

Chief of Naval Operations

Safety and Health

Guidance for

Base Realignment

and Closure

(BRAC)

ACKNOWLEDGMENTS

This publication is a product of the NAVOSH Quality Council with assistance of representatives from Chief of Naval Operations (N45), Naval Air Systems Command, Commander in Chief U.S. Atlantic Fleet, Naval Facilities Engineering Command, Naval Sea Systems Command, Navy Inspector General, and Bureau of Medicine and Surgery who have provided assistance to the Task Action Team. While all supporting individuals and organizations are not specifically identified, their efforts in the preparation of this publication are appreciated.

TABLE OF CONTENTS

INTRODUCTION	iii
CHAPTER 1 - Occupational Safety and Health Program BRAC Issues	1
Summary of OSH Functional Responsibilities.....	1
Program Execution Issues/Concerns	1
- Solutions	
Mishap Prevention Issues/Concerns	3
- Solutions	
Program Documentation Issues/Concerns	4
- Solutions	
Deactivation of Facilities Issues/Concerns	5
- Solutions	
Turnover Responsibilities Issues/Concerns	7
- Solutions	
CHAPTER 2 - Occupational Health Program BRAC Issues	9
Summary of Occupational Health Functional.....	9
Medical Evaluations/medical Record Issues/Concerns	9
- Solutions	
Workers' Compensation Issues/Concerns	11
- Solutions	
Stress and Violence in the Workplace Issues/Concerns.....	11
- Solutions	
Industrial Hygiene/workplace Monitoring Services Issues/Concerns.....	12
- Solutions	
Physical Examination Issues/Concerns	12
- Solutions	
CHAPTER 3 - FECA/Human Injury Compensation/Human Resources Program	
BRAC Issues	14
Summary of Injury Compensation Functional Responsibilities	14
Injury Compensation Issues/Concerns	14
- Solutions	
Cost Control Issues/Concerns	14
- Solutions	
Injury Compensation Program Administrator Resource Issues/Concerns	15
- Solutions	
Recordkeeping Issues/Concerns.....	16
- Solutions	
Documenting of Light Duty Positions Issues/Concerns	16
- Solutions	

TABLE OF CONTENTS (Cont.)

CHAPTER 4 - Command Program Management BRAC Issues After

Operational HRT Closure 17
Summary of Specific Headquarters Command and Personnel Management
Organization Responsibilities 17
- BUMED 17
- OCPM/HROs 17
- NAVFACENGC.COM..... 17

APPENDICES

A. Summary of NAVOSH Program A-1
B. Records Disposition Summary..... B-1
 B-1 Federal Records Centers..... B-10
 B-2 Guidelines for BRAC Records Disposition..... B-13
 B-3 Disposition Survey Format B-14
 B-4 Agreement Letter Format Between Office of Federal Records Centers,
 National Archives and Records Administration, and DoNs B-15
C. OSH References/Policy Documents..... C-1
D. Base Realignment and Closure Facility Layaway and Caretaker Standards..... D-1
E. Safety and Health Integrated Closure Checklists E-1
 E-1 Current/Historical Use of The Site E-3
 E-2 Physical Site Inspection E-5
 E-3 Site Sampling Plan and Procedures E-8
 E-4 Site Cleanup and Remediation E-10
 E-5 Final Action/Documentation E-15
F. Innovative Cost Reduction Strategies F-1
G. Technical Experts/Point of Contact G-1
H. Additional Supporting Documents..... H-1
 H-1 CFRs, DoD Directives and Manuals Pertinent to BRAC..... H-1
 H-2 Services Instructions and Guidance Document Pertinent to BRAC H-2
 H-3 List of BRAC Messages H-3
I. Glossary of Terms and Acronyms I-1

INTRODUCTION

Title XXIX of the Defense Base Realignment and Closure (BRAC) Act of 1990, P.L. 101-150, has generated significant issues and challenges for all activities undergoing either closure or downsizing as a result of realignment. The Navy Occupational Safety and Health (NAVOSH) Quality Council recognized the concerns BRAC raised related to occupational safety and health programs. The Quality Council chartered a Task Action Team (TAT) to develop a Chief of Naval Operations (CNO) guide for Commanding Officers, whose activities are either closing or downsizing, to assist them in maintaining effective occupational safety and health programs. The TAT used a guide developed by NAVAIRSYSCOM as the basis for developing this publication.

The document consists of the following chapters:

- Chapter 1, OCCUPATIONAL SAFETY AND HEALTH PROGRAM (OSH) BRAC ISSUES, discusses OSH responsibilities and program requirements. Chapter sections address issues, concerns and solutions associated with mishap prevention, program documentation, and turnover responsibilities.
- Chapter 2, OCCUPATIONAL HEALTH PROGRAM-BRAC ISSUES, discusses functional responsibilities involving industrial hygiene and occupational medicine. Chapter sections address the issues, concerns and solutions associated with medical evaluations and medical records, worker stress and violence in the workplace, industrial hygiene and workplace monitoring services, and physical examinations.
- Chapter 3, INJURY COMPENSATION/HUMAN RESOURCES PROGRAM BRAC ISSUES, discusses injury compensation functional responsibilities and requirements of the Federal Employees' Compensation Act (FECA), and local activity management of the Injury Compensation Program Administrator (ICA). Chapter sections address issues, concerns and solutions associated with ICA resource, and record keeping.
- Chapter 4, COMMAND PROGRAM MANAGEMENT BRAC ISSUES AFTER OPERATIONAL CLOSURE, discusses the responsibilities of specific headquarters commands and civilian personnel management organizations during base closure. Chapter sections address the responsibilities of BUMED, Office of Civilian Personnel Management (OCPM)/ Human Resources Office (HROs), and NAVFACENGCOM.

