426) amended CERCLA. The Act eases military base closures by allowing portions of bases which are not contaminated to be sold or transferred, while cleanup activities continue at the contaminated portions.

8. Energy Planning and Community Right-to-Know Act (EPCRA)

The Energy Planning and Community Right-to-Know Act requires:

- (1) the development of a national inventory of releases of toxic chemicals; and
- (2) local emergency planning which allows for appropriate responses to chemical emergencies.

The purposes of the inventory [now known as the Toxic Release Inventory (TRI)] is to provide information to the general public about chemicals to which they may be exposed. The TRI is a computerized compilation by the EPA of annual data on environmental releases and transfers off-site by manufacturers and processors of more than 300 chemicals. [Ref 11, p. 67] Manufacturers with ten or more employees who either use 10,000 pounds or process 25,000 pounds of any one of the chemicals listed on the TRI must report annually to the EPA and to the State a variety of information regarding their use, treatment and disposal of each chemical. Furthermore, under the concept of "right-to-know," the Act mandates that local businesses provide responsible local officials with

relevant information about their activities involving hazardous chemicals.

9. Clean Air Act Amendments of 1990

Although the Clean Air Act Amendment of 1990 (P.L. 101-549) was signed into law on November 15, 1990, its roots date back to the Air Pollution Control Act (P.L. 84-159) which was passed into law in 1955. Prior to 1955, air pollution was controlled at the State and Local level. [Ref 11, p. 7] The Federal role was strengthened in subsequent amendments and changed significantly with the passage of the Clean Air Act Amendments of 1990. The Act establishes federally mandated minimum standards and assigns primary responsibility to states to assure adequate air quality. The Act addresses ozone depletion, mobile sources, air toxics, and the special problem of acid rain. Changes to the Act by the 1990 amendments included provisions to:

- (1) classify "nonattainment areas" according to the extent to which they exceed the standard and to tailor deadlines according to each area's unique status and problems;¹²
- (2) tighten automobile emission standards;
- (3) establish a new program to address the problem of sudden, catastrophic releases of toxics;
- (4) phase out the most ozone-depleting chemicals; and
- (5) update the enforcement provisions to include authority for the EPA to assess administrative penalties.

¹² Non-attainment areas are those areas not meeting the minimum standards.

10. Pollution Prevention Act of 1990

The Pollution Prevention Act states that it is the policy of the United States that

pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner. [Ref 11, p. 3]

The Pollution Prevention Act marked a turning point in the direction of U.S. environmental protection policy. Prior to this Act, the focus had been to reduce or repair environmental damage at the point where the pollutants are released into the environment. With the passage of this Act, Congress turned to pollution prevention through reduced generation of pollutants at their point of origin. Pollution prevention is also referred to as "source reduction" and "is viewed as the first step in a hierarchy of options to reduce risks to human health and the environment." [Ref 11, p. 3] Source reduction is defined as any practice which reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment prior to recycling, treatment, or disposal.

The Act also required the EPA to establish an Office of Pollution Prevention which was given authority to promote a multi-media (i.e., air, land, and water) approach to source reduction. The Act further requires the EPA to promote source

reduction practices in other Federal agencies and to establish an annual award program.

11. Energy Policy Act of 1992

The Energy Policy Act of 1992 (P.L. 102-482) was signed into law on October 24, 1992. It requires the Secretary of Energy to work with other Federal agencies to reduce significantly the use of energy and reduce the related environmental impacts by promoting the use of energy efficient and renewable energy technologies.

C. EXECUTIVE ORDERS ON THE ENVIRONMENT PERTINENT TO THE NAVY

1. Executive Order 11472

Executive Order 11472 was issued by President Richard Nixon on May 29, 1969, and became the catalyst for the environmental legislation that was to follow. Executive Order 11472 established the Citizen's Advisory Committee on Environmental Quality and the Environmental Quality Council. Action initiated by these two groups "led to the drafting of legislation that was signed into law on January 1, 1970, as NEPA." [Ref 10, p. 11]

2. Executive Order 12088

Section 1-101 of Executive Order 12088 states that the head of each Executive agency is responsible for ensuring that all necessary actions are taken for the prevention, control, and abatement of environmental pollution with respect to Federal facilities and activities under the control of the agency.

This executive order was signed by President Jimmy Carter in October 1978. Executive Order 12088 required Federal agencies to assume leadership in furthering the prevention, control, and abatement of pollution in compliance with federal environmental regulations.

3. Executive Order 12780

Executive Order 12780, which was issued on October 31, 1991, requires that the Federal Government assumes leadership in addressing solid waste management through acquisition procurement practices and policy options promoting environmentally-sound and energy-efficient waste reduction and recycling. More specifically, Section 502 of Executive Order 12780 "requires each Federal agency to annually review the effectiveness of its affirmative procurement program and provide a report of its findings to the EPA and to the OFPP, beginning with a report covering Fiscal Year 1992." [Ref 14]

4. Executive Order (Unnumbered)¹³

An executive order issued by President Bill Clinton on August 4, 1993 is the latest in the series of executive orders designed to protect the environment and public health via an increased emphasis on pollution prevention. Like Executive Order 12088, this executive order emphasizes that the Federal Government should set an example and become the leader in

¹³ This Executive Order was provided to the researcher via a facsimile transmission from the Office of the Assistant Secretary of the Navy (Installations and Environment).

pollution prevention. This executive order requires Federal facilities to reduce their toxic emissions by half by 1999 and requires those facilities to report any release of toxic pollutants to the public. Again, this executive order looks to the acquisition system as the vehicle by which pollution prevention is to be accomplished.

Specifically, the new executive order requires that each Federal agency to:

- (1) provide, in all future contracts, for the contractor to supply the Federal agency all information the Federal agency deems necessary to comply with this executive order; and
- (2) develop a written pollution prevention plan no later than the end of 1995 which sets forth the facility's contribution to the goal of reducing toxic emissions by half by 1999.

This executive order also requires that within twenty-four months of the date of the order

the DoD and the GSA, and other agencies, as appropriate, shall review their agency's standardized documents, including specifications and standards, and identify opportunities to eliminate or reduce the use by their agency of extremely hazardous substances and toxic chemicals, consistent with the safety and reliability requirements of their agency mission. [Ref 15, p. 6]

This executive order also states that any revisions to the FAR necessary to implement this order shall be made within twenty-four months of the date of the order (i.e., August 4, 1993). The executive order also encourages Federal agencies to develop and test innovative pollution prevention technologies, and encourages partnerships between industry, Federal agencies, Government laboratories, and academia to

assess and deploy innovative environmental technologies for domestic use and for markets abroad.

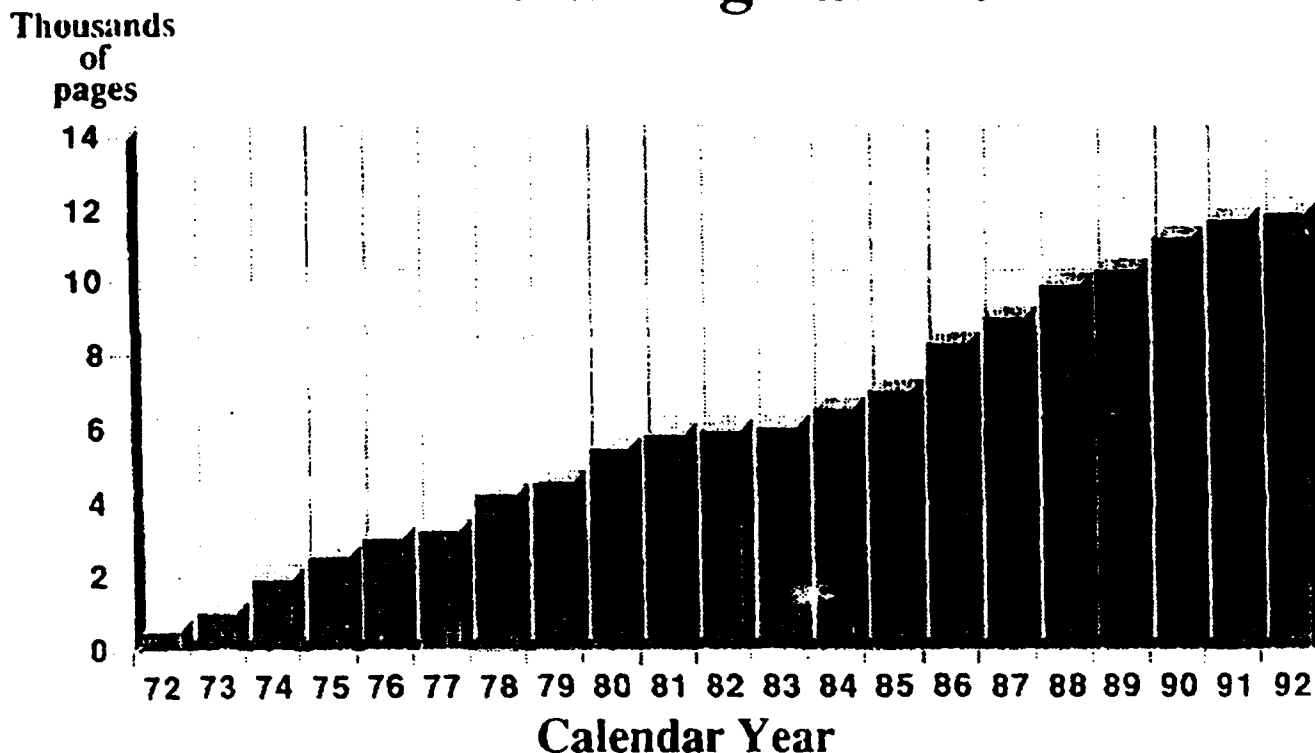
D. CONCLUDING COMMENT ON ENVIRONMENTAL LEGISLATION AND EXECUTIVE ORDERS

In concluding this section, it is important to note that the above summaries of the environmental statutes and executive orders are only brief descriptions of statutory and administrative law that are far more expansive in scope and much more specific in detail. Even with this limited knowledge of the general nature of the pertinent environmental statutes and executive orders, it is apparent that this legislation touches virtually every area of DoN operations through regulation in some fashion.

Equally significant to note is that, since 1972, there has been a substantial increase in Federal statutes that govern military environmental activity. As shown in Figure 2.1, the scope of Federal environmental regulation --as measured by the number of statutory pages-- has expanded dramatically. As is illustrated in the next section, this increase in complexity is not without cost to the DoD. Base commanders are under increasing pressure to devote scarce operating dollars to fund the disposal of currently generated waste, while simultaneously funding programs to comply with the growing list of federal, state, and local environmental statutes and administrative orders. [Ref 10, p. 7]

Figure 2.1

Environmental Regulations Code of Federal Regulations



Source: Department of the Navy, Deputy Chief of Naval Operations (Logistics), Environmental Protection, Safety & Occupational Health Division (N45), Washington, D.C. 20350-2000.

Figure 2.2 illustrates the increase in the number of Federal environmental statutes that has occurred since the turn of the century. Appendix H provides a list of the major Federal environmental statutes affecting Navy operations. These laws, and several executive orders and military instructions, are the driving forces for all of the DoN compliance and cleanup activities. The following section illustrates the dollar impact of the legislation, which was discussed in the previous section, on the DoN.

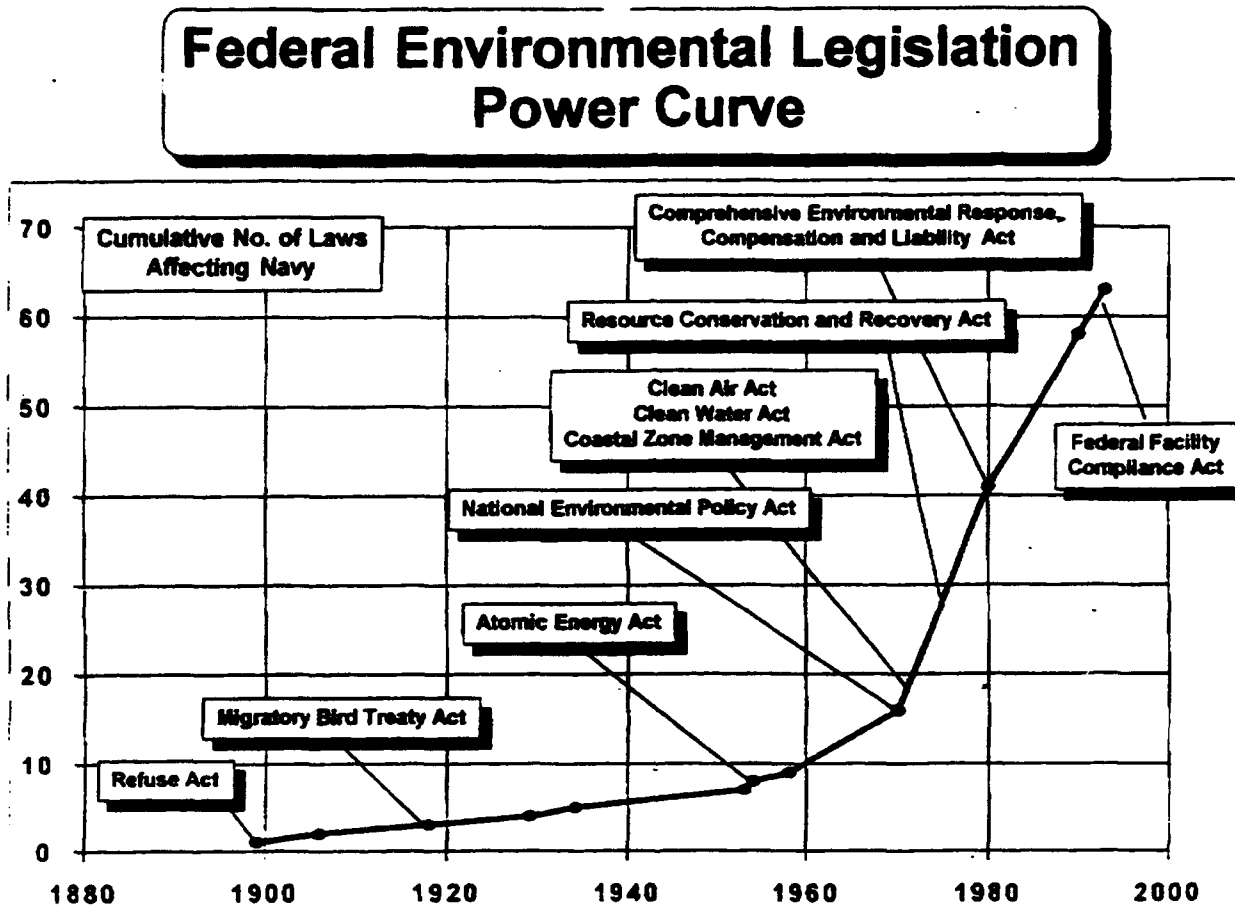
E. DOLLAR IMPACT OF ENVIRONMENTAL LEGISLATION ON THE NAVY

Planned budget authority for Navy environmental programs for Fiscal Year 1994 is in excess of \$1,513 million which can be divided into "compliance," "cleanup," and "BRAC." [Ref 4] This is an increase over all prior fiscal years as shown in Table 2.1 which provides DoD and DoN dollars either actually "spent" (FY 90 - FY 92) or "budgeted for" (FY 93 - FY 94).

As shown in Table 2.1, the DoD reporting system does not break out separately the dollars spent by the Army, Air Force, and Navy for Legacy projects and SERDP.¹⁴

¹⁴ Legacy programs are those programs pertaining to the preservation or conservation of national heritage properties (including cultural and/or historic) and endangered species. SERDP covers programs that are mutually beneficial to DoD, DoE, and EPA, and therefore is funded using SERDP funds.

Figure 2.2



Source: Department of the Navy, Deputy Chief of Naval Operations (Logistics), Environmental Protection, Safety & Occupational Health Division (N45), Washington, D.C. 20350-2000.

Table 2.1: DoD Environmental Security Programs FY 90 - FY 94
(figures in millions of dollars).

	<u>FY 90</u>	<u>FY 91</u>	<u>FY 92</u>	<u>FY 93</u>	<u>FY 94</u>
Cleanup					
Navy	158	230	240	368	450
DoD	601	1,065	1,129	1,638	2,309
Compliance					
Navy	192	358	655	802	931
DoD	790	1,108	1,929	2,514	2,484
BRAC					
Navy	0	9	55	150	132
DoD		294	522	550	282
Legacy					
Navy	N/A	N/A	N/A	N/A	N/A
DoD	N/A	10	25	50	10
SERDP					
Navy	N/A	N/A	N/A	N/A	N/A
DoD	N/A	77	70	180	100
Total					
Navy	350	497	950	1,320	1,513
DoD	1,391	2,554	3,675	4,923	5,185

Source: Charlie Wood, Program Analyst, Office of the Deputy Under Secretary of Defense (Environmental Security).

By the end of Fiscal Year 1992, as part of a congressionally mandated identification process, the Department of the Navy had identified hazardous waste, stored or disposed of improperly, at virtually every Navy installation. [Ref 10 p. 4] As shown in Table 2.1, the estimated cleanup costs of these sites in FY 93 alone is estimated to be \$518 million. This figure includes \$150 million relating to BRAC. The above-mentioned legislation also provides the legal support by which State and Local

governments, as well as other Federal agencies, may assess fines against DoN. The following sub-section illustrates the dollar impact that environmental legislation has on the DoN in terms of fines.

In FY 92, the DoN received 417 Notices of Violations (NOVs); that is, the Navy received 1.65 NOVs per Federal work day for the entire year. [Ref 16] This is an increase from the two prior fiscal years as shown in Table 2.2.

Table 2.2: Open Enforcement Actions in U.S. Navy.

	FY 1990	FY 1991	FY 1992
Number of NOVs	90	363	417

Source: "Open Enforcement Actions," Deputy Chief of Naval Operations (Logistics), N-45, Office of Chief of Naval Operations.

Further, in FY 92, the DoN was assessed \$16,000 in state fines, and \$485,436 in local fines for a total of \$501,436. The Clean Air Act (CAA) and the Clean Water Act (CWA) were the only two statutes under which the Navy was fined in FY 92. A comparison between Table 2.5 and Tables 2.3 and 2.4 reveals a decrease in fines assessed against the Navy in FY 92 compared to Fiscal Years 1990 and 1991. However, Fiscal Year 1993 data are not as encouraging, as shown in Table 2.6. Based only on the first three quarters of FY 93, the data show an increase of 96.7 percent in fine assessments levied against the Navy in FY 93 as compared to FY 92.

**Table 2.3: Total Fines Assessed by State Regulators in FY 90
Broken Down by Applicable Act and Whether Fine was
Initiated at the Federal, State or Local Level.**

	Federal	State	Local	Total
CAA	0	48510	56795	105305
CWA	0	2672	0	2672
RCRA-C	74250	386300	0	460550
RCRA-D	0	300	0	300
TSCA	328500	0	0	328500
CERCLA	0	25500	0	25500
TOTAL	402750	463282	56795	922827

Source: "Total Fines Assessed Contrasted with Amount Paid FY 90 - FY 92," Deputy Chief of Naval Operations (Logistics), N-45, Office of Chief of Naval Operations.

**Table 2.4: Total Fines Assessed by State Regulators in FY 91
Broken Down by Applicable Act and Whether Fine was
Initiated at the Federal, State or Local Level.**

	Federal	State	Local	Total
CAA	0	15300	133380	148680
CWA	0	15000	10000	25000
RCRA-C	0	543340	0	543340
RCRA-D	0	0	0	0
TSCA	165500	0	0	165500
CERCLA	0	0	0	0
TOTAL	165500	573640	143380	882520

Source: "Total Fines Assessed Contrasted with Amount Paid FY 90 - FY 92," Deputy Chief of Naval Operations (Logistics), N-45, Office of Chief of Naval Operations.

**Table 2.5: Total Fines Assessed by State Regulators in FY 92
Broken Down by Applicable Act and Whether Fine was
Initiated at the Federal, State or Local Level.**

	Federal	State	Local	Total
CAA	0	2000	482599	484599
CWA	0	14000	2837	16837
RCRA-C	0	0	0	0
RCRA-D	0	0	0	0
TSCA	0	0	0	0
CERCLA	0	0	0	0
TOTAL	0	16000	485436	501436

Source: "Total Fines Assessed Contrasted with Amount Paid FY 90 - FY 92," Deputy Chief of Naval Operations (Logistics), N-45, Office of Chief of Naval Operations.

**Table 2.6: Total Fines Assessed by State Regulators for the
First 3 Quarters of FY 93 Broken Down by
Applicable Act and Whether Fine was Initiated at
the Federal, State or Local Level.**

	Federal	State	Local	Total
CAA	0	0	6957	6957
CWA	0	22287	3249	25536
RCRA-C	257580	398432	0	656012
RCRA-I	0	80	0	80
TSCA	296000	0	1600	297600
CERCLA	0	0	0	0
TOTAL	553580	420799	11806	986185

Source: "Total Fines Assessed Contrasted with Amount Paid FY 93," Deputy Chief of Naval Operations (Logistics), N-45, Office of Chief of Naval Operations.

It is significant that not all fines assessed are actually paid. For example, of the \$922,827 fines assessed in FY 90, only \$46,071 were actually paid. In other words, only five percent of the fines assessed were actually paid. [Ref 17] However, the fines actually paid as a percentage of fines assessed has increased to 9.2% (an increase of 84% from FY 90 percentage).

F. INCREASED MEDIA ATTENTION ON ENVIRONMENTAL ISSUES

Finally, just as there has been increases in environmental legislation, environmental budgeting, and environmental fines, so too has there been increases in media attention regarding environmental issues. This increase in media attention has come from both civilian and military newspapers and periodicals.

According to the Public Affairs Office at Chief of Naval Information (CHINFO), there has been a noticeable increase in media attention that the Navy has been receiving regarding environmental issues. [Ref 18] Although some of this increased media attention is due to Navy promotional efforts, much of the increase is due to the efforts of local communities and environmental groups trying to raise environmental awareness in order to highlight current or potential environmental problems.

CHINFO has yet to quantify the increase in environmental media attention; but nonetheless, its expanse is readily

apparent and significant. The bottom line is that increased media attention involving the DoN may be expected to exert a powerful influence on the DoN.

With noticeable increases in congressional oversight, environmental legislation, notices of violation, environmental fines, and media attention, coupled with the expectation of more environmental legislation and the threat of an increase in the number and severity of fines and penalties, it would behoove the Navy to take a proactive role in attempting to comply with environmental legislation and regulations and examine how it can best allocate its scarce resources to effectively and efficiently meet the challenges of current and expected environmental legislation. One of the ways the Navy can be proactive is to examine how it can minimize environmental violations, environmental fines, and environmental cleanup costs by procuring environmentally-sound, energy-efficient products and services from the outset; that is, how it can comply with OFPP Policy Letter 92-4.