This guide is not all inclusive; however, it does address major OSH issues and concerns. Appendices provide references and points of contact for additional support to the Commanding Officer. The primary focus of the guide is directed toward the concerns of closing activities. However, there are many issues addressed which will also impact activities being realigned, downsized, and gaining personnel and/or functions. The concerns and proposed solutions for such activities are highlighted by shading.

Chapter 1

OCCUPATIONAL SAFETY AND HEALTH PROGRAM BRAC ISSUES

SUMMARY OF OSH FUNCTIONAL RESPONSIBILITIES

Occupational safety and health (OSH) program requirements include compliance with applicable Department of Defense (DoD), Department of Navy (DON) and Occupational Safety and Health Administration (OSHA) standards; inspection of all work places; prompt abatement of identified hazards; appropriate safety and health training; OSH review of all design, construction, and procurement plans and specifications to ensure that hazards are eliminated or controlled; and continuation of comprehensive occupational health surveillance programs. Several OSH programs require special training, certification, and/or appointment by the Commanding Officer. They are:

- Confined Spaces
- Respiratory Protection
- Laser
- Radiation (Non-Ionizing and Ionizing)
- Asbestos
- Explosive Safety
- Weight Handling Equipment

Appendix A (Summary of NAVOSH Programs) provides a summary of OSH programs and identifies elements with special requirements, as well as the level of contractibility. Appendix B (Records Disposition Summary) provides detailed guidance on record keeping and record disposition requirements and procedures.

PROGRAM EXECUTION ISSUES/CONCERNS

- Compliance with all federally mandated standards, as well as DON regulations, will become increasingly difficult as downsizing progresses. Workload will not decrease with BRAC but may actually increase.
- Loss of trained/certified personnel during downsizing will adversely affect the ability to maintain technical and administrative portions of the OSH program.
- The inability to rapidly recertify or train replacements due to lack of resources (e.g., available quotas, personnel, funding) may result in work stoppages.
- The inability to replace departing personnel due to hiring restrictions will hinder activities' ability to complete their mission.
- Funding cut-off for centrally funded NAVOSH projects will affect abatement of identified deficiencies.

SOLUTIONS

- The activity OSH Manager should identify, to the Commanding Officer, the impact of staff reductions on program execution.
- The affected activity commanding officer should ensure OSH staff and funding requirements are included in the activity BRAC funding plan.
- As resources decline, the activity OSH Manager must prioritize the implementation of OSH program elements focusing on statutory requirements and those elements with the greatest risks to personnel.

Note:

Document the decision process through waiver requests to Echelon 2 Command Headquarters.

- The activity OSH Manager must ensure OSH position descriptions reflect critical or unique duties that must be maintained to meet operational requirements such as task certifications for confined space, respiratory protection, radiation, and industrial hygiene programs.
- The affected activity commanding officer should ensure adequate OSH staff resources are retained to provide continuity of critical program requirements and include resources in budgets through closure (e.g., cross-training, reassignments of personnel, multiple backups, reduction in Force (RIF) management, contracting of OSH services, and use of temporary/term employment).
- The affected facility commanding officer should ensure coordination with and identification to the Echelon 2 Command Headquarters of any requirements for OSH program management that cannot be resolved locally (e.g., training, travel, contracting, and use of tiger teams). This action should be taken as soon as possible in the BRAC process.

Note:

The difficulty in maintaining qualified OSH staff is well understood and requires a variety of creative approaches to ensure successful program maintenance. Assistance from Echelon 2 Command Headquarters, Human Resources Offices or Centers, and other commands may be necessary. In some cases, omnibus contracts or arrangements with local OSH professional resources may be beneficial (other agencies including local/state offices, universities, or major industries).

MISHAP PREVENTION ISSUES/CONCERNS

- An increase in injuries and claims may occur due to:
 - Decreased morale at BRAC activities
 - Stress in the workplace
 - Financial insecurities
 - Job reassignment (Personnel being assigned unfamiliar duties due to downsizing and closure)
 - Deterioration of working conditions (deferred OSH deficiency abatement, deferred accomplishment of preventive maintenance of equipment and facilities, reduced training, and fewer OSH inspections) may result in an increase of unsafe conditions.
- An increase in potential design, renovation, and construction hazards (e.g., ventilation, egress, electrical services) may occur due to temporary relocation of personnel.

SOLUTIONS

- The activity commanding officer should ensure top-level management maintains open lines of communication with employees at every level. Managers must attempt to maintain an individual's feeling of self-worth during times of job loss.
- The activity commanding officer should ensure first level supervisors provide and maintain necessary technical hazard awareness and training for employees (especially when employees are reassigned and when working conditions change).
- The activity commanding officer should ensure maintenance of technical, hazard correction, and preventive maintenance programs in operations to protect personnel from hazardous exposure through facility closure.
- The activity commanding officer should ensure activity OSH/Safety Engineering Personnel and Engineering Field Division (EFD) are included in the review of BRAC relocation, layaway, and transition plans.
- The activity commanding officer should ensure that job placement, counseling, and other programs are provided to assist employees in transition.
- The management and OSH staff should provide special focus to personnel performing non-traditional or reassigned tasks and ensure that these personnel have necessary training and job performance oversight.

PROGRAM DOCUMENTATION ISSUES/CONCERNS

- Staff reductions may result in inadequate staff to maintain OSH program documentation/administrative requirements.
- Not all records must be maintained after closure.
- Inconsistencies exist between SECNAV/OPNAV/OSHA recordkeeping requirements.
- OSH program oversight may not be adequately maintained (e.g., PPE, medical surveillance, hazardous communication, and training) for employees who are administratively transferred but remain at the closing site.

SOLUTIONS

- The OSH Manager must ensure that proper inventory and physical transfer of records (e.g., industrial hygiene, workplace monitoring, training, medical surveillance, inspections, deficiency abatement, hazardous materials, and Material Safety Data Sheets.) occurs, including custody of records, from the closing activity to gaining activity, Federal Records Centers (FRCs), Echelon 2 Command, Host Command, and/or caretaker site office.
- The OSH Manager must review documentation retention guidance in Appendix B (Records Disposition Summary) to identify what documentation must be retained and to make appropriate provisions for the inventory, indexing, and boxing of records not required for day-to-day operations to be stored, disposed, or transferred. The OSH Manager must not leave preparation for transfer of records to the last minute.
- The OSH Manager must maintain adequate administrative staff to support OSH program requirements. Provide cross training for backups. Consider contracting for clerical support.
- The OSH Manager must coordinate with Echelon 2 and Federal Records Centers (FRCs) for record retention guidance. FRCs are available to come on-site and work with activities to assist/train in documentation requirements.
- The OSH Manager must ensure all insulation/asbestos-related documents are separated as normal practice to facilitate disposition procedures in accordance with SECNAVINST 5212.10 series.

DEACTIVATION OF FACILITIES ISSUES/CONCERNS

-
- Loss of corporate knowledge of past facility use may occur.
 - Failure to provide adequate OSH oversight of cleanup, construction, renovation, and demolition at BRAC sites may result in an increase of potential hazards.
 - OSH offices are typically not involved in the development and implementation of activity or facility Layaway Plans.
 - The inadequate layaway of a facility may present liability and other safety risks.
 - Access to closed facilities by non-government personnel creates potential liability.
 - An exchange of hazard information (a deficiency abatement program, location of confined space, energy control measures, and hazard communication) and inventories with potential new tenants, contractors, or gaining command (CSO) may/will be required.
 - A failure to follow proper procedures for disestablishing controlled programs (e.g., Radiation Safety Program) may result in regulatory non-compliance and increased risk for personnel.
 - The change in activity missions (e.g., to environmental cleanup, demolition, and construction) may result in inadequate OSH resources.

SOLUTIONS

- The activity commanding officer should establish a working group with local area or regional activities/tenants on the closure list to discuss/resolve OSH concerns and share lessons learned (e.g., transition team concept).
- The activity commanding officer should ensure sufficient resources are available for continued OSH oversight including the changed activity mission. These resources must be identified in the BRAC budget plan.
- The activity commanding officer should ensure safety and security procedures are established and maintained for all visiting personnel associated with BRAC that have a need for access to industrial or other sectors of the BRAC activity during the closure or realignment period.
- The activity commanding officer should ensure deficiencies are corrected in accordance with Navy policy and ensure that remaining/existing hazards are properly documented in contracts

and cooperative lease agreements established with new owners/occupants. (See Appendix C for a list of OSH References/Policy Documents).

- The activity commanding officer should ensure OSH staffs are included in closure and layaway plan development, review, and implementation.
- The activity commanding officer should ensure coordination with NAVSEADDET Radiation Safety Office (RASO) to ensure that proper requests are submitted to disestablish the Radiation Safety Program. This process shall be initiated one year prior to operational closure.
- The activity commanding officer should ensure facility layaway efforts follow current guidance (see Appendix D, Base Realignment and Closure Facility Layaway and Caretaker Standards, and most current applicable BRAC messages).
- Affected activities may use Appendix E (Safety and Health Integrated Closure Checklist) for additional guidance and as a checklist for building closure procedures.
- Affected activities should document the facility historical use as turnover record (e.g., operations, processes, chemicals used and stored).

TURNOVER RESPONSIBILITIES ISSUES/CONCERNS

- There will be a need for an adequate interface between the activity and Echelon 2 Command Headquarters, Naval Facilities Engineering Command EFD, contractors, and potential new tenants to ensure a smooth transition and exchange of information regarding existing facility equipment hazards.
- There will be a need to identify requirements/responsibilities for maintenance of systems and equipment after turnover, and during dual occupancies (e.g., ventilation, elevators, egress, and fire protection).

SOLUTIONS

- The activity commanding officer should ensure copies of the confined space inventory, list of remaining facility deficiencies, asbestos inventory and surveys, hazardous materials inventory and required records, and any applicable operating procedures for equipment and systems left in place are provided to the caretakers and/or tenants.

- The activity commanding officer should ensure that cooperative lease agreements clearly delineate government and tenant responsibilities.