The proactive actions do not necessarily or directly solve immediate problems facing the Navy (e.g., disposal of hazardous material or environmental issues revolving around base closures), but they may result in fewer environmental problems, costs, penalties and embarrassment in the future.

The Navy has an opportunity to get its "ducks in a row" for future days of environmental reckoning with Congress. The Navy, by identifying and analyzing the key issues associated

with OFPP Policy Letter 92-4, and by taking appropriate actions, can establish an environmentally-conscious, system-wide procurement program.

Before delving into OFPP Policy Letter 92-4 and determining the issues the Policy Letter raises, the next section briefly describes the Navy environmental policy and how the Navy is organized to carry out its own policy.

G. NAVY ENVIRONMENTAL POLICY

Navy environmental policy is provided comprehensively in the Navy's *Environmental and Natural Resources Program Manual* (OPNAVINST 5090.1A). As stated in that manual:

The Navy is committed to operating its ships and shore facilities in a manner compatible with the environment. National defense and environmental protection are, and must be, compatible goals. The chain of command must provide leadership and personal commitment to ensure that all Navy personnel develop and exhibit an environmental protection ethic. Thus, an important part of the Navy's mission shall be to prevent pollution, protect the environment, and conserve natural, historic, and cultural resources. [Ref 5, p. 1-4]

In addition, the Navy requires all Naval personnel (military and civilian), all tenants, and contractors working for the Navy to, "comply with all federal, state, local, and internal environmental policies, regulations, and requirements." [Ref 5, p. 1-4] The manual goes on further to state that pollution prevention is the preferred method of environmental protection and that

methods for the elimination or minimization of pollutants shall be identified and, where possible, incorporated at the earliest stages of planning, design, and procurement

of facilities, weapon systems, equipment, and material.
[Ref 5, p. 1-4]

This is not a dormant policy. It is being backed by the highest ranking Navy officials throughout the Pentagon, fleet and shore establishments. Recently, at a Superintendent's Guest Lecture at the Naval Postgraduate School in Monterey, California, Vice Admiral (VADM) Stephen Loftus pronounced that of the seven QMBs (Quality Management Boards) established by CNO Admiral Kelso, two (Fleet Support and Environmental) are receiving the highest priority. [Ref 19] During this lecture, VADM Loftus said,

You can all recognize that we are in a time of increasing environmental awareness and enforcement. What we hope to do is to get out of crisis response of fixing the sins of the past and move ourselves to an environmental leadership role of leaning forward. [Ref 19]

In his lecture, VADM Loftus mentioned that the Navy is concentrating on the following environmental QMB issues/initiatives:

- Environmental Funding;
- Pollution Prevention;
- Environmentally Sound Ship of the 21st Century;
- Environmental Training; and
- Measures of Effectiveness.

Another senior Navy officer echoing the environmental policy of the CNO is RADM R. M. Moore (Chief of the Navy Supply Corps and the Commander of the Naval Supply Systems Command). In a *Flash* sent out to all Navy Supply Corps officers, RADM Moore stated that hazardous material management

and environmental issues are an area of increasing responsibility for Supply Corps officers.¹⁵ RADM Moore went on to state that Supply Corps officers

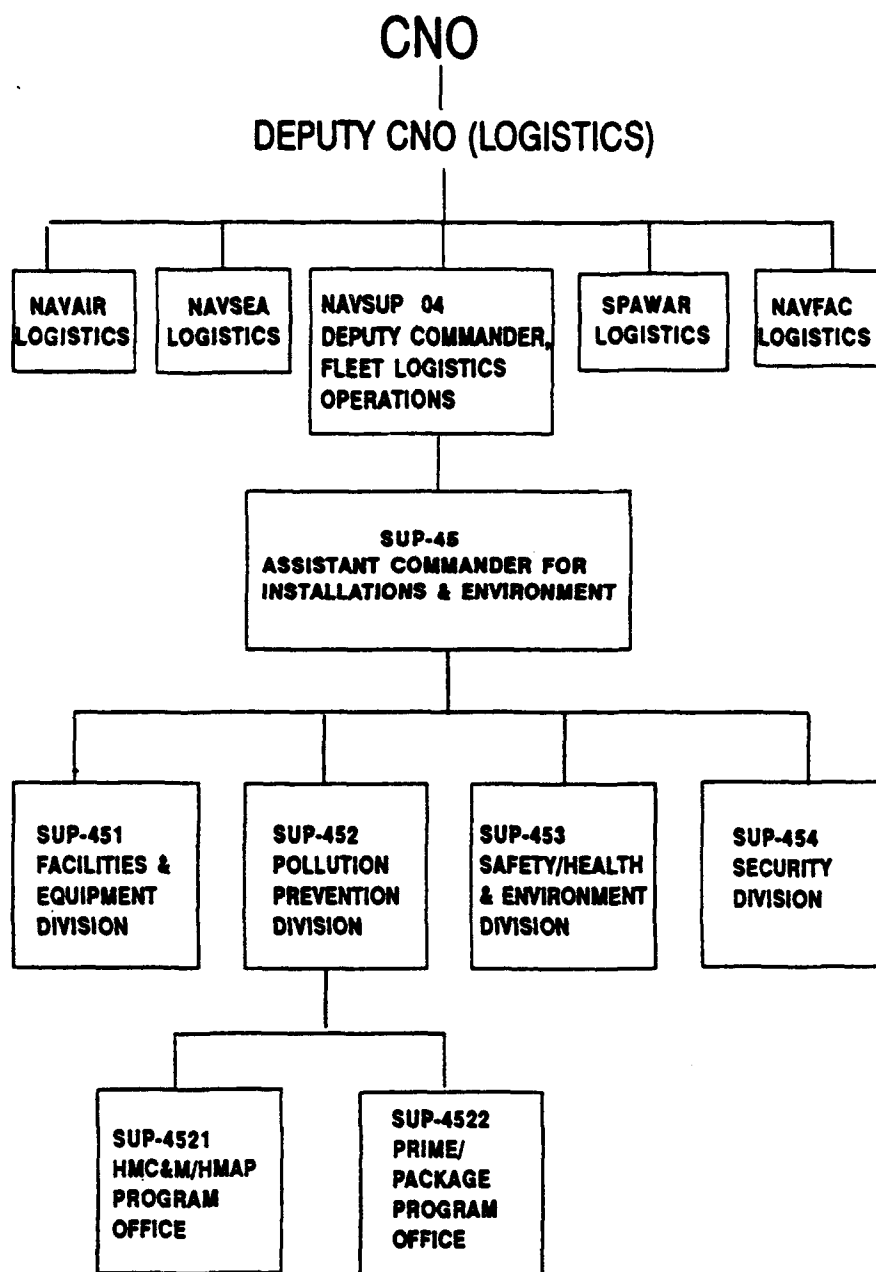
must provide the policy, tools, and training which position the Supply Corps to be the provider of choice for environmental services to both the Fleet and shore stations. [Ref 20]

The Navy is committed to a policy of environmental protection. The organizational structure with accompanying roles and responsibilities is quite complex; but nonetheless, it is sufficiently and comprehensively delineated in OPNAVINST 5090.1A. Figure 2.3 provides only one of several organization charts that illustrate the way the Navy is organized to develop, implement, and oversee Navy environmental policy and programs. Among the other organizational charts is one that illustrates reporting relationships from the Secretary of the Navy to the Navy field activities via the Assistant Secretary of the Navy (Installations and Environment).¹⁶

¹⁵ *Flash* is the title of the correspondence that the Chief of the Navy Supply Corps sends to all Navy Supply Corps officers on an "as required" basis.

¹⁶ A copy of the SECNAV/Field Activity organization chart may be requested from ASN(I&E), phone (703) 602-2461.

Figure 2.3 A Navy Environmental Organization Chart



Source: *What's Up*, a NAVSUP newsletter dated 13 January 1992, Naval Supply Systems Command, Washington, DC 20376-5000.

III. OFPP POLICY LETTER 92-4

A. INTRODUCTION

Office of Federal Procurement Policy Letter 92-4, titled *Procurement of Environmentally-Sound and Energy-Efficient Products and Services*, is a logical outgrowth of the various Federal statutes, executive orders, and other OFPP policy letters that preceded it. OFPP Policy Letter 92-4 is provided in its entirety -as it appeared in its final draft in the Federal Register on 9 November 1992- in Appendix B. Before delving into the history, requirements, and current status of the Policy Letter, a brief description of the Federal office responsible for the policy (i.e., the Office of Federal Procurement Policy) is provided.

B. THE OFFICE OF FEDERAL PROCUREMENT POLICY

The Office of Federal Procurement Policy was established on August 30, 1974 within the Office of Management and Budget (OMB). Its creation was the result of the Commission on Government Procurement which completed its work in December 1972. One of the proposals of the Commission was the creation of an Office of Federal Procurement Policy in the executive branch to assure fulfillment of government-wide statutory and executive branch requirements in performing procurement responsibilities. [Ref 21, p. 103]

The role of the OFPP is to provide central policy and direction for procurement. The Office was designed to function as the principal entity with authority to develop procurement policy on an executive branch-wide basis. [Ref 21, p. 104] The OFPP was made a permanent agency by Congress in October 1988.

Since the OFPP was established in 1974, it has developed and issued many policy documents such as OMB circulars and OFPP policy letters. Perhaps the most significant contribution of the OFPP is the writing of the Federal Acquisition Regulation. To this day, the Administrator of the OFPP chairs the FAR Council (i.e., the council responsible for monitoring the development of procurement regulations and their incorporation into the FAR).¹⁷

In short, by its congressional charter, the OFPP has been given a unique opportunity to make "far reaching improvements in the efficiency, effectiveness, and economy of Government procurement." [Ref 21, p. 104] OFPP Policy Letter 92-4 is one of those instruments that the OFPP is using in order to achieve some of those improvements in Government procurement.

¹⁷ Other members of the FAR Council are the heads (or their designees) of GSA, DoD, and NASA.

C. HISTORY OF OFPP POLICY LETTER 92-4

As mentioned in Chapter II, RCRA was enacted in 1976. OFPP Policy Letters 76-1 and 77-1 were developed to implement some of the requirements of RCRA. When RCRA was amended in 1984, Policy Letters 76-1 and 77-1 were not updated, as would have been appropriate. Lack of an appropriate OFPP policy letter to implement the 1984 RCRA amendments was duly noted by Senator Levin (Michigan) and Senator Cohen (Maine) who had constituents that stood to benefit through the implementation of RCRA by selling recycled products to the Federal Government. On November 8, 1991, the Senate Committee on Governmental Affairs held a hearing regarding the implementation of the RCRA amendments. As a result of the committee hearing, which lasted five days, the OFPP was directed to draft a policy letter which would implement the RCRA amendments.

In January 1992, Dr. Allan Burman, the Administrator of OFPP, directed his staff to draft a policy letter to implement the requirements of Section 6002 of the Resource Conservation and Recovery Act (42 U.S.C. 6962) and Executive Order 12780 (Federal Agency Recycling, and the Council on Federal Recycling and Procurement Policy) issued by President Bush during this same time frame. [Ref 22] Section 6002 of RCRA requires the OFPP to issue coordinated policies to maximize federal use of recovered materials, while Executive Order 12780 requires the federal government to assume leadership in

addressing solid waste management through acquisition procurement practices and policy options promoting environmentally-sound and energy-efficient waste reduction and recycling.

A rough draft of OFPP Policy Letter 92-4 was published in the Federal Register on March 24, 1992. Section 418(b) of P.L. 98-577 (the October 30, 1984 Amendments to the OFPP Act) requires that any proposed policy expected to significantly affect the operating procedures of any agency beyond the internal agency procedures of the initiating agency must be published in the Federal Register to notify the general public and allow for public comment to be made on the proposed policy. The minimum period necessary to remain open to public comment is thirty days. As is OFPP practice with most of its proposed policies, the agency allowed for a period of sixty days to receive public comment.

Comments were received in response to the Federal Register notice from nineteen Government and ten private organizations. All comments were reviewed and, where warranted, changes were made in the final Policy Letter which was published in the Federal Register on November 9, 1992. Upon its publication, OFPP Policy Letter 92-4 superseded and cancelled: OFPP Policy Letter 76-1 (*Federal Procurement Policy Concerning Energy Conservation*); Supplement Number 1 to Policy Letter 76-1; and OFPP Policy Letter 77-1 (*Procurement of Products that Contain Recycled Material*).

The purpose of OFPP Policy Letter 92-4 is to provide executive branch policies for the acquisition and use of environmentally-sound, energy-efficient products and services. OFPP Policy Letter 92-4 states that it is the policy of the Federal Government that executive agencies implement cost-effective procurement preference programs favoring the purchase of environmentally-sound, energy-efficient products and services.¹⁸

After reading OFPP Policy Letter 92-4, it is apparent that the Policy Letter will be accomplished primarily through the procurement process. Another observation is that it is really nothing new -- at least in intent. The intent is consistent with all the environmental statutes and executive orders discussed in this thesis. Again, it is specifically designed to implement RCRA and Executive Order 12780. Further, it is apparent that the Policy Letter is in consonance with the Navy policy as that policy is delineated in OPNAVINST 5090.1A.

Although OFPP Policy Letter 92-4 is consistent with prior environmental legislation, executive orders, and Navy policy, there are some salient requirements imposed by the Policy Letter which form the basis of this research.

¹⁸ A definition of "cost-effective procurement preference programs" is provided in Appendix L.

D. UNIQUE REQUIREMENTS OF OFPP POLICY LETTER 92-4

OFPP Policy Letter 92-4 imposes many requirements on each Executive agency, particularly on each agency acquisition system which actually encompasses both the "requirements determination" process and the "procurement" process. This section of the thesis extracts those requirements of OFPP Policy Letter 92-4 that directly mandate action by contracting personnel either by (1) determination that it is their sole responsibility or (2) virtue of the fact that a specific requirement necessitates a requirements-procurement interface. There are actually seven such requirements; however, the seventh (i.e., the requirement for each agency to establish "Affirmative Procurement Programs") is a composition of six other requirements and is therefore handled separately in this thesis, as is described below.

In addition to six unique requirements delineated below, OFPP Policy Letter 92-4 mandates that executive agencies develop specific Affirmative Procurement Programs for each of the items covered by guidelines developed by the EPA if the purchase of any one of those designated items, or of functionally-equivalent items, results in annual expenditures of \$10,000 or more.

Each Affirmative Procurement Program must provide for the attainment of the six requirements, and each program must be reviewed annually to determine the effectiveness of the program. Each program may allow for a waiver (i.e., a

decision not to procure an item composed of the highest percentage of recovered materials practicable) if that waiver is based on a determination that such an item:

- (a) is not readily available;
- (b) fails to meet reasonable performance standards set forth in the applicable specifications;
- (c) is only available at an unreasonable price; or
- (d) is not available from a sufficient number of sources to maintain a satisfactory level of competition.

Although the establishment of Affirmative Procurement Programs is a unique requirement of OFPP Policy Letter 92-4, efforts to investigate the establishment of such programs are beyond the scope of this research. However, this would provide a fruitful area for further research.

At this point, a brief description of the six requirements imposed on contracting personnel by OFPP Policy Letter 92-4 is provided.

1. Energy & Environmental Factors in PRs, IFBs, and RFPs

Agencies must consider energy conservation and efficiency data, and environmental factors (e.g., conservation of natural resources and environmental protection), along with estimated costs and other relevant factors, in the development of purchase requests and solicitations for offers (e.g., Invitation for Bid, and Request for Proposal).

2. Comparison Against Energy Efficiency Standards

With respect to the procurement of consumer products, agencies shall consider energy use/efficiency labels (42 U.S.C. 6294) and prescribed energy efficiency standards (42 U.S.C. 6295) in making purchasing decisions.

3. Highest Percentage of Recovered Materials & Certification

Agencies shall procure products, including packaging, that contain the highest percentage of recovered materials, and where applicable, post-consumer waste, consistent with performance requirements, availability, price reasonableness and cost effectiveness. Furthermore, agencies shall require vendors to certify the "percentage of recovered materials used" when contracts are awarded wholly or in part on the basis of utilization of recovered materials.

4. Life Cycle Cost Analysis

Whenever feasible and appropriate, agencies shall employ life cycle cost analysis to assist in making product and service selections. Life cycle cost analysis considers costs of a product or service that are incurred as a result of that product or service's initial procurement, use, maintenance, and disposal.

5. Product Descriptions and Specifications

Agencies shall use product descriptions and specifications that reflect cost-effective use of:

- (1) recycled products;
- (2) recovered materials;
- (3) water efficiency devices;
- (4) remanufactured products; and
- (5) energy-efficient products, materials, and practices.¹⁹

Agencies must assure that the specifications: (a) do not exclude the use of recovered materials; (b) do not unnecessarily require the item to be manufactured from virgin materials; and (c) require the use of recovered materials and environmentally-sound components to the maximum extent practicable without jeopardizing the intended use of the item.

6. Special Requirements for Paper

When ordering paper and paper products from GSA, agencies shall designate that the paper and paper products identified in the *GSA Recycled Products Guide* be provided.²⁰ Furthermore, agencies must specify, in paper orders and printed product orders, the highest minimum content paper specifications developed by the Joint Committee on Printing and the Government Printing Office.

Agencies must also refrain from specifying coated papers and other fancy grades of paper for products with a

¹⁹ The definition of "recovered material" is provided in Appendix L.

²⁰ Copies of the *GSA Recycled Products Guide* can be obtained by contacting the GSA Centralized Mailing List Service in Fort Worth, TX 7615 or by calling COMM: (817) 334-5215 or AV: 739-7369.

limited useful life such as annual reports, catalogues, and telephone directories.

E. ACTION REQUIRED OF DARC AND CAAC

The extraction of these six requirements from the Policy Letter provides the answer to the first subsidiary question of this research (i.e., What are the unique requirements of OFPP Policy Letter 92-4?). OFPP Policy Letter 92-4 requires the DAR Council and CAAC to

conduct a thorough review of the relevant parts of the FAR to assure that (1) no unintended encumbrances to the acquisition of environmentally-sound, energy-efficient products and services are contained therein. [Ref 23, p. 7]

The Policy Letter also requires the FAR Councils (DARC and CAAC) to incorporate the procurement policies established by OFPP Policy Letter 92-4 into the FAR within 210 days of the effective date of the Policy Letter. The 210th day was June 6, 1993. As of June 6, 1993, the FAR Councils have yet to incorporate the Policy Letter into the FAR. Although the deadline has not been met, the OFPP believes that the DARC and the CAAC have made substantial efforts at achieving "incorporation," and will not impose any sanctions on the FAR Councils. [Ref 22] However, a new OFPP Administrator is scheduled to relieve the current Administrator (Dr. Allan Burman) on November 29, 1993, and Dr. Burman is following-up everyday with the FAR Council to ensure that OFPP Policy Letter 92-4 is incorporated into the FAR without any

unnecessary delay.²¹ The next section provides the current status of the Policy Letter.

F. CURRENT STATUS OF OFPP POLICY LETTER 92-4

On June 18, 1993, Nancy Ladd, COL, USAF, (Director, Defense Acquisition Regulatory Council), forwarded the DAR Council's "interim FAR rule" to implement OFPP Policy Letter 92-4 to the Civilian Agency Acquisition Council for its review and consideration. On June 21, 1993, Colonel Ladd forwarded a copy of the interim FAR rule to Dr. Allan Burman (OFPP Administrator). As of the writing of this thesis, the CAAC is still working on their proposed FAR rule to implement the Policy Letter. No detailed status could be obtained from Mr. Albert Vicchiolla (Chairman, CAAC) regarding when the CAAC will publish its proposed FAR rule.²²

It is very likely that the CAAC will not make any major changes to the DAR Council's proposed FAR rule. Assuming then that the CAAC concurs with the DARC's proposed FAR rule, the CAAC must publish the proposed FAR rule in the Federal Register at least thirty days prior to the proposed rule being incorporated into the FAR. After the mandatory public comment period has expired, and assuming that no changes are

²¹ The position of OFPP Administrator is a political-appointee job. President Clinton has named Steven Kelman as the new OFPP Administrator.

²² Ralph DeStefano is the GSA point-of-contact for OFPP Policy Letter 92-4. His phone number is (703) 602-6136.

considered necessary after consideration of the public comment, the CAAC will publish the rule in the FAR, and any necessary FAR revisions will be provided to all Federal agencies via a FAR Circular which will provide pages with the appropriate FAR changes.

As stated earlier, once the new rule and the corresponding changes are published in the FAR, they are expected to have significant impact on the procurement process. In the words of NAVSUP's Pollution Prevention Specialist, "Just a cursory review of the Policy reveals that the procurement process will be greatly impacted." [Ref 24] Given that the proposed FAR changes are in consonance with the Policy Letter itself, it is worthy to solicit feedback from Navy contracting activities on what the impact of OFPP Policy Letter 92-4 might be on their organizations.²³ Chapter IV provides a brief description of the procedure that was used to obtain that feedback and other related feedback. Chapter IV then provides a summary of all the feedback that was collected.

²³ As of September 12, 1993, two drafts of proposed FAR changes have developed. One, which was mentioned in the above text, was completed by the DAR Council, and the other draft was produced by "the FAR Workgroup" which was one of five workgroups that were chartered by the Council on Federal Recycling and Procurement Policy. Both drafts propose similar changes to the FAR.