- The activity commanding officer should ensure close coordination with EFDs to assure responsibilities/requirements for closure/turnover are clearly conveyed and in the transfer agreement or direct turnover.

- The activity commanding officer should ensure identification of types of positions/personnel who may need to be transferred to EFD roles (e.g., administrative, fire, security, safety) and the essential OSH program elements needed to support them (e.g., training, personal protective equipment, and mishap investigation).

Chapter 2

OCCUPATIONAL HEALTH PROGRAM

BRAC ISSUES

SUMMARY OF OCCUPATIONAL HEALTH FUNCTIONAL RESPONSIBILITIES

The Occupational Health Program is divided into two major specialties: industrial hygiene and occupational medicine. Industrial hygiene involves the identification and evaluation of occupational health hazards and the recommendation of practices and controls which will control or reduce workplace health risks. Occupational medicine focuses on the hazards identified during the industrial hygiene workplace evaluations, and the diagnosis and treatment of acute occupational injuries and illnesses. These two specialties, working together, form the basis for a proactive occupational health care program.

Occupational medical and industrial hygiene resources are frequently overtaxed by issues created by BRAC. Employees are being moved from one workplace location to another. Most workplace moves require medical evaluations to determine the ability of the employee to perform essential job functions. These issues must be coordinated with occupational health, Human Resources Office (HRO), and command personnel and must also follow Bureau of Medicine and Surgery (BUMED) and federal regulations. Occupational health clinics will be affected by job changes regardless of whether a command is closing or not.

Stress-related issues, surfacing as increased worker's compensation cases and potential workplace violence, are of special concern. Industrial hygiene resources may be overburdened as employee jobs are redefined, work practices and processes are modified, and operations are changed. These changes will require additional industrial hygiene evaluations to determine new hazards, exposures, and the need for medical surveillance. The occupational health staff must be kept informed of changes to meet the needs of the command.

MEDICAL EVALUATIONS/MEDICAL RECORD ISSUES/CONCERNS

➤ Old and inaccurate position descriptions may be used by occupational health staff to evaluate the ability of employees to perform job functions.

-
- Increased medical evaluations required by regulations may occur due to BRAC. These include exit, entrance, transfer, job function changes, and acute care such as emergencies and first aid.
 - Inadequate medical staffing may occur and, as a result, may affect the ability of the occupational health clinics to provide services as BUMED reduces and/or redistributes resources due to BRAC.
 - Occupational health services supporting population data may be difficult to obtain and track. Additionally, some employees may be transferred to another command while physically remaining in their current positions.

SOLUTIONS

- Supervisors and OSH office staff must coordinate closely with occupational health staff to identify which employees require what evaluations and when.
- Local activities need to coordinate with occupational health staff (via responsible medical clinics and/or hospitals) to identify changes in population served and make adjustments in resources.
- Occupational health staff members must be involved in the downsizing/BRAC process to ensure medical support is available as changes occur.
- Occupational health staff must be kept informed of status of local employees in order to coordinate the transfer of medical data from closing to gaining activities as employees actually transfer.
- Closing activities need to communicate OH support needs to the responsible medical treatment facility (MTF) and their headquarters command.
- BUMED must closely monitor OH support needs to ensure adequate levels of resources are maintained to support closing activities and NAVFACENGCOM (after operational closure).

WORKERS' COMPENSATION ISSUES/CONCERNS

- Diminishing occupational health services will adversely affect medical case management.

SOLUTIONS

- In areas where occupational health services are downsizing, the Commanding Officer must ensure that the required occupational health and medical case management services are available to activity personnel by coordinating with servicing medical facility and if necessary, by identifying requirements to Echelon 2 Headquarters Command.

- Occupational health staff must coordinate with Injury Compensation Program Administrator (ICPA) and OSH staff for careful and complete workers compensation tracking, medical documentation, medical management, recordkeeping, and occupational health input to the Department of Labor (DOL).

STRESS AND VIOLENCE IN THE WORKPLACE ISSUES/CONCERNS

- Increased stress and violence due to BRAC and downsizing may result in an increase of stress-related illness, family dysfunction, and injury.

SOLUTIONS

- The affected activity should ensure stress recognition classes are made available for all levels of supervision.

- The affected activity must ensure anticipatory stress reduction classes and voluntary counseling are available. Structure employee assistance programs to handle probable increases in referrals.

- The supporting occupational health staff must structure health promotion programs to meet the specific needs of the employees' population.

INDUSTRIAL HYGIENE/WORKPLACE MONITORING SERVICES ISSUES/CONCERNS

- Industrial hygiene/workplace monitoring services may be adversely affected due to activity population and work process changes.

- Inadequate industrial hygiene/workplace monitoring staffing may affect the ability to provide required services.

SOLUTIONS

- The local activity must coordinate closely with industrial hygiene staff (via the responsible hospital/clinic) to identify resources necessary to meet changes in requirements.
- Industrial hygiene staff must be involved in the downsizing/BRAC process to ensure industrial hygiene support is available as changes occur.
- The local activity and supporting MTF should explore the possibility of outsourcing industrial hygiene/workplace monitoring services.

PHYSICAL EXAMINATION ISSUES/CONCERNS

- Employees who are required by regulation to have a fitness for duty physical exam, as ordered by management, may not be providing appropriate medical evidence when a private medical physician is utilized. This may allow an employee who is unable to perform the full range of duties to be reassigned to another activity as fully qualified.
- The Report of Medical Examination (SF-78) used in the current medical screening process may not reflect accurate physical or environmental factors of the positions.