IV. FEEDBACK FROM NAVY CONTRACTING ACTIVITIES

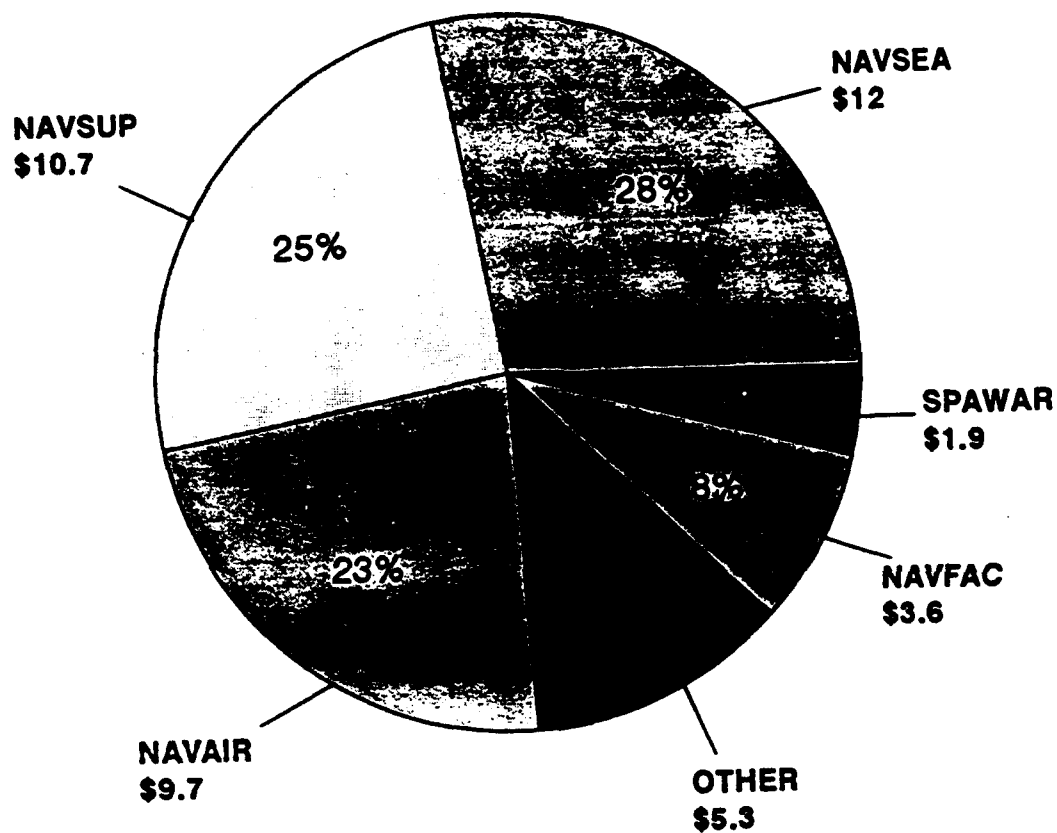
A. INTRODUCTION

Before identifying the contracting activities chosen to be surveyed for expert opinion regarding the research questions on OFPP Policy Letter 92-4, it will be beneficial to provide a brief overview of the Navy Field Contracting System (NFCS).

The Navy Field Contracting System consists of 962 shore activities and all afloat units. [Ref 25] Of the 962 shore activities, forty are considered "NAVSUP commands." [Ref 25] NAVSUP commands include activities such as the NRCCs (Navy Regional Contracting Centers) and FISCs (Fleet and Industrial Supply Centers). As shown in Figure 4.1, in FY 92, NAVSUP commands spent \$10.7 billion of the \$43.2 billion spent in Navy contracting which was twenty-five percent of all Navy contracting dollars. In Fiscal Year 1992, NAVSUP commands also accounted for eighty percent of all Navy contracting actions. [Ref 25] As shown in Figure 4.2, in FY 92, four other systems commands (NAVSEA, NAVAIR, NAVFAC, and SPAWAR) accounted for sixty-three percent of Navy contracting expenditures, while "other" contracting activities accounted for the remaining twelve percent of FY 92 contracting dollars. [Ref 26] Like NAVSUP, each of the other systems commands have sub-commands. For example, "NAVSEA commands" include all the

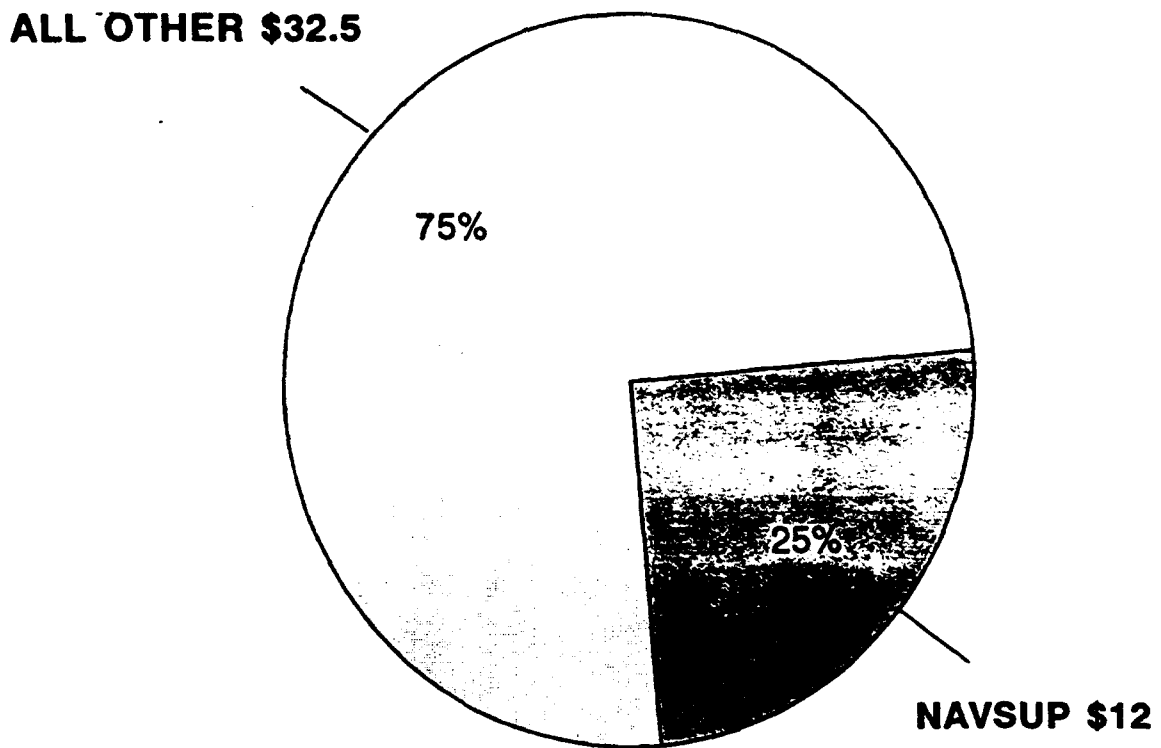
SUPSHIP (Supervisor of Shipbuilding, Conversion & Repair) activities.

Figure 4.1 FY 92 Contracting (\$ Billions)
NAVSUP vs. Navy



Source: Handouts from a NAVSEA contracting brief presented by Captain Mike Sullivan, SC, USN (NAVSEA Code 02) on August 5, 1993 at Naval Postgraduate School, Monterey, CA.

Figure 4.2 FY 92 Contracting (\$ Billions)
NAVSUP vs. other SYSCOMS



Source: Handouts from a NAVSEA contracting brief presented by Captain Mike Sullivan, SC, USN (NAVSEA Code 02) on August 5, 1993 at Naval Postgraduate School, Monterey, CA.

B. ORGANIZATIONS CHOSEN TO BE SURVEYED

As stated in Chapter I, it is beyond the scope of this research to solicit expert opinion from all Navy contracting activities regarding the implementation of OFPP Policy Letter 92-4. Therefore, decisions on which contracting activities to survey had to be made. These decisions were made under the advice of the Pollution Prevention Division at NAVSUP. The contracting activities were chosen to ensure that the impact

of the Policy Letter would be evaluated by a diverse group of contracting activities. Expert opinion coming from a diverse group of contracting activities was intended to ensure that the Policy Letter would be evaluated in terms of its impact on the procurement of a wide variety of products and services.

The Pollution Prevention Division at NAVSUP chose twenty-one contracting activities to ensure a "good mix" of contracting activities. Included in these organizations are both NAVSUP commands and other systems commands, such as NAVAIR and NAVSEA. The complete list of the contracting activities chosen to be surveyed is shown in Appendix C.

To supplement information obtained from contracting activities via the formal survey method, the researcher also contacted a variety of other organizations to obtain insight and opinion relating to OFPP Policy Letter 92-4. A list of those organizations is provided in Appendix D.

C. PROCESS FOR SOLICITING EXPERT OPINION

Twenty-one contracting activities were surveyed. To ensure that respondents would provide comments relevant to the primary and subsidiary research questions, a survey form was developed to provide a framework for answering the research questions and to increase the likelihood of a comprehensive response.

The survey form was drafted by the researcher and proofread by the Thesis Advisor and the sponsor (NAVSUP) of

this research. A copy of the approved survey form is provided in Appendix G. The survey form was structured to:

- (1) reveal what the anticipated impacts of OFPP Policy Letter 92-4 might be on a contracting organization;
- (2) allow for the respondent to assess his/her activity's ability to comply immediately with the requirements of the Policy Letter;
- (3) reveal any obstacles preventing an organization from complying immediately; and
- (4) determine what actions an organization would have to take to facilitate compliance with OFPP Policy Letter 92-4.

In addition, the survey form was designed to obtain information regarding: (1) the perceptions on the intent of the Policy Letter; and (2) the level of environmental awareness among personnel at contracting activities. To increase the likelihood of meaningful, well-thought-out responses, a cover letter from NAVSUP (provided as Appendix F) accompanied each survey form that was mailed out. The researcher also hoped that the cover letter would increase the likelihood of timely responses.

Throughout the survey process, as well as the entire information gathering process, the importance of maintaining an accurate and current list of names, phone numbers, addresses, topics discussed, etc. was not underemphasized. The form provided in Appendix E was used to:

- (1) maintain a current directory;
- (2) facilitate follow-up requests for information; and
- (3) ensure professionalism when contacting senior military and civilian officials.

D. SUMMARY OF DATA COLLECTED

This section provides a summary of the data collected from the survey. Responses were received from thirteen of the twenty-one organizations surveyed. As of the writing of this chapter, seven of the eight activities that did not respond had indicated either a desire or willingness to participate in the survey, but those organizations did not respond by the requested cutoff date. As input from these activities may provide insightful opinion and information to better answer the research questions, it may behoove NAVSUP to pursue input from these activities.

This section provides tabulated results and individual comments, where appropriate, generated from the survey. An analysis of the data is provided in Chapter V. Each of the following subsections correspond to the broad headings on the survey form.

1. Perceptions

a. General Intent of OFPP Policy Letter 92-4

In no other area of the survey was there more consensus than in this area. One hundred percent of the respondents agreed that the general purpose and intent of OFPP Policy Letter 92-4 is good.

b. Responsibility to Carry Out the Policy

Despite total consensus that the general intent of the Policy Letter is good, there were mixed opinions on

whether contracting personnel should be responsible for carrying out this Policy. For example, six respondents stated that contracting personnel should not be responsible for ensuring that environmental and energy factors are considered in Government procurements. Six respondents felt that carrying out the Policy should be a shared responsibility between requirements personnel and contracting personnel. Only one respondent stated that it is the responsibility of contracting personnel to carry out OFPP Policy Letter 92-4, with no mention of any shared responsibility.

2. Anticipated Impacts

When surveyed as to what might be the anticipated impact of the Policy Letter on the respondent's contracting activity, the following responses (provided in subsections a through f) were received. The comments have not been edited. The responses are grouped under the appropriate contracting phase. If more than one respondent answered a question with the same or similar response, then the number of personnel who answered with that response is provided in parentheses at the end of the response.

a. Acquisition Planning Phase

1. Review of the Statement of Work (SOW) & Performance Work Statement (PWS)

- OFPP Policy Letter 92-4 would impact this phase, as this is how the contracting officer would have to communicate the description of the item required to the contractor.

- Contracting personnel will have one more area to scrutinize when reviewing SOWs and PWSs. This is an additional burden placed on personnel who are not technically competent to determine if the specification/SOW is correct in its wording relative to allowing for or not restricting environmentally-sound and energy-efficient products or components.
- Requirements personnel should insert an environmentally-sound, energy-efficient preference in SOW/PWS. Not a KO (contracting officer) function.
- The KO needs to ensure inclusion of environmental considerations.
- Our system would require a "cultural change" to consider environmental aspects.
- Environmental and energy requirements would need to be built into the SOW.
- The KO will have to ensure that consideration is given to the Policy in specifications. If consideration is not included, sufficient justification for not using will be required.
- May increase need for review of drawings/specifications to ensure compliance.

2. Method of Contracting (e.g., RFP, IFB, RFQ)

- No impact (11).
- Indicating a preference for environmentally-sound, energy-efficient products and services may be better served by using RFP's (2).

3. Type of contract

- No impact (12).
- Additional incentive in contracts could be given in an incentive or award fee contract, but may be difficult to measure acceptability and difficult to determine the amount of the award fee.

4. Source Selection Evaluation Criteria

- Substantial impact depending on the product (3).
- Weight the importance of environmental and energy factors.
- Use as a determinant of "best value."
- Should only be a small part of overall decision.
- Impact depends on item being procured.
- Not workable.
- Would require the development of easy to understand, easy to apply criteria.
- Factors would need to be clearly identified and instructions to offerors in preparing proposals would also be required.
- Environmental and energy factors would have to be included as evaluation criteria, but this would probably reduce competition.
- Will be another area to consider (2).

b. Solicitation Phase

1. Bidders' Conference

- Minimal or no impact (8).
- The degree to which environmental factors can be incorporated into specifications will determine the extent to which a Bidders' Conference is required. Consider the extremes of purchasing either facilities or recycled paper (5).

2. Amendments to Solicitations

- Minimal or no impact (13).

c. Source Evaluation/Source Selection Phase

1. Pre-Award Survey (PAS)

- Minimal or no impact (5).

- Depends if tailored facilities are required.
- Involves technical personnel, and contracting personnel should not be expected to assist.
- Substantial impact if a PAS is needed to verify the capability of satisfying environmental concerns (2).
- May require training of industrial specialists who are key personnel in PASs.
- Could disqualify otherwise responsible offerors.²⁴
- May increase need for performing a PAS.

2. Field Pricing Team

- Minimal or no impact (8).
- May impose an extra burden on the Field Pricing Team if the team is required to assess the reasonableness of the additional costs for a contractor to comply.
- Depends on the product or service being contracted for.
- May require the addition of someone to the pricing team who is knowledgeable of environmental and energy factors.

3. Price Analysis and/or Cost Analysis

- Minimal or no impact (7).
- Review company history regarding participation in community environmental and energy programs.
- Compare published price lists with new items.
- May require additional time to do market research to find items of comparable design.
- Significant impact in a sole source procurement.

²⁴ A "responsible" offeror is one who is technologically and financially capable of meeting the terms and conditions of the contract.

- Needed to determine reasonableness of costs necessary to comply.
- May be unreasonably costly to perform this analysis.

d. Negotiation Phase

- Minimal or no impact (8).
- Could be significant depending on the product/service being purchased.
- Depends on whether the ability to comply becomes an issue especially in a sole source procurement (3).
- Negotiations would be necessary to determine amount of costs associated with the environment and energy requirements.

e. Contract Award Phase

1. Debriefing Unsuccessful Offerors

- Minimal or no impact if straightforward criteria are used (5).
- May be very important depending on the weight assigned to the environmental and energy factors (4).
- Under the Freedom of Information Act, the unsuccessful bidders will be allowed to review the file.
- Potentially a very controversial area until government, GAO, and industry settle down on specifically how an environmental factor should be used to determine contractor selection.

2. Protests

- No impact.
- Minimal impact if straightforward criteria are used.
- Only if environmental factors were the deciding criteria.
- The KO must ensure complete documentation is maintained to enable legal counsel to handle protests in a smooth process.

- Many protests may not come right away, since companies currently aren't "up to speed"; when they are, hopefully so too will the Government.
- Some protests can be expected if an offeror was displaced due to environmental or energy factors.
- Probably more in the early years.
- Yes, yes, yes. Everyone is going to be pointing fingers at other contractors and questioning their ability to comply and whether they are really complying.
- May increase the number of protests, simply because the Policy Letter gives competing firms another aspect upon which to base a protest.

f. Contract Administration Phase

1. Ability to evaluate the contractor's compliance with contract clauses

- Minimal or no impact (2).
- Dependent upon Administrative Contracting Officer's (ACO) ability to acquire qualified environmental personnel.
- May be very difficult to determine if they complied.
- Substantial impact. Environmental concerns will require additional surveillance.
- To be effective at monitoring contractor compliance, we will have to train our QARs (Quality Assurance Representatives) and ensure they experience a cultural change.
- Experts in environmental and energy matters --at the ACO organization-- may be necessary just as there are quality specialists.
- This will be a real nightmare. Certification may be necessary on everything.
- May impact ACO responsibility (2).

2. Ability to Evaluate Contractor's Compliance with Applicable Environmental Laws

- Minimal or no impact (5).
- If DoD has to provide certification to EPA, collection of data will add moderately to the post-award workload.
- Direct compliance with applicable laws is outside the purview of the ACO and needs to be addressed by EPA and Justice Department.
- Not possible. Responsibility of EPA, state and local officials (2).
- Requires additional training for inspectors, and increased surveillance.
- Requires additional training.
- Experts --on the ACO team-- in the environmental and energy areas may be necessary (2).

3. Ability to evaluate the contractor's environmental compliance programs

- Minimal or no impact (5).
- Requires qualified personnel.
- Would need to rely on Defense Contract Management Area Operations (DCMAO).²⁵
- Requires additional training for inspectors, and increased surveillance.
- I can't imagine each individual agency performing this evaluation. We do not have technical experts capable of accomplishing this work.
- Experts --on the ACO team-- in the environmental and energy areas may be necessary (2).
- Will increase the responsibilities of the ACO.

²⁵ DCMAOs provide contract and contract administration support to Department of Defense activities in their respective areas.

4. Disputes

- Minimal or no impact (6).
- Government claims will result from contractor's non-compliance with contract clauses.
- Disputes should be between contractor and EPA; not between contractor and KO.
- Substantial impact, especially if the disputes are over new laws (3).

3. Ability to Immediately Comply

Nine of the thirteen respondents indicated that their contracting activity could not immediately comply with the requirements of OFPP Policy Letter 92-4. The amount of time that those activities said it would take to be able to comply varied from three months to twenty-four months.

4. Impediments Preventing Compliance

The following impediments were identified to explain why contracting activities could not immediately comply with the requirements of OFPP Policy Letter 92-4:

- Shortage of personnel;
- Lack of experience;
- Lack of expertise;
- Inability to monitor;
- Lack of evaluation criteria;
- No compulsion to change;
- Poor coordination between requirements personnel and contracting personnel;

- Lack of training; and
- Lack of coordination among DoN, DoD, and other Government agencies.

Two reasons most frequently cited for not being able to comply are (1) the lack of experts (i.e., the number of trained personnel) and (2) the lack of expertise (i.e., the knowledge of those already in the work force).

5. Actions Which Would Facilitate Compliance

Five actions were recommended to facilitate compliance with OFPP Policy Letter 92-4:

- (1) provide training;
- (2) develop incentives;
- (3) establish internal procedures and guidelines;
- (4) provide additional funding; and
- (5) increase the level of manning.

The two actions most frequently recommended were to:
(1) provide training; and (2) develop incentives.

a. Training

The training most thought to be needed was on the Navy environmental policy. Eleven of the thirteen respondents viewed this as necessary training. Nine of the thirteen respondents stated that technical training was needed. The following is a list of other training considered necessary:

- environmental legislation;
- environmental awareness;

- environmental jargon;
- resource availability (i.e., training that would provide KOs information on who the experts are);
- writing specifications;
- evaluating proposals; and
- monitoring and enforcement.

When asked who should receive such training, twelve of the thirteen respondents indicated that contracting specialists should receive this training. Eleven of these respondents also indicated that technical personnel should receive training. Less than half of the respondents felt that the users needed environmental training. Some respondents indicated that program managers, logistics specialists, quality assurance specialists, and safety & environmental personnel should receive environmental training as well.

The majority (8 of 13) indicated that "road show" type training would be more efficient and effective rather than providing the training at a centrally located training site. One suggestion was made to put training on a video cassette and distribute it to the various commands.

The preferred method of training was "mandatory lecture." None of the respondents recommended a "self-paced correspondence course."

b. Incentives

The concept of incentives to motivate Navy contracting activities to comply with OFPP Policy Letter

92-4 is popular and generated a wide range of suggestions.

The following comments and suggestions were received:

- Just make it a requirement via the FAR and DFARS;
- Evaluate compliance in personnel evaluations;
- Make use of GAO/DoD oversight;
- Allow for a phased-in implementation schedule;
- Make it easy;
- Highlight organizations that comply;
- Report organizations that don't comply;
- Allow the activity to share in any resultant cost savings;
- Provide for Navy-wide recognition;
- Give OFPP Policy Letter 92-4 a lot of publicity;
- Incentives may not work. We have to rely on the Kos ethical responsibility;
- If it is law, no further incentive is necessary; and
- Top management needs to "sell" the concepts behind OFPP Policy 92-4 and provide support.

6. Environmental Awareness

This portion of the survey was designed to evaluate the environmental awareness level among Navy contracting officers. To determine awareness level, questions were asked regarding:

- (a) self-evaluation of ability to evaluate a contractor's proposal with regard to a product/service being environmentally sound and energy efficient;
- (b) undergraduate college major;
- (c) environmental training received during Navy career;
- (d) environmental training provided to subordinates;

- (e) existence of internal guidelines for the procurement of environmentally-sound, energy-efficient products and services;
- (f) knowledge of internal and external resources to aid in making procurement decisions which adequately address environmental and energy considerations.

When asked to evaluate his/her ability to rate --on a scale of 1 to 10-- a contractor's proposal with regard to a product/service being environmentally sound or energy efficient, the average score was 3.77. A score of "10" would have indicated a very strong self-assessment of ability to rate a proposal based on environmental and energy criteria.

The following are the areas of undergraduate study among the contracting officers surveyed:

- various majors within Business (7);
- Management (1);
- Liberal Arts (1);
- English Literature and History (1);
- Engineering and Geology (1); and
- No college degree (2).

Twelve of the thirteen respondents have not received any formal training on environmental contracting. The one contracting officer who did receive formal training had attended only one two-day course titled *Environmental Law for Non-lawyers*.

Only one of the thirteen respondents had sent any of his contracting specialists to environmental contracting

courses or seminars. The courses that the one contracting officer had sent his contracting specialist to were:

- RCRA Facility Compliance (a 3-day course); and
- Environmental Laws & Regulations (a 5-day course).

Twelve of the thirteen respondents work at a contracting activity that does not have its own set of guidelines for the procurement of environmentally-sound and energy-efficient products and services. The one activity that has its own guidelines has those only pertaining to shipbuilding.

Nine of the thirteen respondents do not know whether their activity has a person designated as the Environmental Coordinator.

Contracting officers stated that the only written material they are aware of to guide them in making procurement decisions considering environmental and energy related factors were the FAR, DFARS, NAPS, and NAVSUP interim policy on ozone-depleting substances.

Organizations listed by the respondents as capable of assisting them in making procurement decisions that consider environmental and energy related factors were:

- Local environmental office (1);
- DoN, Office of the General Counsel (1);
- NAVAIR Facilities and Environmental Program Office and NAVAIRSYSCOM (1);

- Deputy Assistant Secretary of the Navy (Environmental & Safety) (1); and
- Public Works personnel (1).

None of the respondents are familiar with EPA Procurement Guidelines for environmentally-safe and energy-efficient products and services.²⁶ Only two respondents know their Environmental Area Coordinator. Of those two, only one knows his Environmental Region Coordinator and Environmental State Coordinator.

Twelve of the thirteen respondents do not evaluate environmental and energy related factors in their procurements. The one respondent that does evaluate environmental and energy factors in source selection does so through the employment of life-cycle cost analysis.

E. PRELUDE TO ANALYSIS

The survey generated a wealth data useful in providing answers to the research questions. Although a meaningful statistical analysis is not achievable due to the lack of a random sample and an insufficient sample size, these responses provide overwhelming evidence of major deficiencies

²⁶ Section 6962(e) of U.S. Code Title 42 requires the Administrator of the EPA, after consultation with the Administrator of the GSA, the Secretary of Commerce (acting through the National Institute of Standards and Technology), and the Public Printer, to prepare, and from time to time revise, *guidelines* for the use of procuring agencies in complying with the requirements of Section 6962 of the U.S. Code Title 42. A copy of the various guidelines can be obtained by calling the EPA Director of Acquisition Management - Procurement Division (202-260-9032).

(e.g., lack of environmental training), and demonstrate some consensus with respect to the issues addressed by the research. Chapter V provides an analysis of the raw data provided in Chapter IV, and attempts to answer each of the subsidiary research questions.

V. INTERPRETATION & ANALYSIS

A. INTRODUCTION

This chapter interprets and analyzes the raw data provided in Chapter IV. Chapter V answers each of the subsidiary research questions. Before providing answers to subsidiary questions #2 and #3, the answer to subsidiary question #1 is reiterated.

B. UNIQUE REQUIREMENTS OF OFPP POLICY LETTER 92-4

Subsidiary question #1: What are the unique requirements of OFPP Policy Letter 92-4? The detailed examination of OFPP Policy Letter 92-4 provided an answer to this question in Chapter III; it is summarized below.

Six unique requirements were extracted from OFPP Policy Letter 92-4. Those requirements mandate that agencies shall:

- (1) consider energy conservation and efficiency data, and environmental factors in the development of purchase requests and solicitations for offers;
- (2) consider energy use/efficiency labels and prescribed efficiency standards when making "consumer product" purchasing decisions;
- (3) procure products that contain the highest percentage of recovered materials, and where applicable, post-consumer waste, consistent with performance requirements, availability, price reasonableness and cost effectiveness;
- (4) employ life cycle cost analysis --including initial procurement, use, maintenance, and disposal-- to assist in making product/service selections;
- (5) use product descriptions and specifications that reflect cost-effective use of: recycled products; recovered

materials; water efficiency devices; remanufactured products; and energy-efficient products, materials, and practices; and

- (6) when ordering paper products, designate that the paper products identified in the *GSA Recycled Products Guide* be provided.

The next section provides an answer to subsidiary question #2 (i.e., What will be some of the principal impacts of these requirements on Navy contracting activities).

C. PRINCIPAL IMPACTS OF OFPP POLICY LETTER 92-4

The data reveal that contracting officers had wide agreement that OFPP Policy Letter 92-4 would not impact certain aspects and phases of the contracting process. For example, the overwhelming majority of contracting officers thought that the requirements of OFPP Policy Letter 92-4 would have minimal or no impact on:

- the preferred method of contracting (e.g., use of an IFB or RFP);
- the preferred type of contract (e.g., Firm Fixed Price, Cost Plus Fixed Fee, etc.); or
- the number or nature of amendments to solicitations.

At first glance, one may question the validity of such statements that the Policy Letter will have "minimal or no impact" on those three areas. Such comments are more believable, with the understanding that "minimal or no impact" is a relative phrase...relative to the status quo. For example, nothing in the Policy Letter necessitates a significant change from the status quo, with respect to the

preferred contract type. Each of the various contract types will have its applicability depending on the product or service being procured; just as each contract type has its appropriate application in the status quo. The same is true with respect to the preferred method of contracting. As far as "number of amendments" are concerned, that will more likely be a function of "changing requirements" and "proper planning," than it is of any extra effort to procure environmentally-sound, energy-efficient products and services.

On the other hand, the data show that the majority of contracting officers agreed that the requirements of the Policy Letter will have a significant impact on:

- (1) the contracting officer's review of the Statement of Work and Performance Work Statement;
- (2) the development of source selection evaluation criteria;
- (3) the contract award phase, including both the debriefing of unsuccessful offerors and the handling of an expected increase in the number of protests; and
- (4) the contract administration phase, in terms of a contracting officer's ability to evaluate a contractor's compliance with the terms and conditions of the contract.

The specific impact of OFPP Policy Letter 92-4 on each of these four areas is analyzed in subsections 1 through 4.

1. Contracting Officer's Review of SOW/PWS

The Statement of Work or Performance Work Statement is part of the technical documentation that conveys the description of the item required --whether it be a product or a service-- to the contractor. A Statement of Work is

primarily used when procuring a product, while a Performance Work Statement is primarily used when procuring a service. In any case, either statement will contain the specifications for the product or service being requested. Whichever is used, the SOW or PWS is a vital part of the solicitation document (IFB or RFP).

The survey data indicate three important concerns on this issue. First, the majority of contracting officers felt that the requirement to review the specifications in the SOW or PWS will add to their workload; no doubt it will. This may be a major reason for the apparent reluctance of contracting officers to take on the responsibility of implementing OFPP Policy Letter 92-4. Secondly, there is concern whether contracting officers can adequately ensure that energy and environmental factors are incorporated into the SOW or PWS. As one contracting officer responded,

Contracting personnel will have one more area to scrutinize when reviewing SOWs and PWSSs. This is an additional burden placed on personnel who are not technically competent to determine if the specification/SOW is correct in its wording relative to allowing for or not restricting environmentally-sound and energy-efficient products or components. [Anonymous]

Thirdly, and perhaps most importantly, as highlighted in the above quote, there is a belief that contracting officers should not be "burdened" with the responsibility of ensuring that energy and environmental factors are incorporated into SOWs and PWSSs. This hits the larger issue: Should contracting personnel be responsible for ensuring that energy

and environmental factors are considered in Government procurements?

Although only one contracting officer stated that contracting officers should not be burdened with reviewing SOWs and PWSs to ensure the inclusion of environmental and energy factors, as previously noted, six of the thirteen respondents stated that contracting personnel should not be responsible for ensuring that energy and environmental factors are considered in Government procurements. This seems to indicate that contracting personnel have a narrower view of the scope of their jobs, than does the Federal Government. While the Federal Government reasons that DoD procurement is an appropriate vehicle to accomplish socioeconomic goals, those in the procurement arena do not necessarily agree.

Clearly, if OFPP Policy Letter 92-4 is to be implemented successfully, then the issue of responsibility -- both for overall implementation and for specification review-- must be addressed by senior Navy acquisition officials.²⁷ Even once responsibility is clearly delineated and assigned, training directed at creating environmental awareness will be necessary to affect the needed cultural change. Recommendations to resolve the issues of "who is responsible" and "how to affect a cultural change" are provided in Chapter VI -- Conclusions and Recommendations.

²⁷ "Acquisition officials," as used here, includes both the personnel in program management and personnel in contract management.

Another major area of concern is how OFPP Policy Letter 92-4 will impact the development of source selection evaluation criteria and the source selection process. As is evident in the next section, one of the underlying reasons for this concern is the inability of contracting officers to adequately perform these functions due to a perceived low level of technical competence regarding environmental and energy matters.

2. Development of Source Selection Evaluation Criteria & Source Selection

The inclusion of environmental and energy factors in source selection evaluation criteria is, without a doubt, one of the key mechanisms by which OFPP Policy Letter 92-4 will be accomplished. Accordingly, all thirteen respondents believe that the requirement to include energy and environmental factors in the source selection evaluation criteria will have a significant impact on the contracting process, depending of course on the type of product or service being procured. The survey produced two important concerns relating to source selection evaluation criteria.

First is the concern that incorporating energy and environmental factors into the source selection evaluation criteria will reduce competition. Reduced competition would adversely affect price and availability. Although a reduced number of competitors may result from incorporating more source selection evaluation criteria, empirical data are

necessary to support that assumption. Regardless, paragraph 7.C.(2)(d) of the Policy Letter was specifically adopted to address those situations of inadequate competition. It states that a contracting officer can

base decisions to waive, or not to procure, guideline items composed of the highest percentages of recovered materials practicable on a determination that such items are not available from a sufficient number of sources to maintain a satisfactory level of competition.

Second is the concern that two respondents raised regarding the necessity of developing clear, easy to understand, source selection evaluation criteria. A third respondent went a step further to state that acquisition personnel will have to assign weights (signifying the importance) to environmental and energy factors. While that statement is not exactly true, it should remind contracting officers of the requirement in FAR Subpart 15.604 which mandates that the evaluation factors and their *relative importance* be clearly stated in the solicitation document and used in making the source selection. Although actual numerical weights *may be* employed in the evaluation of proposals, they need not be disclosed in the solicitations. Generally, it is not advisable to include numerical weights in the RFPs, since that practice tends to give protestors more concrete data on which to base a protest. The concept of "weighting the criteria" was also alluded to by two other respondents who thought that environmental and energy factors should:

(1) only be a small part of the overall source selection decision; and

(2) be used as a determinant of "best value."

Fortunately, specific wording in OFPP Policy Letter 92-4 [paragraphs 6(a), 6(b), and 7(a)] allows flexibility regarding the degree that environmental and energy factors should influence a source selection decision.

Nevertheless, decisions regarding the appropriateness of including environmental and energy factors in source selection evaluation criteria, and decisions on how to weight those criteria in relation to other criteria (e.g., cost, performance, durability, etc.) still have to be made. For major systems procurements, those decisions are typically made by a Source Selection Evaluation Board (SSEB) that convenes prior to the issuance of the solicitation document.²⁸ Such a board is typically comprised of experts from the following disciplines: contracting; accounting; and various technical areas including engineering.²⁹

Clearly, contracting officers are not solely responsible for selecting, weighting, and including environmental and energy criteria into the overall source selection evaluation criteria. However, contracting officers are expected to contribute to such input, and definitely have

²⁸ For procurements other than "major systems," similar boards perform roughly the same functions.

²⁹ It is not uncommon for the contracting officer to serve as the chairman of the SSEB.

to be conversant on the subject, especially if negotiations are part of the process. Furthermore, contracting officers will have to be capable of justifying and defending their source selection decisions during contractor debriefings and pursuant to any contractor protests.

Despite the importance of a contracting officer's ability to partake in the development of environmental and energy source selection criteria, the survey points out a perceived low level of technical competence among contracting officers, preventing them from contributing to this function with any degree of relevance or success. For example, as highlighted in Chapter IV, the average self-assessment score of a contracting officer's ability to rate a contractor's proposal with regard to environmental and energy criteria was only 3.77 on a scale of 1 to 10. This should not come as a shock when the lack of environmental training that contracting professionals receive is considered. Once again, "lack of training" is cited as an underlying problem to an impediment hindering compliance with the Policy Letter. A recommendation to develop a training course which would help overcome contracting officers' inabilities to adequately develop and employ environmental and energy source selection criteria is provided in Chapter VI.

The next major impact explored is the debriefing of unsuccessful offerors and the handling of protests, both of which are related to source selection evaluation criteria.

3. Debriefing Unsuccessful Offerors and Handling Protests

Although OFPP Policy Letter 92-4 makes no mention of functions to be performed in the contract award phase (e.g., debriefing unsuccessful offerors, and administrative handling of protests), the survey showed that some contracting officers believe that the requirements of OFPP Policy Letter 92-4 will have a significant impact on the contract award phase. Over one-third of the respondents thought that the Policy Letter would have minimal or no impact on the "debriefing of unsuccessful offerors" function if straightforward criteria are used in solicitation documents. Evidence presented in Chapter IV, however, reveals that this is a risky "if" to rely on, given the current inability of contracting officers to ensure that appropriate, clear criteria are included in the SOWs, PWSs, and solicitation documents.

Another factor that may complicate the process of debriefing unsuccessful offerors is the relative weight that "environmental and energy" source selection criteria are given in relation to other source selection criteria. Obviously, the greater the relative importance assigned to energy and environmental factors, the greater the likelihood that contracting officers will have to explain or rationalize those factors to unsuccessful offerors. Contracting officers will have to prepare for the tasks of appropriately choosing or reviewing environmental and energy source selection criteria and assigning relative weights to those criteria. In order to

prepare for those tasks, contracting officers will need to get trained, keep current (i.e., be aware of technological changes), and seek expert advice when necessary.

The requirements of OFPP Policy Letter 92-4 mandating consideration of energy and environmental factors in the source selection phase are likely to result in increased problems in the contract award phase including the debriefing of unsuccessful offerors. Many of the unsatisfied "unsuccessful offerors" (i.e., those bidders who are unconvinced that the contracting officer selected a proper source), may opt to file a protest. The majority of the survey respondents think that the number of protests are likely to increase as a result of implementing the requirements of OFPP Policy Letter 92-4. Once again, the clarity of the criteria and how they are to be applied will be a determinant as to the amount of that increase.

Even with straightforward, unambiguous criteria, OFPP Policy Letter 92-4 is likely to increase the number of protests, simply because the Policy Letter gives competing firms another aspect upon which to base a protest. Filing a protest gives the protesting firm an opportunity to delay an award and fight for precious market share (i.e., obtain a bigger piece of a shrinking pie).

The number of protests will be inversely related to the ability of contracting officers to ensure that unambiguous criteria are provided in solicitation documents and convince

would-be protestors of the propriety of their source selection criteria and source selection decisions. Once again, adequate training will serve to minimize the number of protests.

As is the case with the contract award phase, another not so obvious impact of OFPP Policy Letter 92-4 is the likely effect that the Policy Letter will have on the contract administration phase. This concern is addressed in the next section.

4. Evaluating a Contractor's Compliance with the Contract

All of the aforementioned initiatives of OFPP Policy Letter 92-4 will not achieve the desired result (i.e., the procurement of environmentally-sound, energy-efficient products and services) if efforts are not taken in the contract administration phase to ensure that the contractor is in compliance with the terms and conditions of the contract. The function of contract administration is frequently delegated to an ACO (Administrative Contracting Officer). If that function is not delegated to an ACO, then it remains the responsibility of the PCO (Procuring Contracting Officer).

Eleven of the thirteen respondents foresee that OFPP Policy Letter 92-4 will have a substantial impact on their organizations with regard to monitoring contractor compliance with the contract. Not only will the Policy Letter require additional surveillance, the quality of that surveillance will be dependent upon the expertise of those assigned to that task. The task of ensuring compliance with the environmental

and energy requirements of the contract will most likely be performed by Quality Assurance Representatives (QARs).

In short, to be effective at monitoring contractor compliance, ACOs will have to: (1) ensure that their QARs receive appropriate training; and (2) hire experts who are already familiar with environmental and energy matters, when necessary. In addition to receiving training, QARs should consult with technical staff on the PCO's team, and enlist the support of the EPA when dealing with contract-unique, hard-to-monitor areas. In the interim (i.e., before training is implemented and received), ACOs may have to rely on outside assistance. Currently, there are plenty of environmental consulting-engineering (c-e) firms in the marketplace. The ten largest firms in the c-e industry claim less than 20% of the market. [Ref 27, p. 1] The existence of this competition should serve to ensure a reasonable price for the ACO seeking the assistance of such consulting-engineering firms.

5. Concluding Comment on Impacts of the Policy Letter

It is understandable that contracting officers are concerned about the impact of the Policy Letter on: (1) the contracting officer's review of SOWs and PWSs; and (2) the source selection evaluation criteria, since these are two areas that OFPP Policy Letter 92-4 specifically addresses in unique requirements #1/#5 and #3/#4 respectively. Impacts that may not have been as foreseeable by the drafters of the

Policy Letter are those on the contract award phase and the contract administration phase.

The survey shows overwhelmingly that Navy contracting activity staff are not capable of immediately absorbing the shocks (impacts) addressed in this section. Clearly, Navy contracting activities will have to take certain actions to facilitate compliance with the requirements of OFPP Policy Letter 92-4. Some of these actions are presented in the next section.

D. ACTIONS THAT WILL FACILITATE COMPLIANCE WITH OFPP POLICY LETTER 92-4

As highlighted in Chapter IV, the contracting officers responding to the survey recommended five actions to facilitate compliance with the Policy Letter. Those five action recommendations are:

- (1) the Navy should provide training to contracting activities;
- (2) the Navy should develop incentives to motivate contracting activities to comply;
- (3) each contracting activity should establish internal procedures and guidelines;
- (4) the Navy should provide additional funding to contracting activities; and
- (5) the Navy should allow contracting activities to increase their manning levels.

Of these five actions, two -- #4 (additional funding) and #5 (increased manning) -- will not be explored by this research. With a downsizing defense budget and force structure, it would

not be advisable to develop an action plan predicated on increased funding and increased manning. Instead, this research focuses on developing an action plan that is within the constraints of the Navy's current budget and force structure. This seems to be a realistic and moderate approach, since it is equally likely that Navy dollars dedicated to environmental programs will not decrease in the immediate future.³⁰ The following sections enumerate three actions that will facilitate compliance with OFPP Policy Letter 92-4.

1. Training

The number one action recommended to facilitate compliance is "training." This stands to reason when one considers the general apprehension/reluctance of contracting officers to implement the requirements of OFPP Policy Letter 92-4 while possessing only a limited knowledge about environmental and energy matters.

Virtually every aspect of the survey points to a need for training. In addition to "lack of training" specifically cited as an impediment preventing immediate compliance, "lack of experts" and "lack of expertise" were frequently cited as

³⁰ Evidence to support this was presented in Chapter II. Furthermore, "environmental programs" is one of the two areas that the DoD currently considers "hot" and it is unlikely the dollars will be cut from these programs. The other area is "Quality of Life programs."

impediments to compliance. Training is the vehicle by which these last two impediments can be overcome.

Contracting officers recognize strongly the need for environmental and energy training. The survey reveals that they both want and think they need training. Contracting officers provided a long list of training that they believe is necessary. The list ranged from general topics such as "Navy environmental policy" to much more specific topics such as "specification writing."

Throughout the survey, comments were made stating the need for a *cultural change* within Navy contracting activities if the requirements of the Policy Letter are to be fully implemented. In short, training could serve as the vehicle by which:

- (1) cultural values are changed in the Navy contracting system;
- (2) contracting officers and contracting specialists acquire the necessary knowledge to intelligently interface with requirements personnel to ensure proper consideration is given to energy and environmental factors in SOWs, PWSs, and specifications; and
- (3) environmental awareness is heightened as to the internal and external resources available to contracting personnel to assist them in making environmentally-sound, energy-efficient procurement decisions, and to effectively monitor contractor compliance with the contract.

Contracting personnel concerns regarding "lack of training" is well founded. Navy officers graduating from the Naval Postgraduate School's *Acquisition & Contract Management curriculum* receive no special training on environmental and

energy contracting. These are the future leaders of Navy contracting activities. The situation is just as bleak for contracting officers and contracting personnel already in the work force. Unfortunately, this is not a deficiency unique to the Navy. DoD wide, no specific courses are offered regarding environmental and energy contracting. Although the DoD began operating the Defense Acquisition University (DAU) on August 1, 1992, DAU does not offer one course --among its 61-course offering-- in environmental and energy contracting.³¹ [Ref 28, pp. A1-A7] Ironically, the policy letter that immediately preceded OFPP Policy Letter 92-4 "directed the DoD to provide acquisition work force training based on the duties and competency levels required in its acquisition positions." [Ref 29, p. 16]

Although some environmental contracting courses are offered from time-to-time by the EPA and various private concerns (e.g., Federal Publications, Inc.), these courses and seminars tend to focus mostly on "environmental legislation familiarization" and do not address the training needs identified in this research.

Chapter VI provides recommendations on how, with existing resources, such training should be prioritized and

³¹ DAU is a consortium of DoD education and training institutions and organizations which provide mandatory acquisition courses for military and civilian personnel serving in twelve acquisition career fields. The President of DAU reports directly to the Under Secretary of Defense for Acquisition and Technology {USD(A&T)}.

provided. Chapter VI also provides recommendations on how to improve the current availability of training to future, Navy contracting officers.

The next section addresses another action to facilitate and motivate compliance with OFPP Policy Letter 92-4.

2. Incentives

The concept of incentives to induce certain behaviors is gaining popularity throughout government and industry. Contracting officers frequently attempt to "incentivize" contractors through the use of incentive-type contracts (e.g., Cost Plus Fixed Fee, Fixed Price Incentive Fee, etc.). With the growing popularity of incentives and the present familiarity that contracting officers have with them, it comes as no surprise that the majority of respondents suggested "incentives" as a way to facilitate compliance with OFPP Policy Letter 92-4. Now, however, contracting officers feel that they themselves need to be incentivized.

Although no wide consensus was revealed as to the best way to provide incentives to contracting personnel, the thirteen suggestions on what incentives to use could be grouped into three broad categories:

- (1) negative incentives/penalties (e.g., "report organizations that don't comply");
- (2) positive procedural incentives (e.g., "allow for a phased-in implementation schedule," "make it easy"); and

- (3) positive personal and organizational incentives/rewards (e.g., "provide for Navy-wide recognition").

The first of these categories (negative incentives) may be a given; that is, negative incentives may be employed by higher authority (e.g., Congress or DoD) without any extra effort on the part of the Navy hierarchy. OFPP Policy Letter 92-4 will be incorporated into the FAR and DFARS, and oversight can be expected via Procurement Management Reviews (PMRs), GAO reports and DoD inspections. While a violation of some FAR rules [e.g., FAR 3.101-2 (Solicitations and acceptance of gratuities by Government personnel)] can lead to employment termination, violation of other rules such as "mandatory awards to SDBs (Small Disadvantaged Businesses)" are virtually ignored.³² The consequences of non-compliance with OFPP Policy Letter 92-4 remain to be seen. Since negative incentives may require increased oversight, additional administrative reporting, and increased judicial costs, the Navy may be better off to explore alternatives that better motivate contracting personnel to comply with the Policy Letter.