SOLUTIONS

- The affected activity must require employees who have a fitness for duty physical exam conducted by private physicians to provide documentation, in accordance with activity standards, to an Injury Compensation Program Administrator (ICPA).
- Medical screening personnel must ensure SF-78 reflects accurate physical or environmental factors.
- HRO briefing should include information regarding return to original work when inaccurate information is made available to the examining physician by the employee.

Chapter 3 INJURY COMPENSATION/ HUMAN RESOURCES PROGRAM BRAC ISSUES

SUMMARY OF INJURY COMPENSATION FUNCTIONAL RESPONSIBILITIES

The Federal Employees' Compensation Act (FECA) program provides benefits to employees who sustain on-the-job injuries/illnesses. This program is managed at the local activity level by an Injury Compensation Program Administrator (ICPA) who is generally located in the Human Resources Office. The ICPA is responsible for case management which includes monitoring of claims, controversions, light duty programs, fraud investigations, return to work, and monitoring of chargeback costs. The ICPA must coordinate with the occupational safety and health staff to provide total case management.

INJURY COMPENSATION ISSUES/CONCERNS

- RIFs, downsizing, and closures will create more claims.
- The Federal Employees' Compensation Act offers more attractive benefits than retirement benefits or Voluntary Separation Incentive Pay/Reduction in Force benefits. Some employees may inappropriately seek FECA benefits.

SOLUTIONS

- The affected activity (ICPA) must ensure each claim is properly evaluated and questionable claims are all controverted.

COST CONTROL ISSUES/CONCERNS

- The ability to place injured employees in temporary light duty positions may be decreased due to limited placement opportunities.
- The ability to provide rehabilitation/accommodations for employees who have a permanent disability may be decreased due to limited placement opportunities.

SOLUTIONS

- Commanding officers and corporate boards of affected activities should support innovative cost reduction strategies. See Appendix F (Innovative Cost Reduction Strategies).

INJURY COMPENSATION PROGRAM ADMINISTRATOR RESOURCE ISSUES/CONCERNS

- Many Human Resource Offices are adopting the generalist's philosophy. Former specialists under the new system are now servicing multiple programs (i.e., staffing classification, or employee relations).
- As the customer ratio increases at the Human Resource Office the quality of services may diminish.
- Reductions in clerical assistance at the Human Resource Office may threaten to dilute the program.
- Many ICPA's have little or no time to devote to cost avoidance/reduction issues such as effectively challenging or controverting of claims.

SOLUTIONS

- Activity commanding officers must ensure that the injury compensation program is adequately staffed to provide appropriate support services through closure of activity.
- Claims controversion training is available through OCPM and must be used, where appropriate.

RECORDKEEPING ISSUES/CONCERNS

- There may be a lack of direction/coordination for the transfer of injury compensation records from losing activities to gaining activities or to designated custodians.
- The disposition of former employees injury compensation files will vary from one activity to another.

SOLUTIONS

- Affected activity commanding officers must ensure the base closure plan addresses the maintenance, transfer, or disposition of appropriate records. See Appendix B (Records Disposition Summary).

DOCUMENTING OF LIGHT DUTY POSITIONS ISSUES/CONCERNS

- Employees may have been accommodated in light duty positions without proper documentation by supervisor, human resources office, and/or medical provider.
- Employees accommodated in light duty positions may not have performance appraisals which accurately reflect the duties they are performing.

SOLUTIONS

- Commanding officers of affected activities must ensure that supervisors do not allow informal light duty assignments (without proper medical documentation).
- Commanding officers must request employees, who have been accommodated on informal light duty, to provide updated fitness for duty medical information. If appropriate, process required personnel actions to reflect accommodations.
- Commanding officers must ensure employees accommodated in light duty positions have performance elements assigned to reflect their current duties.

Chapter 4

COMMAND PROGRAM MANAGEMENT BRAC ISSUES AFTER OPERATIONAL HRT CLOSURE

SUMMARY OF SPECIFIC HEADQUARTERS COMMAND AND PERSONNEL MANAGEMENT ORGANIZATION RESPONSIBILITIES

Even though bases are being closed, some headquarters commands have safety and health responsibilities that continue until the property is ultimately released, disposed of to public, etc. Close coordination and cooperation among the closing activity, Caretaker Site Office (CSO) and cognizant Echelon 2 Commands Headquarters are essential to ensure personnel receive adequate OSH support. BUMED, OCPM/HROs, and NAVFACENGCOM have the following specific responsibilities:

- **BUMED:** Continue to provide Occupational Health services to Navy personnel while the base is preparing for operational closure and to the Navy personnel performing caretaker responsibilities while cleaning up environmental contamination and disposing of real estate.
- **OCPM/HROs:** Continue to provide oversight and assistance to control workers' compensation claim costs per OPNAVINST 12810.1 series.
- **NAVFACENGCOM:** Continue to maintain an effective safety and health program from operational closure of the facilities/base through any remaining environmental clean up and property transfer. Specific NAVFACENGCOM responsibilities include:

- **Liability/tort claim prevention** due to accidents. In some states, tort claim responsibility is tied to the title holder of real property, regardless of other internal Navy leases, transfer documents and agreements. California is one of those states. NAVFACENGCOM must safely dispose of Navy real property. NAVFACENGCOM must protect the Navy from liability claims involving public visitors, lessees, and contractors due to accidents at closed BRAC bases. Do not allow destruction or contamination of Navy BRAC property from accidents or unsafe lessee operations involving inadequate storage of toxic or flammable materials, etc.