For example, the use of positive procedural incentives may be a less costly and more realistic approach. This approach would allow the Navy contracting system to train its personnel, gain experience, and develop easy-to-understand

³² Public Law 99-661 requires that each DoD contracting activity awards at least 5% of its total procurement dollars to SDBs.

internal directives and instructions. Using positive procedural incentives, such as a phased-in implementation schedule, may reduce the "cost of change" (e.g., protest costs) in terms of time and money. This method would also tie in closely with "training" as another means to facilitate compliance. However, there is one major disadvantage with this approach; the Navy will not be able to implement the Policy Letter at its own pace unless specific provisions in DoD Notices expressly authorize a phase-in period. DoD cannot authorize a phase-in period without permission to do so via federal legislation.

The third category (positive personal and organizational incentives) appears to be within the Navy's ability to control. A suggestion classified under this category is "allowing the activity to share in any resultant cost savings." Although Navy employees partake in similar "cost savings sharing" programs, such as BENESUG (Beneficial Suggestion), BOSS (Buy Our Spares Smart), and *qui tam* actions, a program such as any one of these may take a long time to establish and could be costly to establish, administer, and monitor.³³ Still, investigating such a "cost savings

³³ Under the *qui tam* provision of the 1986 Amendments to the False Claims Act, private citizens may file suit "on behalf" of the Federal Government alleging that someone has violated the False Claims Act. The person who discovers an error or fraudulent action can share in a certain percentage of the dollar savings realized by the correction of that error.

sharing" incentive program appears to be a fruitful area for further research.

Another suggestion classified under "positive personal and organizational incentives" is to give recognition to activities that comply with the Policy Letter either with respect to timeliness, quality of compliance, or both. Currently, both the DoD and the DoN have an awards program to provide such recognition. The Navy program provides award recognition in the following categories:

- Pollution Prevention and Recycling;
- Environmental Quality; and
- Material Resources Conservation.

The SECNAV environmental awards program is designed to recognize outstanding individual and organizational achievement in each of its services (Navy and Marine Corps) under each of the above categories. The 1993 SECNAV Environmental Awards Winners List is provided in Appendix J. An actual "nomination for award" write-up is provided in Appendix K.

For the reasons previously provided, and based on the fact that environmental recognition programs already exist in the Navy and DoD, incentivizing contracting organizations to comply with OFPP Policy Letter 92-4 through various forms of recognition is probably the most realistic and easiest incentive approach to employ. Recommendations on how to

enhance the effectiveness of the current awards program and on how to provide additional incentives are provided in Chapter VI.

3. Establishing Internal Procedures and Guidelines

There is a consensus among survey respondents that each contracting activity should develop its own set of internal procedures and guidelines explaining how to implement the requirements of OFPP Policy Letter 92-4. The practice of each lower echelon activity, in the DoD chain of command, developing its own instructions --citing higher authority references-- is not uncommon in the Department of Defense. Sometimes this practice seems redundant and wasteful, while at other times it is highly recommended and even required. With renewed emphasis on "streamlining" the DoD acquisition process, the practice of simply "rewriting" higher level instructions is being discouraged.³⁴ The following excerpt from DOD Directive 5000.1 illustrates this thrust:

Consistent with the objective of reducing the self-imposed administrative burden within the Department of Defense, this Directive shall not be supplemented, except as prescribed by statute, specifically authorized herein, or with the prior approval of the Secretary or Deputy Secretary of Defense. [Ref 30, p. 3]

³⁴ Streamlining the DoD acquisition process is being investigated diligently by the Department of Defense Acquisition Law Advisory Panel (commonly known as the Section 800 Panel). Panel members include prominent personnel from varied disciplines (contracting, law, etc.) within government and industry.

As noted earlier, however, sometimes the practice of establishing and publishing internal procedures and guidelines applicable only to the drafter's organization is recommended to accommodate unique characteristics of that particular organization. This practice appears to be reasonable in this case. "Navy internal" procedures could be used to communicate responsibility to both requirements personnel and contracting personnel. It would also be beneficial if each Navy activity developed its own set of procedures and guidelines to meet the requirements of OFPP Policy Letter 92-4 as the Policy pertains to the unique products and services that that particular activity procures. Therefore, the consensus opinion to establish internal procedures and guidelines is valid and would ultimately lead to facilitating the implementation of the Policy Letter. Recommendations as to how and when these "Navy internal" and "activity internal" procedures should be established are provided in Chapter VI.

E. CHAPTER SUMMARY

This chapter provided an interpretation and analysis of data presented in Chapter IV. As an answer to subsidiary question #2, this analysis shows that OFPP Policy Letter 92-4 is likely to have a significant impact on:

- (1) the contracting officer's review of the Statement of Work and Performance Work Statement;
- (2) the development of source selection evaluation criteria;

- (3) the contract award phase, including both the debriefing of unsuccessful offerors and the handling of an expected increase in the number of protests; and
- (4) the contract administration phase, in terms of a contracting officer's ability to evaluate a contractor's compliance with the terms and conditions of the contract.

The Policy Letter imposes extra requirements on contracting personnel in each of these four areas. Impediments, such as those indicated below, are several of the major factors that may prevent contracting activities from complying immediately with the requirements of OFPP Policy Letter 92-4:

- the lack of experts (i.e., the number of trained personnel);
- the lack of expertise (i.e., the knowledge of those already in the work force;
- a shortage of personnel;
- poor coordination between requirements personnel and contracting personnel; and
- an attitude of non-responsibility on behalf of contracting officers.

In answer to subsidiary question #3, Chapter V derived three recommendations as actions that might facilitate compliance with the Policy Letter:

- (1) the Navy should provide environmental and energy training to contracting activities;
- (2) the Navy should develop incentives to motivate contracting activities to comply; and
- (3) each contracting activity should establish internal procedures and guidelines.

Conclusions and recommendations regarding each of these actions are provided in Chapter VI.

VI. CONCLUSIONS & RECOMMENDATIONS

A. INTRODUCTION

This chapter provides an answer to the primary research question. Specifically, this chapter provides a plan of prioritized action steps designed to allow Navy contracting activities to efficiently and effectively comply with the requirements mandated by OFPP Policy Letter 92-4.

This plan is based on the analysis of data collected from the survey process and from personal interviews. The plan consists of three major recommendations. In order of priority, they are:

- (1) Senior Navy officials [e.g., SECNAV, CNO, ASN(RD&A)] have to communicate to all Navy acquisition officials that the implementation of OFPP Policy Letter 92-4 is the responsibility of contracting personnel and requirements personnel;
- (2) Environmental and energy related training must be provided to contracting personnel on a variety of subject areas (e.g., Navy environmental policy, environmental awareness, specification review, etc.); and
- (3) Positive personal and organizational incentives should be used to motivate contracting activities (as whole organizations) and contracting personnel (as individuals) to comply with the Policy Letter.

The details of these three recommendations are presented in the remainder of this chapter.

B. COMMUNICATING RESPONSIBILITY

OFPP Policy Letter 92-4 cannot be implemented without cooperation, communication, and coordination between requirements personnel and contracting personnel. Contracting personnel have a strong perception that implementing OFPP Policy Letter 92-4 should be the responsibility of requirements personnel. This sentiment was voiced by the Director of Defense Procurement --Eleanor Spector-- when she made the following comment to the Office of Federal Procurement Policy, "We only buy what we are told to buy." [Ref 12] Although this attitude accurately reflects that requirements personnel have a critical, and perhaps the first, responsibility for ensuring the successful implementation of the Policy Letter, the "it's not my job" attitude is likely to be frowned upon during Procurement Management Reviews (PMRs). Failing a PMR can result in an activity losing its procurement authority. In an effort to prevent nearing that level of embarrassment, and the resultant headaches associated therewith, contracting personnel should be made aware that they are responsible for ensuring that the requirements of OFPP Policy Letter 92-4 are met, and that they will be held accountable for failure to meet those responsibilities.

Not to belittle the concern of many contracting personnel, requirements personnel must also be made aware of their responsibilities in meeting the requirements of the Policy

Letter, and that they too may be held accountable for failing to carry out those responsibilities. Knowing that contracting personnel are required to review the specifications drafted by requirements personnel, requirements personnel must be brought to realize that it is in their best interests to draft specifications that facilitate the procurement of environmentally-sound, energy-efficient products and services. Failure to do so may result in their PR (procurement request) being "kicked back" to them, ultimately resulting in a longer wait period to get the needed item (supplies, equipment, service, etc.).

Senior Navy officials should ensure that requirements personnel and contracting personnel:

- (1) understand their own particular responsibilities; and
- (2) work jointly to develop an acquisition process that
(a) clearly defines their respective roles and responsibilities, and (b) permits the procurement of environmentally-sound, energy-efficient products and services without unduly sacrificing schedule or product/service performance.

Senior Navy officials can ensure that both requirements personnel and contracting personnel feel responsible for meeting the requirements of OFPP Policy Letter 92-4 by:

- convening "initial coordination conferences";
- ensuring adequate guidance is provided in procurement-related instructions; and
- ensuring training programs are established, and that contracting activities receive adequate funding to send their people to those programs.

The conferences should include senior acquisition officials from the "requirements side" and "contracting side" of each major systems command (e.g., NAVSEA, NAVSUP, NAVAIR, NAVFAC, SPAWAR, etc.). The agenda of the conferences should include a discussion of the requirements of OFPP Policy Letter 92-4, and the formulation of an acquisition process that ensures maximum coordination between requirements personnel and contracting personnel in meeting those requirements.

Regarding adequate written guidance, contracting personnel will be held to the rules specified in the FAR, whereas requirements personnel will be held accountable to other rules in various instructions such as OPNAVINST 5090.1A (*Environmental and Natural Resources Program Manual*). Currently, for major acquisitions, program managers are responsible for meeting the requirements of DoD Instruction 5000.2 (Defense Acquisition Management Policies and Procedures). This instruction is relatively vague --at least in comparison to the FAR --with regard to energy and environmentally-related considerations. At present, there are no plans to incorporate the specific wording of OFPP Policy Letter 92-4 into DODINST 5000.2. [Ref 12] Incorporating the Policy Letter into the instruction, however seems to be a logical move, since such a move would put equal emphasis of meeting the specific requirements of OFPP Policy Letter 92-4 on both requirements personnel and contracting personnel.

While exerting more centralized control over acquisition personnel appears to be advantageous, increased facilitation of OFPP Policy Letter 92-4 can be realized if each lower echelon activity establishes its own implementation procedures and guidelines. This practice is recommended, since many contracting activities buy unique products and services that could be more efficiently and effectively procured if "tailor-made" guidelines were in place. However, establishing or publishing such internal instructions would be premature at this stage, since the requirements of OFPP Policy Letter 92-4 have yet to be published in the FAR. Once the Policy Letter is incorporated into the FAR, it would behoove each Navy contracting activity to develop its own internal procedures and guidelines:

- (1) consistent with the FAR and any DoD guidance; and
- (2) "tailor-written" to accommodate the peculiar products and services it buys.

In the meantime, all Navy contracting activities should become familiar with and use the guidance available in OPNAVINST 5090.1A, FAR Part 7.105b(15), and other related regulations and instructions which are listed in Appendix A of OPNAVINST 5090.1A.

One last point regarding "communicating responsibility"... senior Navy officials should attempt to get acquisition personnel to feel more responsible for meeting the requirements of the Policy Letter by developing and administering a training course designed to increase the level

of environmental awareness. The details of this type of training and other related training are discussed in the next section.

C. TRAINING

Training is the second action recommended to facilitate the implementation of OFPP Policy Letter 92-4. It is insufficient, however, to simply state that training is the second prioritized action; the type of training offered and who should receive that training have to be prioritized, since statutory ceilings are imposed on activities' training funds.

1. Type of Training

a. Awareness Training

Navy contracting personnel will have to undergo a *cultural change* before they are fully receptive to other, more specific, environmental and energy-related training. Therefore, awareness training should be at the top of the list. This awareness training should cover such topics as: (1) the impact that the Navy exerts on the environment; and (2) the impact that environmental legislation, budgeting, and media have on the Navy. In addition, awareness training should familiarize contracting personnel with the Navy environmental policy, and acquaint them with other topics contained in OPNAVINST 5090.1A (*Environmental and Natural Resources Program Manual*).

Another topic that should be included in awareness training is "Resources Available To Assist." Contracting personnel need to be aware that a variety of personnel are available to assist and advise them when an energy or environmental issue is involved in a procurement decision. By instruction, each Navy activity is required to have a person designated as the Environmental Coordinator. In addition to this "in-house" resource, other "Navy internal" resources are available. Such resources include Area Environmental Coordinators, Regional Environmental Coordinators, and State Environmental Coordinators. These coordinators are required to:

- serve as point of contact for public and media inquiries;
- ensure consistent positions, agreements, permit conditions and responses to regulatory agencies;
- ensure exchange of environmental information among Navy shore activities including distribution of state, local and regional laws, rules and regulations;
- develop local/regional plans of actions for specific environmental initiatives; and
- provide assistance to facilities in dealing with regulatory agencies.

A list of these Navy coordinators is provided in Appendix I. Further, Navy legal resources such as JAG (Judge Advocate General) and OGC (Office of General Counsel) attorneys provide advice regarding the legal effect of provisions in contracts or agreements with respect to environmental matters.

Resources external to the Navy include other Government agencies such as the EPA, GSA, and DoE. The EPA

has ten regional offices located in the following major cities: Boston, New York, Philadelphia, Atlanta, Chicago, Dallas, Kansas City, Denver, San Francisco, and Seattle. In addition to providing technical and legal advice, each of these regional offices offers some --albeit minimal-- training courses which are available to DoD personnel, often on a no charge basis. [Ref 31] The EPA also publishes various *EPA Procurement Guidelines* which are designed to assist contracting officers in making environmentally-sound, energy-efficient procurement decisions. The GSA is another knowledgeable resource, especially with regard to meeting "unique requirement #6" of OFPP Policy Letter 92-4 (i.e., ordering paper products). The *GSA Recycled Products Guide* is a useful resource for contracting officers to consult when ordering paper products and a variety of other non-military products (consumables, furniture, etc.) The Department of Energy has an Office of Environmental Guidance (phone: 202-586-8505) which is yet another resource available to contracting officers.

b. Specification Review Training

The next training priority should be to educate contracting officers on what to look for when reviewing specifications. This is perhaps the single-most important facet to ensure that the intent of OFPP Policy Letter 92-4 is achieved. This training should acquaint contracting officers with the voluntary standards and specifications established

pursuant to paragraph 7.a.(5) of OFPP Policy Letter 92-4.³⁵ In addition to being familiar with, and having access to, these standards and specifications, contracting officers should also contact other Federal agencies (e.g., GSA, EPA, and DoE), when necessary, to ensure adequate consideration is given to energy and environmental factors.

2. Prioritizing Training

Realizing that: (1) activities have statutorily imposed ceilings on their training funds; and (2) activities cannot send all contracting personnel to training at the same time, each contracting activity must devise a plan that maximizes the benefit of training within given time constraints and fiscal restriction. A recommendation is that contracting activities should create a position titled Environmental and Energy Advocate (EEA) and designate one of its contracting personnel to fill that position. The reasons for having an Environmental and Energy Advocate parallels the reasons for having a Competition Advocate whose duties are delineated in FAR Part 6.5. Rather than have the EEA's primary focus on the promotion of competition (as it is with the Competition Advocate), an Environmental and Energy Advocate would promote the procurement of environmentally-

³⁵ This paragraph requires that heads of executive agencies work with private standard setting organizations in the development of voluntary standards and specifications defining environmentally-sound, energy-efficient products, practices and services.

sound, energy-efficient products and services. Specifically, the EEA would:

- (1) be responsible for challenging barriers (e.g., in specifications) to the procurement of environmentally-sound, energy-efficient products and services;
- (2) identify opportunities to procure environmentally-sound, energy-efficient products and services;
- (3) identify any condition that has the effect of restricting the procurement of environmentally-sound, energy-efficient products and services; and
- (4) prepare a report to the Navy's senior procurement executive describing new initiatives implemented by that EEA's command that positively affected the procurement of environmentally-sound, energy-efficient products and services.

The person designated as EEA should be the first --among all contracting personnel-- to receive environmental and energy training.

3. Method of Training

Due to the noted lack of energy and environmental training, the DoD and the Navy need to develop and administer training on: (1) environmental awareness; (2) resource availability; and (3) specification review. Environmental awareness training lends itself well to video presentation. The visual impact of the devastating effects of improper energy and environmental contracting could leave lasting impressions on the minds of contracting personnel. This video presentation (film) could be shown to future Navy contracting

officers at the Naval Postgraduate School during MN 2302 (Acquisition and Contract Management Seminar) or MN 4371 (Acquisition and Contracting Policy) sessions.

An *Environmental Resources Manual* should be written, distributed, and maintained [i.e., kept up-to-date (e.g., at the SECNAV level)]. The Manual would contain the names and phone numbers of organizations (military and civilian) available and capable of lending assistance to: (1) contracting personnel attempting to procure environmentally-sound, energy-efficient products and services; and (2) contract administration personnel responsible for ensuring contractor compliance with the energy and environmental clauses of contracts under their purview. This Manual would not only be used as a course guidebook, but would also serve as a handy desk-top reference for contracting officers "out in the field."

"Specification review" training and "source selection evaluation criteria" training lend themselves more appropriately to the forum of classroom training. Courses on "specification review" and "source selection evaluation criteria" should be provided within the Defense Acquisition University system and offered to Navy contracting personnel on a TAD (temporary additional duty) basis. The Navy should ensure that these courses are incorporated into the *Acquisition & Contract Management* curriculum at the Naval Postgraduate School; not necessarily as a separate course, but

perhaps incorporated into MN 3303 (Principles of Acquisition and Contracting) or MN 3304 (Contract Pricing and Negotiations). Another alternative which could be used at the Naval Postgraduate School would be to establish and offer an elective course in energy and environmental contracting.

4. Concluding Comment on Training

Only after comprehensive training, such as that delineated above, will contracting personnel be sufficiently motivated and competent to ensure that environmental and energy factors are considered in all procurements. The next section discusses the third recommendation provided at the beginning of this chapter.

D. POSITIVE ORGANIZATIONAL AND PERSONAL INCENTIVES

Providing positive personal and organizational incentives to motivate compliance with OFPP Policy Letter 92-4 would be an easy incentive approach to implement. As noted in Chapter V, an environmental awards program to recognize personal and organizational achievement already exists within DoN and DoD.

Although the current awards programs provide top level recognition and have the potential to be effective incentives, a significant portion of contracting personnel are unaware of their existence. This "lack of awareness" is preventing the program from achieving its full potential as a motivational tool. An appropriate recommendation, therefore, is to enhance

awareness and increase visibility of both the SECNAV and SECDEF awards program by the Secretary of the Navy's staff:

- (1) ensuring maximum distribution of the awards winners list to all Navy commands, and directing maximum dissemination within those commands;
- (2) alerting Navy commands of the procedures for submitting nominations for awards;³⁶
- (3) sending out an official Navy message --the same time every year-- requesting nominations.

In addition to fully utilizing the current Navy and DoD awards programs, Navy contracting activities could "toot their own horns" and call recognition to specific individual achievement by submitting articles for publication in military periodicals (e.g., *Navy News*, *All Hands* magazine) and civilian periodicals {e.g., local newspapers, and environmental journals (e.g., *Environment Today*)}. This form of proactive publicity would serve to give wide recognition to deserving organizations and individuals, and enhance the spreading and sharing of good ideas, methods, and programs.

E. IDEAS FOR FURTHER RESEARCH

OFPP Policy Letter 92-4 is applicable to all Federal agencies. This research examined the Policy Letter as it pertains to Navy contracting activities. This thesis research

³⁶ Details on the SECNAV and SECDEF environmental awards programs are provided in OPNAVINST 5090.1A, and procedures for submitting nominations are contained therein.

revealed that even within the Department of the Navy, further research may prove useful in the following areas:

- 1) Research the establishment of an Affirmative Procurement Program for any one of the Navy contracting activities (e.g., Fleet Industrial Support Center, Oakland);
- 2) Research an optimal plan to implement OFPP Policy Letter 92-4 for a specific commodity group (e.g., fuels); and
- 3) Research the establishment of a monetary incentive program (e.g., a cost savings sharing program) to motivate, facilitate and expedite compliance with OFPP Policy Letter 92-4.

F. CONCLUSION

OFPP Policy Letter 92-4 is an attempt to prevent --or at least minimize-- pollution through the procurement of environmentally-sound, energy-efficient products and services. The Policy Letter represents a shift in focus from pollution clean up to pollution prevention. Ostensibly, proactive pollution prevention actions do nothing to solve some of the immediate problems facing the Navy (e.g., disposal of hazardous material on sites slated for base closure). They may, however, guarantee lower costs associated with environmental litigation and environmental clean up in the future.

In light of: (1) OFPP Policy Letter 92-4; (2) the expectation of more environmental legislation; and (3) the threat of an increase in the number and severity of penalties levied against "non-compliers," it behooves the Navy to take a proactive approach to comply with the requirements of OFPP

Policy Letter 92-4. The plan of prioritized actions recommended in this research should --if implemented-- serve to facilitate compliance with the Policy Letter.