- **New Facilities - renovation/construction.** Properly plan and design new or renovated facilities for new occupancy of relocated Navy employees. Employ system safety analyses and techniques to obtain customer input of hazards that need to be controlled to prevent accidents and illnesses and ensuing workers' compensation claims. Special emphasis is required for adequate industrial ventilation, hazardous material storage, hazardous waste accumulation and

storage, ergonomic work station designs, maintenance hazards, confined spaces, fall protection, etc.

- NAVOSH Compliance. NAVOSH requirements continue to apply for Navy personnel performing CSO, field monitoring, or other cleanup/closure duties. Periodic safety and health inspections, investigations of mishaps, providing of personal protective equipment, medical monitoring, etc. as required by OPNAVINST 5100.23D shall continue.

- OSHA Interface. Even though the base is operationally closed, Federal OSHA or individual state OSHA still have jurisdiction to monitor Navy and contractor compliance as explained in OPNAVINST 5100.23D chapter 11.

- OSHA Standards. OSHA 29 CFR 1910.120 requires a contractor safety and health plan, specific training, emergency response capability, etc. EM 385-1-1, required by the Federal Acquisition Regulations (FAR), contains the demolition and construction safety requirements. In addition, contractors are required to provide a specific accident prevention plan and a specific activity hazards analysis required by EM-385-1-1.

- Contractor Safety & Health. Properly task and monitor contractors who are hired to cleanup, renovate, or dispose of BRAC designated facilities, to minimize threats to safety and health and/or adverse publicity to the Navy. Keep adequate safety and health data to provide lessons learned and track adverse accident trends. Caretaker Site Offices shall be supported by the NAVFACENGCOM chain of command in the same manner as Resident Officer in Charge of Construction (ROICC) Offices are supported.

- Partner with closing activities to provide needed technical facilities safety and health data, plans, and reports. Obtain critical documentation from closing activity to safely close and dispose of property.

- Accident Reporting. At closed bases, NAVFACENGCOM will make notification of any serious accident that occurred to any personnel in accordance with OPNAVINST 5100.23D and OPNAVINST 5102.1A, as applicable. NAVFACENGCOM shall investigate serious accidents and provide required accident investigation reports to cognizant commands.

NOTE:

For questions or further guidance refer to Appendix G: Technical Experts/Points of Contact and Appendix H for additional supporting documentation pertaining to BRAC.

APPENDIX A

SUMMARY OF NAVOSH PROGRAMS

SUMMARY OF NAVOSH PROGRAMS						
PROGRAM		CONTRACTIBLE			COMMENTS	CERTIFICATION OR SPECIAL TRAINING
		YES	NO	PARTIALLY		
1	PREVENTION AND CONTROL OF WORKPLACE HAZARDS		X		INTERNAL MANAGEMENT AND OVERSIGHT NEEDED	SPECIAL TRAINING NEEDED
2	TRAINING			X	EXCEPT WHERE DESIGNATED, PM'S DO TRAINING	SPECIAL TRAINING NEEDED
3	OCCUPATIONAL HEALTH			X		
	MEDICAL SURVEILLANCE			X	BUMED PROVIDES	
	INDUSTRIAL HYGIENE			X	BUMED PROVIDES	
	WORKPLACE MONITORING			X	BUMED PROVIDES	
4	HAZMAT CONTROL			X	TRAINING CAN BE CONTRACTED	
5	INJURY COMPENSATION		X		CASE MANAGEMENT NEEDED. SEE OPNAVINST 12810.2	
6	INSPECTION PROGRAM	X			FEDERAL INSPECTION REQUIREMENTS (29 CFR1960) MUST BE FOLLOWED	SPECIAL SKILLS TRAINING NEEDED
7	EMPLOYEE HAZARD REPORTS		X		AS ABOVE, FEDERAL REQUIREMENTS PM MUST PROVIDE OVERSIGHT	

SUMMARY OF NAVOSH PROGRAMS

PROGRAM		CONTRACTIBLE			COMMENTS	CERTIFICATION OR SPECIAL TRAINING
		YES	NO	PARTIALLY		
8	INSPECTION BY FEDERAL AND STATE OSHA		X		ON SITE PM NECESSARY	
9	DEFICIENCY ABATEMENT (HAZARD CORRECTION)			X	MANY ADMINISTRATIVE FUNCTIONS	
10	COST ACCOUNTING			X	FEDERAL ADMINISTRATIVE ACCOUNTING REQUIREMENTS	
11	MISHAP INVESTIGATION AND RECORDKEEPING			X	OPNAV REQUIREMENTS, PRIVACY ISSUES, LIABILITY ISSUES	SPECIAL TRAINING REQUIREMENTS FOR CLASS A & B
12	RESPIRATORY PROTECTION		X		DESIGNATED POSITION	SPECIAL TRAINING REQUIRED
13	CONFINED SPACE/GFE			X	DESIGNATED PM POSITION	SPECIAL TRAINING NEEDED
14	ASBESTOS			X	DESIGNATED POSITION. TRAINING CAN BE CONTRACTED	SPECIAL TRAINING REQUIRED FOR DESIGNATED PERSONNEL.
15	HEARING CONSERVATION			X	FEDERAL MANDATED MANAGEMENT REQUIREMENTS. TRAINING CAN BE CONTRACTED	
16	SIGHT CONSERVATION			X	SAME AS ABOVE	
17	PERSONAL PROTECTIVE EQUIPMENT		X		PM REQUIREMENTS, OSH MUST APPROVE PURCHASE - LIABILITY ISSUES	