APPENDIX A

LIST OF ACRONYMS

BAT - Best Available Technology
BRAC - Base Realignment and Closure
CAA - Clean Air Act
CAAC - Civilian Agency Acquisition Council
CERCLA - Comprehensive Environmental Response, Compensation,
and Liability Act
CHINFO - Chief of Naval Information
CNO - Chief of Naval Operations
CWA - Clean Water Act
DARC - Defense Acquisition Regulatory Council
DoD - Department of Defense
DoE - Department of Energy
DoN - Department of the Navy
EPA - Environmental Protection Agency
FAR - Federal Acquisition Regulation
FY - Fiscal Year
GSA - General Services Administration
IFB - Invitation for Bid
NASA - National Aeronautics and Space Administration
NAVAIR - Naval Air Systems Command
NAVCOMPT - Navy Comptroller
NAVFAC - Naval Facilities Engineering Command
NAVSEA - Naval Sea Systems Command

NAVSUP - Naval Supply Systems Command Headquarters
NEPA - National Environmental Policy Act
NOV - Notice of Violation
NPL - National Priority List
OFPP - Office of Federal Procurement Policy
OMB - Office of Management and Budget
OSD - Office of Secretary of Defense
PPA - Pollution Prevention Act
PR - Procurement Request
R&D - Research and Development
RCRA - Resource Conservation and Recovery Act
RCRAC - RCRA Subsection C (Hazardous Waste)
RCRAD - RCRA Subsection D (Solid Waste)
RCRAI - RCRA Subsection I (Underground Storage Tanks)
RFP - Request for Proposal
SERDP - Strategic Environmental Research and Development
Program
SPAWAR - Space and Naval Warfare Systems Command
TRI - Toxic Release Inventory
TSCA - Toxic Substance Control Act

APPENDIX B

OFFPP POLICY LETTER 92-4



OFFICE OF FEDERAL
PROCUREMENT POLICY

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET

WASHINGTON, D.C. 20503

November 2, 1992

POLICY LETTER NO. 92-4

TO THE HEADS OF EXECUTIVE DEPARTMENTS AND ESTABLISHMENTS

SUBJECT: Procurement of Environmentally-Sound and Energy-Efficient Products and Services

1. **Purpose.** This Policy Letter provides Executive branch policies for the acquisition and use of environmentally-sound, energy-efficient products and services.
2. **Supersession Information.** The Policy Letter supersedes and cancels OFFPP Policy Letter 76-1, Federal Procurement Policy Concerning Energy Conservation, dated August 6, 1976; Supplement No. 1 to Policy Letter 76-1, dated July 2, 1980, and OFFPP Policy Letter 77-1, Procurement of Products that Contain Recycled Material, dated February 2, 1977.
3. **Authority.** The Policy Letter is issued pursuant to section 6(a) of the Office of Federal Procurement Policy (OFFPP) Act, as amended, 41 U.S.C. 405, and section 6002 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6962. RCRA, section 6002 requires OFFPP to issue coordinated policies to maximize Federal use of recovered material.
4. **Definitions.**
 - a. **Executive Agency.** Means an Executive department, and an independent establishment within the meaning of 5 U.S.C. 101, 102, 103(1) and 104(1), respectively.
 - b. **Recovered Material.** Means waste material and by-products which have been recovered or diverted from solid waste, but such term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process (42 U.S.C. 6903(19)).
 - c. **Post-Consumer Waste.** Means a material or product that has served its intended use and has been discarded for disposal after passing through the hands of a final user. Post-consumer waste is a part of the broader category "recycled material" (40 CFR 247.101(e)).

- d. Recycled Materials. Means a material that can be utilized in place of a raw or virgin material in manufacturing a product and consists of materials derived from post-consumer waste, industrial scrap, material derived from agricultural waste and other items, all of which can be used in the manufacture of new products (40 CFR 247.101(g)).
 - e. Environmentally-Sound. Means a product or service that minimizes damage to the environment and is less harmful to the environment to use, maintain and dispose of in comparison to a competing product or service.
 - f. Cost-Effective Procurement Preference Program. Means a program that favors, where price and other factors are equal, the procurement of products and services that are more environmentally-sound or energy-efficient than other competing products and services.
 - g. Preference. Means when two products or services are equal in performance characteristics and price, the Government in making purchasing decisions, will favor the product that is more environmentally-sound or energy-efficient.
5. Background. In its day-to-day operations, the Federal Government has the opportunity and obligation to be environmentally and energy conscious in its selection and use of needed products and services. The Government, as the largest single consumer in the nation, has many opportunities to conserve and make more efficient use of energy and other resources. Leveraging the Government's \$190 billion annual purchasing program toward more energy-efficient and environmentally-sound practices will not only benefit the nation by reducing the cost of Government, but will help make the Government a model consumer.
6. Policy. It is the policy of the Federal Government that Executive agencies implement cost-effective procurement preference programs favoring the purchase of environmentally-sound, energy-efficient products and services.
- a. Energy Efficiency. Executive agencies shall consider energy conservation and efficiency factors in the procurement of property and services, pursuant to the Energy Policy and Conservation Act, 42 U.S.C. 6201, et seq.; section 3 of Executive Order 11912, as amended, April 13, 1976, and section 5 of Executive Order 12759, April 17, 1991. Energy conservation and efficiency data will be considered, along with estimated cost and other relevant factors, in the development of purchase

requests, invitations for bids and solicitations for offers. In addition, with respect to the procurement of consumer products, as defined under Part B, Title III of the Energy Policy and Conservation Act, agencies shall consider energy use/efficiency labels (42 U.S.C. 6294) and prescribed energy efficiency standards (42 U.S.C. 6295) in making purchasing decisions.

- b. Environmental Conservation. Executive agencies shall give preference in their procurement programs to practices and products that conserve natural resources and protect the environment, pursuant to the Resource Conservation and Recovery Act as amended, 42 U.S.C. 6962 and Executive Order 12780, October 31, 1991. Environmental factors will be considered, along with estimated costs and other relevant factors, in the development of purchase requests, invitations for bids, and solicitations for offers.

7. Responsibilities.

- a. Heads of Executive Agencies. In implementing the policies in Paragraph 6, above, Executive agencies shall:
 - (1) Identify and procure needed products and services that, all factors considered, are environmentally-sound and energy-efficient;
 - (2) Procure products, including packaging, that contain the highest percentage of recovered materials, and where applicable, post-consumer waste, consistent with performance requirements, availability, price reasonableness and cost effectiveness;
 - (3) Employ life cycle cost analysis, whenever feasible and appropriate, to assist in making product and service selections;
 - (4) Use product descriptions and specifications that reflect cost-effective use of recycled products, recovered materials, water efficiency devices, remanufactured products and energy-efficient products, materials and practices;
 - (5) Work with private standard setting organizations and participate, pursuant to OMB Circular No. A-119, in the development of voluntary standards and specifications defining environmentally-sound, energy-efficient products, practices and services;

- (6) Require vendors to certify the percentage of recovered materials used, when contracts are awarded wholly or in part on the basis of utilization of recovered materials;
- (7) Assure, when drafting or reviewing specifications for required items, that the specifications (a) do not exclude the use of recovered materials; (b) do not unnecessarily require the item to be manufactured from virgin materials; and (c) require the use of recovered materials and environmentally-sound components to the maximum extent practicable without jeopardizing the intended end use of the item; and
- (8) Arrange for the procurement of solid waste management services in a manner which maximizes energy and resource recovery. Agencies that generate heat, mechanical, or electrical energy from fossil fuel in systems that have the technical capability of using energy or fuel derived from solid waste as a primary or supplementary fuel shall use such capability to the maximum extent practicable.

b. Special Requirements for Paper. In implementing the policy in Paragraph 6.b. for paper and paper products acquired through the General Services Administration (GSA) or the Government Printing Office (GPO), Executive agencies shall:

- (1) Designate that the paper and paper products identified in the "GSA Recycled Products Guide" or the "GSA Supply Catalog" be provided, where practicable, when ordering paper from GSA.
- (2) Provide information to the Joint Committee on Printing and the Government Printing Office regarding the highest practicable percentages of recovered materials (including post-consumer recovered material) allowable in the various paper requirements of the agency subject to reasonable price, performance and availability limitations.
- (3) Specify in paper orders, placed through either the Government Printing Office or the General Services Administration, or printed product orders, placed through the Government Printing Office, the highest minimum content paper specifications standard (including post-consumer recovered material standards) developed by the Joint Committee on Printing and the Government Printing

Office for the intended use, subject to reasonable price, performance and availability limitations.

- (4) Refrain from specifying coated papers, brand name papers, and other specialty or fancy grades of paper for products with a limited useful life such as annual reports, catalogues, training materials and telephone directories. Newsprint containing recycled content should be considered for many limited life documents.

(Note: Copies of the GSA "Recycled Products Guide" or the "GSA Supply Catalog" may be obtained by contacting the GSA Centralized Mailing List Service in Fort Worth, TX 76115: Commercial (817) 334-5215 or Autovan 739-7369).

c. Affirmative Procurement Programs. In addition to the responsibilities in subparagraph a. and b. above, Executive agencies must take the following actions:

- (1) Develop agency specific affirmative procurement programs for each of the items covered by guidelines developed by the Environmental Protection Agency pursuant to subsection 6002(e) of RCRA (see 40 CFR 248-250, 252 and 253). These programs, as a minimum, must comply with RCRA subsection 6002(i) and must:
 - (a) state a preference for the procurement of the item covered by the guideline;
 - (b) promote the cost-effective procurement of the covered item;
 - (c) require estimates of the total amount of the recovered item used in a contract, certification of the minimum amount actually used, where appropriate, and procedures for verifying the estimates and certifications;
 - (d) provide for the annual review and monitoring of the effectiveness of the program; and
 - (e) include one of the following options, or a substantially equivalent alternative, to insure that contracts for items covered by the guidelines are awarded, unless waivers are granted pursuant to paragraph (2) below, on the basis of:

- Case-by-case procurement, open competition between products made of virgin materials and products containing recovered materials; preference to be given to the latter, or
 - Minimum-content standards, which identify the minimum content of recovered materials that an item must contain to be considered for award.
- (2) Base decisions to waive, or not to procure, guideline items composed of the highest percentages of recovered materials practicable on a determination that such items:
- (a) are not reasonably available within the time required;
 - (b) fail to meet the performance standards set forth in applicable specifications or fail to meet the reasonable performance standards of the procuring agencies;
 - (c) are only available at an unreasonable price, or
 - (d) are not available from a sufficient number of sources to maintain a satisfactory level of competition.

(Note: Any determination under (2)(b), above, shall be made on the basis of National Institute of Standards and Technology guidelines when the items being procured are covered by such guidelines.)

- (3) The responsibilities specified in c.(1) and (2) above, apply only to purchases of guideline items costing \$10,000 or more or where the quantity of such items, or of functionally-equivalent items, acquired in the course of the preceding year was \$10,000 or more.
 - (4) Compliance with RCRA, Section 6002, can also be waived where such compliance would be inconsistent with actions taken pursuant to guidelines for the management of solid waste promulgated by EPA under RCRA, Section 6907.
8. Federal Acquisition Regulation (FAR) Councils. The Defense Acquisition Regulatory Council and the Civilian Agency Acquisition Council shall conduct a thorough review of the

relevant parts of the FAR to (1) assure that no unintended encumbrances to the acquisition of environmentally-sound, energy-efficient products and services are contained therein, and (2) that the procurement policies established by this Policy Letter are fully reflected in the FAR within 210 days of the effective date of this Policy Letter.

9. Reporting Requirements. In accordance with Section 502, Executive Order 12780 and subsection 6002(i) of RCRA, each Executive agency shall review annually the effectiveness of its affirmative procurement program and shall provide a report regarding its findings to the Environmental Protection Agency and to the OFPP beginning with a report covering Fiscal Year 1992. Such report shall be transmitted by December 15 each year. Reports required by this paragraph may be made available to the public.
10. Effective Date. This Policy Letter is effective 30 days after the date of issuance. While full implementation of these policies must await needed change to the FAR, it is expected that agencies will take all appropriate actions in the interim to implement those aspects of the policy that are not dependent upon regulatory change.
11. Federal Acquisition Regulatory Council. Pursuant to sections 6(a) and 25(f) of the OFPP Act, as amended, 41 U.S.C. 401 et seq., the Federal Acquisition Regulatory Council shall ensure that the policies established herein are incorporated in the FAR within 210 days from the date this Policy Letter is published in the Federal Register. The 210 day period is considered a "timely manner" as prescribed in 41 U.S.C. 405(b).
12. Information. Questions or inquiries about this Policy Letter should be directed to Linda Mesaros or Cyndi Vallina, Office of Federal Procurement Policy, 725 17th Street, NW, Washington, DC 20503, telephone (202) 395-3501.

Allan V. Burman

Allan V. Burman
Administrator

APPENDIX C

ORGANIZATIONS CONTACTED AT THE REQUEST OF NAVSUP

13 ACTIVITIES THAT RESPONDED

Activity Name: Navy Aviation Supply Office (ASO)
Address: 700 Robbins Avenue, Philadelphia, PA 19111
POC: Mr. James Brennan
Title: Supervisory Procurement Analyst
Phone: AV: 442-2854 COMM: (215) 697-2854

Activity Name: Naval Air Warfare Center Aircraft Division
Address: Bldg 588, Patuxent River, MD 20670
POC: Doris Browder
Position/Title: Deputy Director of Procurement
Phone: AV: 326-1824 COMM: (301) 826-1824

Activity Name: Naval Regional Contracting Center
Address: Washington Navy Yard, Bldg 200
Washington, DC 20374
POC: Indulis Tupesis
Position/Title: Director of Contracts
Phone: AV: 288-2844 COMM: (202) 433-2845

Activity Name: Fleet and Industrial Supply Center
Address: RCD, Code 202, Charleston, SC 29408
POC: Jolienne Bowers
Position/Title: Acting Director of Contracts Division
Phone: AV: 563-2703 COMM: (803) 743-2703

Activity Name: Assistant Secretary of the Navy (RD&A)
Address: Code APIA-PP, Washington, DC 20350-1000
POC: Louisa McAllister
Position/Title: Senior Procurement Analyst
Phone: AV: 332-2798 COMM: (703) 602-2798

Activity Name: Commander Naval Special Warfare Group 2
Address: NAB-Little Creek, Norfolk, VA 23521
POC: Betty Bonner
Position/Title: Supervisory Purchasing Agent
Phone: AV: 680-7181 COMM: 804-363-4201

Activity Name: Naval Regional Contracting Center, San Diego
Address: 937 North Harbor Drive
San Diego, CA 92132-5106
POC: Laurie McKee, CDR (Sel), USN & Joyce Cozart
Position/Title: Contracting Officer
Phone: AV: 522-3193 COMM: (619) 532-3193

Activity Name: Naval Surface Weapons Center
Address: Headquarters, Dahlgren, VA 22448
POC: Bruce Franks
Position/Title: Head of Contracting Division
Phone: AV: 249-7958 COMM: (703) 663-7169

Activity Name: Naval Air Systems Command
Address: Code AIR 2111, 1421 Jefferson Davis Hwy
Arlington, VA 22243
POC: Judith Richardson and Cynthia Frate
Position/Title: Procurement Analyst
Phone: AV: 222-2865 COMM: (703) 746-2865

Activity Name: Naval Sea Systems Command
Address: 2531 Jefferson Davis Hwy, Arlington, VA 22242
POC: Bonnie Hammersley
Position/Title: Head of Contracts Policy
Phone: AV: 332-3594 COMM: (703) 602-3594

Activity Name: Navy Regional Contracting Center, Philadelphia
Address: U.S. Naval Base, Bldg # 600
Philadelphia, PA 19112
POC: Joe Caromano
Position/Title: Director of Procurement Policy/Competition
Advocate
Phone: AV: 443-5401 COMM: (215) 897-5329

Activity Name: Navy Ships Parts Control Center (SPCC)
Address: Code 0201, P.O. Box 2020
Mechanicsburg, PA 17055-0788
POC: Ronald E. Warner
Position/Title: Supervisor Contract Operations Support Office
Phone: AV: 430-7682 COMM: (717) 790-7682

Activity Name: Naval Surface Warfare Center Crane Division
Address: Southside Drive, Louisville, KY 40214-5000
POC: Charles Buccola
Position/Title: Deputy Director
Phone: AV: 989-5828 COMM: (502) 364-5828

8 ACTIVITIES THAT DID NOT RESPOND

Activity Name: Navy Clothing and Textile Research Facility
Address: 21 Strathmore Rd., Natick, MA 01760-2490
POC: Rudy Marcial
Phone: AV: 256-4196 COMM: (508) 651-4196

Activity Name: Naval Air Warfare Center Aircraft Division
Address: P.O. Box 7176, Trenton, NJ 08628-0716
POC: Pat Martonick
Position/Title: Warranted Contracting Officer
Phone: AV: 442-7971 COMM: (609) 538-6971

Activity Name: Government Printing Services
Address: Defense Printing Office, The Pentagon
 Washington, DC 20350-3000
POC: Don Lee
Phone: AV: 288-3771 COMM: (202) 433-3771

Activity Name: Naval Command, Control and Ocean Surveillance
 Center
Address: Bldg 509, Code 113, Vallejo, CA 94592-5017
POC: Pamela Frey
Position/Title: Division Director of Contracting
Phone: AV: 253-8725 COMM: (707) 646-8725

Activity Name: Fleet Industrial Supply Center, Norfolk
Address: Regional Contracting Department
 1968 Gilbert Street, Suite 600
 Norfolk, VA 23511
POC: Adele Lettieri
Position/Title: Branch Manager and Contracting Officer
Phone: AV: 564-4006 COMM: (804) 444-4006

Activity Name: Naval Facilities Engineering Command
Address: 200 Stovall Street, Alexandria, VA 22332-2300
POC: Mike Green
Position/Title: Director of Environmental Policy
 Implementation
Phone: AV: 221-8175 COMM: (703) 325-8175

Activity Name: Portsmouth Naval Shipyard
Address: Code 530, Purchase Division Officer
 Portsmouth, NH 03801
POC: Jack Balz
Phone: AV: 684-2775 COMM: (207) 438-2775

Activity Name: Naval Air Weapons Station
Address: Code C832, Resident OIC Construction,
 Bldg 00978, China Lake, CA 93555
POC: Mike Thorpe
Position/Title: Contracting Officer
Phone: AV: 437-4412 COMM: (619) 939-4435

APPENDIX D

ORGANIZATIONS CONTACTED AT THE DISCRETION OF THE RESEARCHER

Activity Name: 17th Congressional District
Phone: AV: N/A COMM: (408) 649-3555

Activity Name: Office of the Secretary of the Navy
(Installations & Environment/E & S)
Address: Crystal Plaza 5, Room 236
2211 Jefferson Davis Hwy
Arlington, VA 22244-5110
POC: CDR McConahy
Position/Title: Special Assistant for Pollution Prevention and Compliance
Phone: AV: 332-2461 COMM: (703) 602-2461

Activity Name: Office of Assistant Secretary of the Navy,
Office of General Counsel (RD&A)
Address: OAGC (RD&A), Washington, DC 20350-1000
POC: Greg Seers
Position/Title: Deputy Assistant General Counsel (RD&A)
Phone: AV: 224-6985 COMM: (703) 614-6985

Activity Name: Civilian Agency Acquisition Council
POC: Al Vicchiola
Phone: AV: N/A COMM: (202) 501-0692

Activity Name: Chief of Naval Information
POC: LT Tina Tullman
Position/Title: Public Affairs Officer
Phone: AV: --- COMM: (703) 697-3290

Activity Name: Deputy Chief of Naval Operations (Logistics)
Address: Environmental Protection
Safety & Occupational Health Division (N45)
Washington, DC 20350-2000
POC: David Price
Position/Title: Deputy Chief of Naval Operations (Logistics)
Phone: AV: 332-2550 COMM: (703) 602-2550

Activity Name: Office of CNO
Address: Chesapeake Division - NEFC
901 M Street, S.E.
Bldg 212, Code 09EQ, Washington, DC 20374-5018
POC: Gail Weston
Position/Title: Assistant to Deputy CNO (Logistics)
Phone: AV: 288-7012 COMM: (202) 433-7012

Activity Name: Defense Acquisition Regulatory Council
Address: IMD 3D-139, OUSD (A), 3062 Defense Pentagon
Washington, DC 20301-3062
POC: Michelle Peterson
Position/Title: Assistant to Director of DAR Council/Case
Manager for OFPP Policy Letter 92-4
Phone: AV: 622-3087 COMM: (703) 697-7266

Activity Name: Defense Systems Management College
Address: Bldg 202, FT Belvoir, VA 22060
POC: Dr. Alan Beck
Position/Title: Associate Dean Program Management Education
Division and NCMA National Vice President,
Education & Certification
Phone: AV: 655-3477 COMM: (703) 805-3477

Activity Name: Defense Acquisition University
Address: Room 400, 2001 N. Beauregard Street,
Alexandria, VA 22311
POC: Frank Sobieszczyk
Position/Title: Director for University Operations
Phone: AV: --- COMM: (703) 820-9527

Activity Name: Environmental Protection Agency
Director of Acquisition - Procurement Division
POC: Paul Schaffer
Phone: AV: --- COMM: (202) 260-9032

Activity Name: EPA Region IX
Address: 75 Hawthorne Street, San Francisco, CA 94105
POC: Richard Hernandez
Phone: AV: N/A COMM: (415) 744-1590

Activity Name: EPA Region IX
Address: 75 Hawthorne Street, San Francisco, CA 94105
POC: Frances Hitchon
Position/Title: Technical Information Specialist
Phone: AV: N/A COMM: (415) 744-1500

Activity Name: EPA Region IX
Address: 75 Hawthorne Street, San Francisco, CA 94105
POC: Bob Steven
Position/Title: Director of Training
Phone: AV: N/A COMM: (415) 744-1548

Activity Name: Green Peace USA
Address: 1436 U Street NW
Phone: AV: N/A COMM: (202) 462-1177

Activity Name: General Services Administration
Address: GSA Federal Supply Service, Room 1006
 Crystal Mall 4, Washington, DC 20406
POC: Tom Daily
Position/Title: Chief of Environmental Programs
Phone: AV: N/A COMM: (703) 305-5149

Activity Name: Office of Judge Advocate General (Office of
 Civil Law)
POC: Thomas Ledvina, CAPT, USN
Phone: AV: --- COMM: (703) 602-2252

Activity Name: Naval Facilities Engineering Command -
 Headquarters
Address: 200 Stovall Street, Hoffman II Bldg
 Alexandria, VA 22332
POC: Ms. Elaine McNeil
Position/Title: Public Affairs Officer
Phone: AV: 221-0310 COMM: (703) 325-0310

Activity Name: Naval Facilities Engineering Command
 Port Hueneme, CA
POC: Gary Gasperino
Phone: AV: --- COMM: (805) 982-2638

Activity Name: Naval Supply Systems Command
Address: 1935 Jefferson Davis Hwy
 Arlington, VA 22241-5360
POC: Dave Schuur
Position/Title: Director of Policy
Phone: AV: 327-0711 COMM: (703) 607-0711

Activity Name: Naval Supply Systems Command
Address: 1935 Jefferson Davis Hwy
 Arlington, VA 22241-5360
POC: CAPT Thorpe, USN
Position/Title: Deputy Commander for Contracting Management
Phone: AV: 327-0650 COMM: (703) 607-0650

Activity Name: Office of Federal Procurement Policy
Address: 725 Seventeenth Street, Northwest
 Washington, DC 20503
POC: Cyndi Vallina
Position/Title: Case Worker
Phone: AV: N/A COMM: (202) 395-4544

Activity Name: Office of Secretary of Defense
POC: Blake Valde
Phone: AV: --- COMM: (703) 695-8357

Activity Name: Office Deputy Under Secretary of Defense
Address: 400 Army-Navy Drive, Arlington, VA 22202-2884
POC: Charlie Wood
Position/Title: Program Analyst
Phone: AV: 223-8710 COMM: (703) 693-8710

Activity Name: Office of Under Secretary of Defense
(Acquisition & Technology), Base Closure Unit
Address: The Pentagon
Room 3D814, Washington, DC 20301-8000
POC: Frank Savat
Position/Title: Assistant Director for Real Property
Phone: AV: 224-5574 COMM: (703) 614-5574

Activity Name: Office of the Secretary of the Navy, Office of
the Comptroller
Address: Dept of the Navy, Code NCB-232A
Investment & Development Division
Washington, DC 20350-1100
POC: CDR Vernon Hutton
Phone: AV: 225-7753 COMM: (703) 695-7753

APPENDIX E

FORM USED DURING INFORMATION GATHERING PHASE

ACTIVITY NAME: _____

ADDRESS: _____

POC: _____

POSITION/TITLE: _____

CODE: _____

AV PHONE: _____

COMM PHONE: _____

FAX #: _____

INFORMATION SOUGHT: See next page

DATE/SCONTACTED: _____

DATE/S OF PHONE CONVERSATION/S: _____

DATE SURVEY SENT: _____

DATE QUESTIONNAIRE SENT: _____

GENERAL REMARKS: _____

STATUS: _____

REMARKS FOR THANK YOU NOTE: _____

DATE THANK YOU NOTE SENT: _____

APPENDIX F
COVER LETTER



DEPARTMENT OF THE NAVY
NAVAL SUPPLY SYSTEMS COMMAND
1831 JEFFERSON DAVIS HIGHWAY
ARLINGTON VA 22241-5360

TELEPHONE NUMBER
COMMERCIAL
AUTOVON
IN REPLY REFER TO:

4200
4523/JPL

From: Commander, Naval Supply Systems Command
To:

Subj: SOLICITATION FOR FEEDBACK ON OFPP POLICY LETTER 92-4

Encl: (1) Copy of OFPP Policy Ltr 92-4
(2) Survey
(3) Self-addressed, stamped envelope

1. In November 1992, the Office of Federal Procurement Policy (OFPP) issued OFPP Policy Letter 92-4 entitled "Procurement of Environmentally-Sound and Energy-Efficient Products and Services." Efforts are on line to incorporate this policy into the FAR. OFPP Policy Letter 92-4 is expected to have a significant impact on your buying office.
2. In an attempt to be proactive in complying with the new requirements imposed by the policy which will be further delineated in the FAR, DFARS, DOD Directives, DOD Instructions, and Navy Directives and Instructions, your feedback is requested.
3. OFPP Policy Letter 92-4 is provided as enclosure (1). Please complete enclosure (2) and return it in enclosure (3) which is provided for your convenience and to expedite the collection of responses. Responses are requested to be returned by 15 August 1993.
4. Thank you for your cooperation and assistance. POC on this survey is LT Joseph A. Keller (DSN) 878-2536 or (COMM) 408-656-2536.