SUMMARY OF NAVOSH PROGRAMS

PROGRAM		CONTRACTIBLE			COMMENTS	CERTIFICATION OR SPECIAL TRAINING
		YES	NO	PARTIALLY		

18	LEAD			X	TRAINING CAN BE CONTRACTED	
19	NON-IONIZING RADIATION (LASERS)			X	TRAINING CAN BE CONTRACTED	DESIGNATED POSITION
20	ERGONOMICS			X	SURVEYS CAN BE CONTRACTED	
21	ENERGY CONTROL			X	TRAINING CAN BE CONTRACTED	
22	PCB's			X	TRAINING CAN BE CONTRACTED	
23	MANMADE MINERAL FIBERS			X	TRAINING CAN BE CONTRACTED	
24	WEIGHT HANDLING			X	OVERSIGHT FUNCTION - TRAINING CAN BE CONTRACTED	CERTIFIED OFFICER
25	IONIZING RADIATION		X		DESIGNATED POSITION - SPECIALIZED TRAINING NEEDED	
26	FORMALDEHYDE CONTROL			X	TRAINING CAN BE CONTRACTED	
27	ETHYLENE OXIDE CONTROL			X	TRAINING CAN BE CONTRACTED	
28	BENZINE CONTROL			X	TRAINING CAN BE CONTRACTED	

SUMMARY OF NAVOSH PROGRAMS

PROGRAM		CONTRACTIBLE			COMMENTS	CERTIFICATION OR SPECIAL TRAINING
		YES	NO	PARTIALLY		
29	ANTI NEO-PLASTIC DRUG			X	TRAINING CAN BE CONTRACTED	
30	BLOODBORNE PATHOGENS			X	FEDERALLY MANDATED REQUIREMENTS. TRAINING CAN BE CONTRACTED	
31	CADMIUM CONTROL			X		

32	PESTICIDE CONTROL			X		
33	EXPLOSIVE SAFETY		X		DESIGNATED POSITION SPECIALIZED TRAINING REQUIRED	
34	TRAFFIC SAFETY			X	TRAINING CAN BE CONTRACTED	

APPENDIX B

RECORDS DISPOSITION SUMMARY			
TYPE OF RECORD	SECNAVINST 5212.5	OPNAVINST 5100.23D	OTHER
ASBESTOS RECORDS (All Types) Respirator Fit Tests		Chapter 17 Retain indefinitely - 30 years	SECNAVINST 5212.10A Retain indefinitely
AWARD RECORDS	2 year retention except incentive awards keep for 3 years (see ¶ 12450(1)&(2))		
<p>CONFINED SPACE SAFETY</p> <ul style="list-style-type: none"> ◆ Non-Maritime Operations <ul style="list-style-type: none"> → Critiques & Rehearsals → Functions & calibration checks → Entry Permits → Training (OJT/Classroom) ◆ Maritime Operations 		<p>Chapter 27</p> <ul style="list-style-type: none"> 1 Year retention 1 Year retention 1 Year retention Retain for as long as person is in Confined Space Program 	See NAVSEA SAF-010
CORRESPONDENCE FILES, General Administrative records related to routine internal operation & administration of the activity, copies of reports submitted to higher authority	2 Year retention (See Chapter 5)	Follow SECNAV	
CORRESPONDENCE FILES, General files concerned with safety matters related to civilian & military personnel	4 Year retention (apply ¶ 5215)	Follow SECNAV	
CORRESPONDENCE FILES, General primary program records	See appropriate functional subject matter chapter or series		

RECORDS DISPOSITION SUMMARY

TYPE OF RECORD	SECNAVINST 5212.5	OPNAVINST 5100.23D	OTHER
CORRESPONDENCE FILES, General of CO/XO: Records relating to policy, procedures, planning & execution of projects, engineering & mobilization correspondence, etc.	Permanent retention as provided in ¶ 3100(1)(a)		
DESIGN REVIEWS		Chapter 5 3 Year retention	
EQUIPMENT ◆ Personal Protective Equipment issued	Retain until equipment is returned and/or accounted for		
HAZARD COMMUNICATION ◆ HMC&M ◆ MSDS		Chapter 7 Submit and enter into HMIS, if not in HMIS retain indefinitely	29 CFR 1910.1200
HAZARDOUS WASTE OPERATIONS ◆ Generator Test Results, Analyses ◆ Transporter Manifest			OPNAVINST 4110.2 Encl (2) Page 10 (guidance) OPNAVINST 5090.1 - 3 Year retention OPNAVINST 4110.2 Encl (2) Page 20 (guidance) OPNAVINST 5090.1 - retain for 3 years from date waste is sent to TSD facility/from date waste was accepted by original transporter
HEARING CONSERVATION (tests & exposure documentation) ◆ Noise Measurement Records		Chapter 18 Permanent part of employees health record 50 Year retention	