Very respectfully,

Jane P. Lange
By direction
Pollution Prevention Programs

APPENDIX G

SURVEY FOR NAVY CONTRACTING OFFICERS

Purpose: Your responses to questions in this survey will be used to produce a consensus on: (1) the anticipated impact of OFPP Policy Letter 92-4 on Navy contracting activities; and (2) action the Navy should take in order to facilitate compliance with the policy. Your responses will also be used to gauge the current state of environmental awareness (in terms of training, support organizations, written policy) in the Navy's contracting profession.

Anonymity: I consent to my responses being quoted except where a particular response is otherwise noted by myself on this survey.

☐ Yes
☐ No I desire that all my responses remain anonymous.

NAME: Mr./Ms. _____
POSITION/TITLE: _____
ACTIVITY NAME: _____
ADDRESS: _____
(AV) PHONE: _____ (COMM) PHONE: _____
FAX: _____

At this point, please stop to read OFPP Policy Letter 92-4.

PERCEPTIONS

1. I believe that the general intent of OFPP Policy 92-4 is good.

☐ Agree ☐ Disagree

2. Do you feel that contracting personnel should be responsible for ensuring that environmental and energy factors are considered in government procurements?

☐ Yes ☐ No

Please explain.

ANTICIPATED IMPACT

1. What might be the principal impact of the requirements of OFPP Policy Letter 92-4 on your contracting activity? Please consider the impact in each phase of the contracting process which is outlined below.

Acquisition Planning Phase

Review of SOW (Statement of Work)/PWS (Performance Work Statement):

Method of contracting: (e.g., RFP, IFB, RFQ) _____

Type of contract: _____

Source selection evaluation criteria: _____

Solicitation Phase

Bidders' conference: _____

Amendments to solicitations: _____

Source Evaluation/Source Selection Phase

Pre-award Survey (PAS): _____

Field pricing team: _____

Price analysis/Cost analysis: _____

Negotiation Phase

Contract Award Phase

Debriefing unsuccessful offerors: _____

Protests: _____

Contract Administration Phase

Ability to evaluate the contractor's compliance with contract clauses (e.g., reporting requirements): _____

Ability to evaluate contractor's compliance with applicable environmental laws: _____

Ability to evaluate the contractor's environmental compliance programs (e.g., similar to the requirement to evaluate the contractor's cost estimating system): _____

Disputes: _____

ABILITY TO IMMEDIATELY COMPLY

1. As your contracting activity is currently structured, could you fully comply with the requirements of OFPP Policy Letter 92-4?

☐ Yes (skip to question #4) ☐ No (go to question #2)

2. If not immediately, how long would it take you to comply?

3. What are the impediments preventing your organization from complying with OFPP Policy Letter 92-4?

Current level of personnel staffing (in terms of numbers):

Level of expertise:

Other:

ACTIONS WHICH WOULD FACILITATE COMPLIANCE

4. What actions should your activity take in order to facilitate compliance? Please list under the categories provided and be sure to address any impediments listed in question #2 above.

Type of training needed: (Check one or more)

☐ Environmental Legislation (federal, state, and local)

☐ Environmental Awareness (impact of industry on environment)

☐ Navy's Policy on the Environment (including applicable instructions)

☐ Technical Training (e.g., production processes; material alternatives; fuel alternatives)

☐ Other (please specify) _____

5. Who in your entire organization should receive such training? Check one or more.

☐ Technical ☐ Users ☐ Contracting Specialists

☐ Other (please list) _____

6. Considering efficiency and effectiveness, where would this training best be accomplished? Check one.

☐ centrally located DoD training site ☐ centrally located Navy training site

☐ "road show" type training ☐ non-DoD institution

☐ other (please list) _____

7. What would be the preferred method of training?

☐ Self-paced correspondence courses ☐ Mandatory lecture
☐ Other (please specify) _____

8. What incentives could be used to motivate Navy contracting activities to comply with OFPP Policy Letter 92-4?

9. What other actions would facilitate compliance?

ENVIRONMENTAL AWARENESS

1. On a scale of 1 to 10 (1 being the least capable), how would you rate your ability to evaluate a contractor's proposal with regard to a product/service being "environmentally-sound" or "energy-efficient"? ____

2. What was your undergraduate college major?

3. During your career in the Navy, have you ever received any formal training (classes, seminars, correspondence courses) on environmental contracting?
____ Yes ____ No

on any general environmental or energy topic? ____ Yes ____ No

If you have, please fill in the following table:

Course Title	Institution Providing Training	Course length	Title of Certification
-----------------	-----------------------------------	------------------	---------------------------

4. Have you sent any of your contracting specialists to any environmental contracting courses or seminars?
____ Yes ____ No

If you have, please fill in the following table:

Course Title	Institution Providing Training	Course length	Title of Certification
-----------------	-----------------------------------	------------------	---------------------------

5. Does your activity currently have its own set of guidelines for the procurement of environmentally-sound, energy-efficient products and services?
____ Yes ____ No

If you answered "yes," please consider sending a copy of the policy back with your return of this survey.

6. Without investigating, do you know if your activity has a person designated as the Environmental Coordinator?
____ Yes ____ No

7. What regulations, directives, instructions, etc. do you use to guide you in making a procurement decision that considers environmental and energy related factors?

8. What organizations are available to assist you in making a decision that properly considers environmental and energy factors prior to issuing a solicitation to obtain a product or service?

9. Are you familiar with EPA's procurement guidelines for environmentally-safe and energy-efficient products and services?

___Yes___No

10. Do you know who your Environmental Area Coordinator is?

___Yes___No

11. Do you know who your Environmental Region Coordinator is?

___Yes___No

12. Do you know who your Environmental State Coordinator is?

___Yes___No

13. Do you currently evaluate environmental and energy related factors in your procurements?

___Yes___No

If yes, how?

End of Survey.

APPENDIX H

MAJOR FEDERAL ENVIRONMENTAL STATUTES AFFECTING NAVY OPERATIONS

AA	1906 Antiquities Act
AEA	1954 Atomic Energy Act
AHERA	1988 Asbestos Hazard Emergency Response Act
AHPA	1980 Archeological & Historical Preservation Act
AIRFA	1978 American Indian Religious Freedom Act
APA	1980 Acid Precipitation Act
APPS	1980 Act to Prevent Pollution from Ships
ARPA	1979 Archeological Resources Protection Act
ASNAA	1979 Aviation Safety & Noise Abatement Act
BEPA	1979 Bald Eagle Protection Act
CAA	1977 Clean Air Act
CAAA	1990 Clean Air Act Amendments
CBRA	1982 Coastal Barrier Resources Act
CERCLA	1980 Comprehensive Environmental Response, Compensation, Liabilities Act
CWA	1972 Clean Water Act
CZMA	1966 Coastal Zone Management Act
EPCRTKA	1986 Emergency Planning Community Right-to-Know Act
EQIA	1970 Environmental Quality Improvement Act
ESA	1973 Endangered Species Act
FFCA	1992 Federal Facilities Compliance Act
FIFRA	1972 Federal Insecticide, Fungicide, Rodenticide Act
FLPMA	1976 Federal Land Planning & Management Act
FRRRPA	1974 Forest & Rangeland Renewable Resources Planning Act
FWCA	1958 Fish & Wildlife Coordination Act
GCPA	1987 Global Climate Protection Act
HMTA	1975 Hazardous Material Transportation Act
HSWA	1984 Hazardous & Solid Waste Amendments
LLRWPA	1980 Low Level Radioactive Waste Policy
MBCA	1929 Migratory Bird Conservation Act
MBTA	1918 Migratory Bird Treaty Act
MMPA	1972 Marine Mammal Protection Act
MPPRCA	1987 Marine Plastic Pollution Research & Control Act
MPRSA	1972 Marine Protection, Research & Sanctuaries Act
MUSYA	1960 Multiple Use Sustained Yield Act
MWTA	1988 Medical Waste Tracking Act
NANPCA	1990 Nonindigenous Aquatic Nuisance Prevention & Control Act
NCA	1972 Noise Control Act
NEPA	1970 National Environmental Policy Act
NFMA	1976 National Forest Management Act
NHPA	1966 National Historic Preservation Act

NWPA	1982	Nuclear Waste Policy Act
NWRSAA	1966	National Wildlife Refuge System Administration Act
OCSLA	1953	Outer Continental Shelf Lands Act
OPA	1990	Oil Pollution Act
PPA	1990	Pollution Prevention Act
PRIA	1978	Public Rangelands Improvement Act
PVMWADA	1988	Public Vessel Medical Waste Anti-Dumping Act
RA	1989	Refuse Act
RCRA	1976	Resource Conservation & Recovery Act
RGIAQRA	1986	Radon Gas & Indoor Air Quality Research Act
SARA	1986	Superfund Amendments & Reauthorization Act
SDWA	1974	Safe Drinking Water Act
SWDA	1974	Solid Waste Disposal Act
SLA	1953	Submerged Lands Act
SMCRA	1977	Surface Mining Control & Reclamation Act
TGA	1934	Taylor Grazing Act
TSCA	1976	Toxic Substance Control Act
UMTRCA	1978	Uranium Mill Tailings Radiation Control Act
WA	1964	Wilderness Act
WFRBA	1971	Wild & Free Roaming Burros Act
WQA	1987	Water Quality Act
WRAA	1966	Wildlife Refuge Administration Act
WSR	1968	Wild & Scenic Rivers Act

APPENDIX I

LIST OF ENVIRONMENTAL COORDINATORS

Area Coordinator: CINCPACFLT (ADM Robert Kelly)

CINCPACFLT Regional Environmental Coordinators

Region: AK, WA, OR

Officer: RADM Richard Riddell

POC: CDR Robert Frazier (Code N32)

Phone (comm/AV): 206-526-3225/941-3225

Region: CA (Northern)

Officer: RADM Merrill Ruck

POC: CAPT William Haushalper (Code 03)

Phone (comm/AV): 415-395-3918/475-3918

Region: NV, CA (Southern)

Officer: RADM Luther Schirfer

POC: LCDR Paul Johnson (Code 006E)

Phone (comm/AV): 619-532-1418/522-1418

Region: HI, Midway Islands

Officer: RADM William Retz

POC: CAPT James Rispoli (Code N4)

Phone (comm/AV): 808-471-3926/474-3812

Region: Japan

Officer: RADM Jesse Hernandez

POC: CDR Andy Ritchie (Code 07E & PWC30)

Phone (comm/AV): 011-81-468-261-911(7713) AV 234-7666

Region: Guam

Officer: RADM Edward Kristensen

POC: CDR John Moran (Code N41)

Phone (comm/AV): 011-671-349-5241 AV 349-5241

Region: Korea

Officer: RADM William Mathis

POC: LCDR Gregory Maffett (Code FREM-RE/S)

Phone (comm/AV): 011-822-7913-5941 AV 732-5941

CINPACFLT State Environmental Coordinators

States: AK, WA, OR

Command: COMNAVBASE Seattle

Flag Officer: RADM Richard Riddell

POC: CDR Robert Frazier (Code N32)

Phone (comm/AV): 206-526-3225/941-3225

State: CA

Command: COMNAVBASE San Francisco

Flag Officer: RADM Merrill Ruck

POC: CAPT William Haushalper (Code 03)

Phone (comm/AV): 415-395-3918/475-3918

State: NV

Command: NAS Fallon

Flag Officer: CAPT McFarlan (in lieu of flag)

POC: Mr. Bud Ford (Code 187)

Phone (comm/AV): 702-426-2770/830-2770

States: HI, Midway Islands

Command: COMNAVBASE Pearl Harbor

Flag Officer: RADM William Retz

POC: CAPT James Rispoli (Code N4)

Phone (comm/AV): 808-471-3926/474-3926

States: Guam, Commonwealth of Northern Marianas

Command: COMNAVMARIANAS Guam

Flag Officer: RADM Edward Kristensen

POC: CDR John Moran (Code N4)

Phone (comm/AV): 011-671-349-5241/349-5241

Area Coordinator: COMNAVDIST WASHINGTON DC
(RADM Robert Jones)

COMNAVDIST WASHINGTON DC Regional Environmental Coordinator

Region: MD, DC

Command: COMNAVDIST Washington

Flag Officer: RADM Robert Jones

POC: Mr. Joe Delasho (Code 18)

Phone (comm/AV): 202-433-3591/288-3591

COMNAVDIST WASHINGTON DC State Environmental Coordinator

States: MD, DC
Command: COMNAVDIST Washington
Flag Officer: RADM Robert Jones
POC: Mr. Joe Delasho (Code 18)
Phone (comm/AV): 202-433-3591/288-3591

Area Coordinator: CNET (Chief of Naval Education and Training)
(VADM R. K. U. Kihune)

CNET Regional Environmental Coordinators

Region: MS, AL, FL (panhandle)
Command: CNET
Flag Officer: VADM R. K. U. Kihune
POC: Mr. Robert Ryan (Code N44)
Phone (comm/AV): 904-452-4096/922-4096

Region: TN, KY, WV
Command: CNTECHTRA
Flag Officer: RADM Roger Rich and RADM Raymond Jones
POC: LCDR C. Chapman (Code N81)
Phone (comm/AV): 901-873-5951/966-5951

Region: TX, AZ, NM, UT, CO, ID, WY, MT
Command: CNATRA
Flag Officer: RADM William McGowen
POC: Mr. J. Cortez (Code N61)
Phone (comm/AV): 512-939-2113/861-2113

Region: IL, WI, MI, IN, OH
Command: NTC Great Lakes
Flag Officer: RADM James Partington and RADM Mack Gaston
POC: LT Randy Ortigesen (Code FAC)
Phone (comm/AV): 708-688-3482/792-3482

CNET State Environmental Coordinators

State: TN
Command: CNTECHTRA
Flag Officer: RADM Roger Rich
POC: LCDR C. Chapman (Code N81)
Phone (comm/AV): 901-873-5951/966-5951

State: TX
Command: CNATRA
Flag Officer: RADM William McGowen
POC: Mr. Bob Stender (Code N63)
Phone (comm/AV): 512-939-2123/861-2123

State: IL
Command: NTC Great Lakes
Flag Officer: RADM James Partington and RADM Mack Gaston
POC: LT Randy Ortigesen (Code FAC)
Phone (comm/AV): 708-608-3482/792-3482

State: IN
Command: NAVWPNSUPPCEN Crane
Flag Officer: CAPT Steven Howard (in lieu of flag)
POC: Mr. J. Huntzinger (Code 095)
Phone (comm/AV): 812-854-3233/402-3233

State: MS
Command: NAS Meridian
Flag Officer: CAPT T. L. Hightower (in lieu of flag)
POC: Mr. Perry Davis (Code 18200)
Phone (comm/AV): 601-679-2113 or 2417 AV 637-2113 or 2417

State: KY
Command: NAVORDSTA Louisville
Flag Officer: CAPT Richard Gilbert (in lieu of flag)
POC: Mr. Guy Chamberlain (Code 098)
Phone (comm/AV): 502-364-5890/989-5890

State: WV
Command: LANT NAVFACENGCOM
Flag Officer: RADM James Doebler
POC: Mr. Bill Russel (Code 18)
Phone (comm/AV): 804-445-7336/565-7336

States: CO, OH, MI, WI, WY
Command: NORTHNAVFACENFCOM
Flag Officer: RADM(SEL) Thomas Dames
POC: Mr. Conrad Nayer (Code 18)
Phone (comm/AV): 215-595-0567/443-0567

State: AL
Command: SOUTHNAVFACENGCOM
Flag Officer: CAPT John Rever (in lieu of flag)
POC: Mr. Joe McCauley (Code 181)
Phone (comm/AV): 803-743-0583/563-0583

States: NM, AZ
Command: SOUTHWESTNAVFACENGCOM
Flag Officer: CAPT Thomas Crane (in lieu of flag)
POC: Mr. David Fischer (Code 1822)
Phone (comm/AV): 619-532-1234/522-1234

States: MT, ID
Command: EPA Northwest/WESTNAVFACENGCOM
Flag Officer: CAPT Tom Tanner (in lieu of flag)
POC: Mr. Rick Spenser (Code 09EE)
Phone (comm/AV): 206-476-1091/439-1091

State: UT
Command: WESTNAVFACENGCOM
Flag Officer: CAPT R. L. Moeller (in lieu of flag)
POC: Mr. Henry Gee (Code 182)
Phone (comm/AV): 415-244-2571/494-2571

State: FL
Command: COMHEWINGSBLANT
Flag Officer: RADM Frank Dirren
POC: Jerry Wallmeyer (Code 020)
Phone (comm/AV): 904-772-5216/942-5216

Area Coordinator: CINCUSNAVEUR (ADM Jeremy Boorda)

CINCUSNAVEUR Regional Environmental Coordinators

Region: Europe
Command: CINCUSNAVEUR
Flag Officer: ADM Jeremy Boorda
POC: Andrew Kissel (also POC for Area Coordinator)
Phone (comm/AV): 44-71-409-4238/325-4268

Region: Italy, Greece, Spain
Command: COMFAIRMED
Flag Officer: RADM Daniel Oliver
POC: LT Chris Floro (Code 020)
Phone (comm/AV): 39-81-509-7559/No AV #.

Region: UK, Germany
Command: COMNAVACT UK
Flag Officer: ---
POC: Mr. Wilfred Whitaker (Code A011)
Phone (comm/AV): 44-71-409-4109/235-4109

Area Coordinator: CINCLANTFLT (ADM Hebry Mauz, Jr.)

CINCLANTFLT Regional Environmental Coordinators

Region: ME, VT, NH
Office: ADM Jon Coleman
POC: Jennifer Parker (Code N8)
Phone (comm/AV): 207-921-2911/476-2911

Region: CT, MA, RI
Officer: RADM David Goebel
POC: CDR Michaelleen Mason (Code 007)
Phone (comm/AV): 203-449-4632/241-4632

Region: PA, NY, DE, NJ
Officer: RADM Jon Dalrymple and RADM(SEL) Francis Harness
POC: Martin Dubin (Code 04)
Phone (comm/AV): 215-897-8760/443-8760

Region: VA, NC
Officer: RADM Byron Tobin, Jr.
POC: Cheryl Barnett (Code N4)
Phone (comm/AV): 804-444-3009/564-3009

Region: SC, GA
Officer: RADM Karl Kaup
POC: David Sealander (Code N34)
Phone (comm/AV): 803-743-9629/563-9629

Region: FL (less panhandle)
Officer: RADM Frank Dirren
POC: Jerry Wallmeyer (Code 020)
Phone (comm/AV): 904-772-5216/942-5216

Region: Caribbean
Officer: RADM Lafayette Norton
POC: Al V. Marchette (Code 18)
Phone (comm/AV): 809-865-4152/831-4152

CINCLANTFLT State Environmental Coordinators

States: ME, NH, VT
Command: COMPATWINGSLANT
Flag Officer: ADM Jon Coleman
POC: Ms. Jennifer Parker (Code N8)
Phone (comm/AV): 207-921-2911/476-2911

State: CT
Command: COMSUBGRU TWO
Flag Officer: RADM David Goebel and RADM David Green
POC: LCDR Michealeen Nason (Code 007)
Phone (comm/AV): 203-449-4632/241-4632

State: MA
Command: NAS South Weymouth
Flag Officer: CAPT Karl Ryan (in lieu of flag)
POC: LCDR Chris Mossey (Code 80)
Phone (comm/AV): 617-786-2655/955-2655

State: RI
Command: NETC Newport
Flag Officer: CAPT Norman Pettarozi (in lieu of flag)
POC: LT Jeff Borowy (Code 40E)
Phone (comm/AV): 401-841-3735/948-3735

States: PA, NY, DE
Command: COMNAVBASE Philadelphia
Flag Officer: RADM John Dalrymple and RADM Francis Harness
POC: Mr. Martin Dubin (Code 04)/LT Patrick Hamilton (Code 04A)
Phone (comm/AV): 215-897-8760/443-8760

State: NJ
Command: NAWC Aircraft Division Lakehurst
Flag Officer: CAPT David Raffetto (in lieu of flag)
POC: Ms. Lucy Bottomley (Code 1823)
Phone (comm/AV): 908-323-2270/624-2270

State: VA
Command: COMNAVBASE Norfolk
Flag Officer: RADM Byron Tobin, Jr.
POC: Ms. Cheryl Barnett (Code N4)
Phone (comm/AV): 804-444-3009/564-3009

State: NC
Command: NADEP Cherry Point
Flag Officer: COL George Mayer, Jr. (in lieu of flag)
POC: Mr. Joe Freeman (Code 640)
Phone (comm/AV): 919-466-7647/582-7647

State: SC
Command: COMNAVBASE Charleston
Flag Officer: RADM Karl Kaup
POC: Mr. David Sealander (Code N34)
Phone (comm/AV): 803-743-9629/563-9629

State: GA
Command: NAS Atlanta
Flag Officer: CAPT William Pfeiffer (in lieu of flag)
POC: LCDR William Evans (Code 80)
Phone (comm/AV): 404-421-5516/925-5516

State: FL
Command: COMHELWINGSLANT
Flag Officer: RADM Frank Dirren
POC: Mr. Jerry Wallmeyer (Code 020)
Phone (comm/AV): 904-772-5216/942-5216

State: PR
Command: COMFAIRCARIB
Flag Officer: RADM Lafayette Norton
POC: CDR Al V. Marchette (Code 18)
Phone (comm/AV): 809-865-4152/831-4152

Area Coordinator: COMNAVRESFOR

COMNAVRESFOR Regional Environmental Coordinators

Region: ND, SD, NE, KS, MN, MO, IA, OK, AR, LA
Command: *
Flag Officer: *

* Tasking letters are overdue from COMNAVRESFOR.
POC is LCDR Pat Nead 504-948-5073.

Region: New Orleans, LA only
Command: NSA Louisiana
Flag Officer: CAPT Bair (in lieu of flag)

No State Environmental Coordinators were designated because the Navy does not have a strong presence in these states.

Source: David Price and Gail Weston, Deputy Chief of Naval Operations (Logistics), Environmental Protection, Safety & Occupational Health Division (N45), Washington, DC 20350-2000, AV phone: 332-2550, COMM phone: 703-602-2550.
Alternative POC: Gail Weston, AV phone: 288-7012.

APPENDIX J

1993 SECNAV ENVIRONMENTAL AWARDS WINNERS LIST

I. Pollution Prevention and Recycling Award

Team Award

Navy winner	Naval Aviation Depot, Jacksonville, FL
Marine Corps winner	Marine Corps Recruit Depot, Parris Island, SC
Runner-Up	Naval Undersea Warfare Center Division, Keyport, WA

Individual Award

Navy winner	Mr. John Van Name Naval Aviation Depot, Norfolk, VA
Marine Corps winner	Mr. Dean Bradley Marine Corps Recruit Depot, Parris Island, SC
Runner-Up (Navy)	Mr. Michael G. Linn Naval Aviation Depot, Jacksonville, FL
Runner-Up (Marine Corps)	Mr. Daniel A. Sherman, Marine Corps Air Ground Combat Center, Twentynine Palms, CA

II. Environmental Quality Award

Industrial Installation Award

Navy winner	Naval Aviation Depot, Norfolk, VA
Marine Corps winner	Marine Corps Logistics Base, Albany, GA
Runner-Up (Navy)	Naval Surface Warfare Center, Indian Head Division, Indian Head, MD
Runner-Up (Marine Corps)	Marine Corps Logistics Base, Barstow, CA

II. Environmental Quality Award (continued)

Small Ship Award

Navy winner

USS O'Bannon (DD-987)

Runner-Up

USS Juneau (LPD-10)

Individual Award

Navy winner

AZCM (AW) Paul Brewer
Naval Air Station,
Whidbey Island, CA

Marine Corps winner

Mr. Jack Stormo
Marine Corps Logistics Base,
Barstow, CA

Runner-Up

Mr. Kevin Sommers
Naval Aviation Depot,
Norfolk, VA

III. Natural Resources Conservation Award

Installation Award

Navy winner

Naval Air Station,
Whidbey Island, WA

Marine Corps winner

Marine Corps Air Station,
Kaneohe Bay, HI

Runner-Up

Naval Air Warfare Center,
Aircraft Division,
Lakehurst, NJ

Individual Award

Navy winner

Mr. Walter R. Briggs
Engineering Field Activity,
Northwest, Naval Facilities
Engineering Command,
Silverdale, WA

Runner-Up

Mr. Stephen R. Rothboeck
Naval Air Station,
Whidbey Island, WA

APPENDIX K

ACTUAL NOMINATION FOR AWARD "WRITE-UP"

Master Chief Paul Brewer is the Recycle and Reutilization Program Director at Naval Air Station, Whidbey Island. He has served in ten aviation squadrons and five stations, including six tours of duty at Whidbey Island. In late 1990, Master Chief Brewer took over a recycling effort that only consisted of beverage can collection and sales. Within two years, he turned it into a program which handles more different types of materials than any other in northwest Washington. In 1992, the Washington State Department of Ecology recognized his program as the Best Full-Line Recycling Center in Washington State. Through Master Chief Brewer's leadership, unsightly storage areas have been cleaned up, the solid waste stream has been vastly reduced, the environmental consciousness of the entire community has been raised, and recycling sales proceeds have been used to provide a long list of MWR benefits.

Points for ADM Kelso

- Master Chief Brewer developed a station-wide, full line recycling program in only two years.
- He received the "Best Full Line Recycling Center" Award in 1991 from the Washington State Department of Ecology.
- He continues to develop innovative recycling projects to reduce waste and generate profits for "quality of life" programs.

APPENDIX L

TERMS & DEFINITIONS

Affirmative Procurement Program - A program, each procuring agency is required to develop, which will assure that items composed of recovered materials will be purchased to the maximum extent practicable and which is consistent with the applicable provisions of Federal procurement law. [Ref 32]

Conservation - Wise use and management of natural resources to provide the best public benefits and continued productivity for present and future generations.

Contracting - Purchasing, renting, leasing, or otherwise obtaining supplies or services from non-Federal sources. Contracting includes description (but not determination) of supplies and services required, selection and solicitation of sources, preparation and award of contracts, and all phases of contract administration. Contracting is a subset of acquisition or procurement. [Ref 33 p.95]

Contracting Activity - An element of an agency so designated by the agency head and delegated broad authority for acquisition functions. [Ref 33 p.95]

Cost-Effective Procurement Preference Program - A program that favors, where price and other factors are considered equal, the procurement of products and services that are more environmentally- sound or energy-efficient than other competing products and services.

Environment - The natural and physical environment. It excludes social, economic and/or other environments.

Environmental Compliance Projects - Non-routine, nonrecurring projects (remedial actions, corrective actions, air/water pollution controls, etc.) over \$10K, required by environmental laws or regulations to bring a facility or operation into compliance.

Environmental Impact Statement - A detailed statement, required by the national Environmental Policy Act, that provides a full and unbiased discussion of the significant environmental impacts that a proposed Navy action will have. The statement should also inform decision makers and public of reasonable alternatives which would avoid or minimize adverse

impact or enhance the quality of the human environment. [Ref 5, pp. 5-8]

Environmentally Sound - A product or service that minimizes damage to the environment and is less harmful to the environment to use, maintain, and dispose of in comparison to a competing product or service.

EPA Designated Item - Items designated by the EPA which are or can be produced with recovered materials and whose procurement will carry out the objectives of Section 6962 of U.S. Code Title 42 (Federal Procurement Responsibilities). [Ref 34]

Installation - Major, minor, or support activities which have plant accountability for land, structure, buildings, or utilities. [Ref 9, p. 35]

Pollution Prevention - The Navy's preferred method of environmental protection. This method requires that all means for the elimination of pollutants shall be identified and, where possible, incorporated at the earliest steps of planning, design, and procurement of facilities, weapon systems, equipment, and material. Eliminating or controlling, to the maximum extent feasible, the pollutant source. [Ref 5, pp.1-4]

Post Consumer Waste - A material or product that has served its intended use and has been discarded for disposal after passing through the hands of a final user.

Recovered Material - Waste material and by-products which have been recovered or diverted from solid waste, but does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

Recycled Material - A material that can be utilized in place of a raw or virgin material in manufacturing a product and consists of materials derived from post-consumer waste, industrial scrap, material derived from agricultural waste and other items, all of which can be used in the manufacture of new products.

Source Reduction - any practice which reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment prior to recycling, treatment, or disposal.

Strategic Environmental Research and Development Program - the Federal fund which provides dollars to environmental programs that are mutually beneficial to the DoD, the DoE, and the EPA.

Sustained Yield - Production of renewable natural resources at a level that harvest or consumptive use does not exceed net growth. [Ref 5, p. 19-5]

LIST OF REFERENCES

1. Camahort, J. L. (Ph.D.), Primer on Environmental Issues, Lockheed Missiles & Space Company, Inc.
2. Recer, Paul, "Ozone layer falls to record low levels," *The Monterey County Herald*, April 23, 1993.
3. Beamish, Rita, "EPA concerned about soot causing 60,000 deaths a year," *The Monterey County Herald*, July 20, 1993.
4. Wood, Charlie, Program Analyst, "DoD Environmental Security Programs FY 1990 -FY 1994," Office of the Deputy Under Secretary of Defense (Environmental Security).
5. Environmental and Natural Resources Program Manual, OPNAVINST 5090.1A, Department of the Navy, Office of Chief of Naval Operations, 2 OCT 1990.
6. Federal Facilities Compliance Strategy, EPA Office of Federal Facilities, November 1988.
7. "Budget & Forces Summary," NAVSO P-3523, Office of Navy Comptroller, Resource Allocation & Analysis Division, 30 April 1993.
8. National Defense Budget Estimates for FY 1994, Office of the Comptroller of the Department of Defense.
9. Department of Defense, Base Structure Report for Fiscal Year 1993, Office of the Assistant Secretary of Defense (Production and Logistics), February 1992.
10. Kunkel, Kurt, Fiscal Oversight of DoD Environmental Cleanup and Compliance Activity, Fiscal Years 1984-1993, Thesis, Naval Postgraduate School, Monterey, CA, December 1992.
11. Lee, Martin R., Summaries of Environmental Laws Administered by the Environmental Protection Agency, CRS Report for Congress, 93-53 ENR, Congressional Research Service, The Library of Congress, January 14, 1993.
12. Valde, Blake, Office of Pollution Prevention, Office of Secretary of Defense, Personal Interview, Arlington, VA, July 1, 1993.

13. Murdock, Vicky, Environmental Security, EPA Headquarters, Washington, D.C., 20406, Phone Conversation with LT Keller, August 25, 1993.
14. Burman, Allan, Administrator of the OFPP, Office of Management and Budget, Memorandum to Assistant Secretaries for Management/Administration and Senior Procurement Agency Executives, October 13, 1992.
15. Executive Order, dated August 4, 1993.
16. "Open Enforcement Actions," Deputy Chief of Naval Operations (Logistics), N-45, Office of Chief of Naval Operations, July 28, 1993.
17. Price, David, Office of the CNO, N-45, "Total Fines Assessed Contrasted with Amount Paid FY 90 - FY 92," July 1993.
18. Tullman, Tina (LT, USN), Public Affairs Officer, Chief of Naval Information, Phone conversation with LT Keller, August 20, 1993.
19. Loftus, Stephen, (VADM, USN), Deputy Chief of Naval Operations (Logistics), Lecture at Naval Postgraduate School, Monterey, CA, August 3, 1993.
20. Moore, R. M. (RADM, USN), *Flash from the Chief*, 19 July 1993.
21. Sherman, Stanley N., Government Procurement Management, Woodcrafters Publications, Germantown, Maryland, 1991.
22. Vallina, Cyndi, Office of Federal Procurement Policy, Office of Management and Budget, Washington, DC, 20503, Phone Conversation on July 26, 1993.
23. OFPP Policy Letter 92-4, Office of Federal Procurement Policy, Office of Management and Budget, November 2, 1992.
24. Lange, Jane, Pollution Prevention Specialist, NAVSUP, Memorandum dated 30 Dec 1992.
25. Thorpe, CAPT, USN, Deputy Commander Contracting Management, Code 02, Naval Supply Systems Command, Washington, DC, Contracting Brief, August 1993.
26. Sullivan, Mike, CAPT, SC, USN, Code 02, Naval Sea Systems Command, Washington, DC, Contracting Brief presented at Naval Postgraduate School, Monterey, CA, August 5, 1993.

27. Snyder, James D., "Consulting/Engineering Trends: The More the Merrier?", *Environment Today*, July 1992.
28. Defense Acquisition University Course Catalog for 1992-1993, Office of Under Secretary of Defense (Acquisition), Defense Acquisition University, Alexandria, VA.
29. Sobieszczyk, Frank, "Defense Acquisition University," *Contract Management*, June 1993.
30. Department of Defense Directive 5000.1, Defense Acquisition, February 23, 1991.
31. Stevens, Robert C., Director of Training, U.S. EPA, Region IX (San Francisco, CA), Phone conversation, July 27, 1993.
32. U.S. Code Title 42, Section 6962(i), U.S. Government Printing Office, Washington, D.C., 1989.
33. Nash, Ralph C. and Steven L. Schooner, The Government Contracts Reference Book, The George Washington University, 1992.
34. U.S. Code Title 42, Section 6962(e), U.S. Government Printing Office, Washington, D.C., 1989.

BIBLIOGRAPHY

1. Abramson, Rudy, "19.6 billion U.S. energy budget proposed," *The Monterey County Herald*, April 6, 1993.
2. Beamish, Rita, "Millions unrecoverable by EPA in toxic waste cleanup," *The Monterey County Herald*, June 21, 1993.
3. Beamish, Rita, "Officials tried to stymie EPA probe, says inspector," *The Monterey County Herald*, June 23, 1993.
4. Beamish, Rita, "EPA concerned about soot causing 60,000 deaths a year," *The Monterey County Herald*, July 20, 1993.
5. Burke, Margo, "World constitutional convention proposed," *The Monterey County Herald*, July 31, 1993.
6. Camahort, J. L. (PhD), Primer on Environmental Issues, Lockheed Missiles & Space Company, Inc., February 1993.
7. Chamberlain, Edward M., Hazardous Waste Management at Department of Defense Facilities, U.S. Army War College, Carlisle Barracks, PA, March 30, 1990.
8. Daily, Tom, "GSA - Source of Supply for Recycled Products," Lecture, DoD Solid Waste Committee Meeting, June 30, 1993.
9. Davis, Charles, "Recyclers take it a 'step further'," *The Monterey County Herald*, April 20, 1993.
10. Defense Environmental Management Information System FY 92, April 29, 1993.
11. DoD Directive 4700.2, Secretary of Defense Award for Natural Resources and Environmental Management, 15 JUL 1988.
12. DoD Directive 5000.1, Defense Acquisition, February 23, 1991.
13. DoD Instruction 5000.2, Defense Acquisition Management Policies and Procedures, February 23, 1991.
14. Dunn, Michael G., Response of Airbreathing Propulsion Systems or Overpressure/Dust-Laden/Smoke-Laden Environments, Calspan Corp., Buffalo, NY, November 1, 1991.
15. Elliot, Lorraine, "Environmentally Sound...Subbase Bangor," All Hands, April 1993.

16. Enforcement Accomplishments Report FY 1991, EPA, Office of Enforcement, April 1992.
17. Enforcement Accomplishments Report FY 1992, EPA, Office of Enforcement, April 1993.
18. "EPA Administrator promises to straighten out agency," Associated Press, *The Monterey County Herald*, date unknown.
19. Fallows, James, National Defense, Vintage Books Division, Random House, NY, 1981.
20. Gatlin, Robert B., BRAC. What Will IT COST?, Study Project, U.S. Army War College, Carlisle, PA, April 10, 1992.
21. Holman, Curt, "Clinton/Gore: Eye on the Environment?," *World Wastes*, Jan 1993.
22. Inspector General (DoD), Audit Report Number 92-011, Environmental Compliance Assessment Programs, November 8, 1991.
23. Kirts, Richard E. and Phillip L. Stone, Paint Removal Using Cryogenic Process, Naval Civil Engineering Laboratory, Port Hueneme, CA, January 1992.
24. Kunkel, Kurt, Fiscal Oversight of DoD Environmental Cleanup and Compliance Activity, Fiscal Years 1984-1993, Thesis, Naval Postgraduate School, Monterey, CA, December 1992.
25. Ladd, Nancy L. (Colonel, USAF) Director of Defense Acquisition Regulatory Council, Letter dated June 18, 1993 to Civilian Agencies Acquisition Council.
26. Lange, Jane, Pollution Prevention & Acquisition/Contracting Specialist, Naval Supply Systems Command, Washington, DC, Numerous phone conversations February 1993 - November 1993.
27. Lee, Martin R., Environmental Protection Legislation in the 103rd Congress, Congressional Research Service Brief, The Library of Congress, March 10, 1993.
28. Lee, Martin R., Summaries of Environmental Laws Administered by the Environmental Protection Agency, Congressional Research Service, The Library of Congress, January 14, 1993.
29. Loftus, Stephen (VADM, USN), Superintendent's Guest Lecture, Naval Postgraduate School, Monterey, CA, August 3, 1993.

30. MacKay, Robert C. and Donald V. Roseborough, "Environmental Cost Reimbursement and Task Order Subcontracts for the Savannah River Site," Contract Management, April 1993.
31. Mayer, Jim, "Environmental cleanup of state's bases growing more costly," *The Monterey County Herald*, June 15, 1993.
32. Mann, Dr. Diane K., Catherine Demeroukas, and Curt Williams, Environmental Compliance Assessment System, U.S. Army Construction Engineering Research Laboratory, Champaign, IL, January 1991.
33. Mann, Dr. Diane K. and Roy Solomon, Worldwide Environmental Compliance Assessment and Management Program, U.S. Army Construction Engineering Research Laboratory, Champaign, IL, January 1991.
34. Miller, James E. (RADM, USN), "Looking Back, Looking Forward," The Navy Supply Corps Newsletter, May/June 1993.
35. Moore, R. M. (RADM, USN), "Charting Our Future Course: Preeminent Issues," *Flash from the Chief*, 19 July, 1993.
36. Moore, Vicky (LT, USN), "FISC Norfolk Sells First Can of Refurbished Paint," The Navy Supply Corps Newsletter, May/June 1993.
37. Naval Command, Control and Ocean Surveillance Center, RDT&E Division, San Diego, CA, Environmental Quality Technology, May 4, 1992.
38. Neve, Trevor L., Sonny Oh, and James Hathaway, The National Environmental Policy Act in DoD: Defending Our Environment's Future, Report, Logistics Management Institute, Bethesda, MD, June 1990.
39. Ningelen, Willi, and Dr. Diane Mann, Worldwide Environmental Compliance Assessment and Management Program - German Supplement, U.S. Army Construction Engineering Research Laboratory, Champaign, IL, May 1989.
40. OFPP Policy Letter 92-4, Office of Federal Procurement Policy, Office of Management and Budget, Washington, DC, November 2, 1992.
41. OPNAVINST 5090.1A, Environmental and Natural Resources Program Manual, Department of the Navy, Office of the CNO, Washington, DC, 2 October 1990.
42. Osborne, David and Ted Gaebler, Reinventing Government, Addison-Weekly Publishing Company, Reading, MA, 1992.

43. Price, David, "Open Enforcement Actions in U.S. Navy," Report, Office of the CNO, Code N-45, facsimile transmission, 28 July 1993.
44. Price, David, "Total Fines Assessed Contrasted with Total Amount Paid," Report, Office of the CNO, Code N-45, facsimile transmission, 28 July 1993.
45. Recer, Paul, "Ozone layer falls to record low levels," *The Monterey County Herald*, April 23, 1993.
46. Rodgers, Dean C., Closing Overseas Military Installations: Environmental Issues, International Agreements and Department of Defense Policy, Thesis, AFIT student attending: George Washington University, September 30, 1991.
47. Salthouse, Robert W., Douglas M. Brown, and Sunny Oh, Achieving Environmental Compliance, Vol I, Measuring Environmental Compliance, Logistics Management Institute, Bethesda, MD, June 1991.
48. Snyder, James D., "Consulting/Engineering Trends: The More the Merrier?", *Environment Today's 100 Largest Consulting Firms*, *Environment Today*, July 1992.
49. Sobieszczyk, Frank, "The Defense Acquisition University," Contract Management, June 1993.
50. Stevens, Robert C., RCRA Training Schedule 4-93, U.S. EPA, Region IX (San Francisco, CA).
51. Stone, Kenneth R. and Mary E. Bourassa, Running a Conference as a Clean Product, EPA Report # EPA/600/2-91/026, Risk Reduction Engineering Laboratory, Office of Research and Development, U.S. EPA, Cincinnati, OH, June 1991.
52. "The Top 50 environmental R&D leaders," *Environment Today*, January 1993.
53. Thompson, Fred and L. R. Jones, Regulatory Policy and Practices, Regulating Better and Regulating Less, Praeger Publishers, New York, NY, 1982.
54. Wellington, Joseph A., Naval Readiness, Operational Training, and Environmental Protection: Achieving an Appropriate Balance Between Competing National Interests, Advance Research Program, Naval War College, Newport, RI, June 1988.

Initial Distribution List

Activity Name	# of Copies
1. Defense Technical Information Center Cameron Station Alexandria, VA 22304-6145	2
2. Library, Code 0142 Naval Postgraduate School Monterey, CA 93943-5002	2
3. Naval Supply Systems Command (Code 02) 1935 Jefferson Davis Highway Arlington, VA 22241-5360	1
4. Naval Supply Systems Command (Code 04) ATTN: Ms. Jane Lange 1935 Jefferson Davis Highway Arlington, VA 22241-5360	1
5. General Services Administration ATTN: Chief of Environmental Programs GSA Federal Supply Service, Room 1006 Crystal Mall 4 Washington, D.C., 20406	1
6. Professor Larry R. Jones Administrative Science Department Code AS/JN Naval Postgraduate School 555 Dyer Rd. Room 229 Monterey, CA 93943-5103	1
7. Professor David V. Lamm Administrative Science Department Code AS/Lt Naval Postgraduate School 555 Dyer Rd. Room 229 Monterey, CA 93943-5103	2
8. LCDR Walter E. Owen Administrative Science Department Code AS/ON Naval Postgraduate School 555 Dyer Rd. Room 229 Monterey, CA 93943-5103	1

9. LT Joseph A. Keller
6021 Hodgman Drive
Parma Hts., OH 44130
--

1