INDUSTRIAL HYGIENE SURVEYS		Chapter 8 40 Year retention (except asbestos) Asbestos - retain indefinitely	
INJURY COMPENSATION FORMS (Compensation forms, reports, & related medical & investigative correspondence other than what is sent to DOL & OPF copies)	Cut off annually. Destroy when 2 years old. (See ¶ 12810)		
INSPECTIONS ◆ Workplace ◆ Safety Engineering Reports	3 Year retention	Chapter 9 Retain for 5 calendar years following end of FY to which they relate	
INSULATION		Chapter 17 Retain indefinitely	SECNAVINST 5212.10A Retain indefinitely
LEAD (and related records)		Chapter 21 Retain for the period of employment plus 20 years or 50 years, which ever is greater.	
MANAGEMENT EVALUATIONS	3 Year retention	Chapter 9 Retain for 5 years following end of FY to which they related	
MEDICAL RECORDS		Chapter 8 50 year retention	29 CFR 1910.20 Duration of employment, plus 30 yrs, except that the following types of records need not be retained for any specified period: Health insurance claims maintained separately from the employer's medical

			program; first aid records (not including medical histories) of one-time treatment & subsequent observations of minor scratches, cuts, burns, splinters, etc. which do not involve medical treatment, loss of consciousness, restriction of work or motion, or transfer to another job, if made on-site by a non-physician & if maintained separately from the employer's medical program & it's records; the medical records of employees who have worked for less than 1 year (if upon termination the records are provided to the employee).
MISHAP INVESTIGATION AND REPORTING <ul style="list-style-type: none"> ◆ Annual Report of Civilian Injuries & Illnesses ◆ Navy Log of Injuries & Illnesses ◆ Safetygrams ◆ Training Mishap Reports ◆ Shore On-Duty Injuries or Occupational Disease SR/SSIR Reports ◆ Dispensary Permits ◆ General Correspondence 	<p>Permanent retention. Transfer to FRC when 4 years old. (NAVEXOS-1680)</p> <p>3 Year retention (NAVEXOS-109)</p> <p>1 Year retention (NAVEXOS-107)</p>	<p>Chapter 14 Retain for 5 years following end of FY for which related.</p> <p>" "</p> <p>" "</p> <p>" "</p> <p>" "</p> <p>Chapter 14 - 5 Year retention</p>	<p>DODINST 6055.7 Class A&B and other OSHA required report retention for 5 years</p>

<p>accumulated in connection w/routine administration & operation of mishap investigation & reporting</p> <ul style="list-style-type: none"> ◆ Diving Mishap Reports ◆ Explosive Mishap Reports ◆ Motor Vehicle Mishap Reports ◆ Recreation, Athletic and Home Mishap Reports 	<p>3 Year retention (NAVEXOS-2449)</p>	<p>Chapter 14 - 2 Year retention</p>	<p>OPNAVINST 5102.1 - 5 Year retention following end of FY to which they relate</p> <p style="text-align: center;">" " "</p> <p style="text-align: center;">" " "</p> <p style="text-align: center;">" " "</p>
<p>MISHAP INVESTIGATION REPORTING continued</p> <ul style="list-style-type: none"> ◆ Monthly Injury Data Report ◆ Statistical Analysis and Summaries ◆ Supervisors Reports of Injuries 	<p>2 Year retention (NAVEXOS-110)</p> <p>3 Year retention (NAVEXOS-111/NAVEXOS-2449)</p> <p>3 Year retention when no compensation claim involved. Indefinite when comp. claim is involved. (NAVEXOS-108)</p>	<p>None Required</p> <p>Not Specified</p> <p>None Required</p>	<p>OWCP CA Forms include a Supervisor's section; process IAW OWCP requirements</p>
<p>POLICY & PROCEDURES</p> <ul style="list-style-type: none"> ◆ Instructions & Regulations ◆ Policy Council/Committee Meetings/PATs Minutes 	<p>Dispose of in same manner as general correspondence files (Apply ¶ 5215)</p>	<p>Follow SECNAV</p> <p>Chapter 4 3 Year retention</p>	

RADIO FREQUENCY RADIATION (RFR) Surveys and Reports		Chapter 22 5 Year retention & then determine usefulness	
RESPIRATORY PROTECTION ◆ Fit Tests	Chapter 15 3 Year retention		
TRAINING ◆ NAVOSH Records (all programs except insulation/asbestos-related)		Chapter 6 5 Year retention for OSH Office Records	Copies of official training records may accompany personnel transferred within the Navy. For military personnel training shall be recorded in the General Military Training (GMT) record. For civilians, record in OPF as applicable.
UNSAFE/UNHEALTHFUL WORKING CONDITIONS		Chapter 10 5 Year retention following end of CY which final action was taken	
VEHICLE OPERATOR TEST RECORDS ◆ Motor Vehicle Licenses ◆ Heavy Equipment Licenses	3 Month retention with copy filed in personnel folder (NAVEXOS-1974)		NAVFAC P-300 4 Year retention NAVFAC P-306 2 Year retention
WORKPLACE MONITORING (Employee exposure records, Surveys, Evaluations)		Chapter 7 & 8 40 Year retention (except asbestos)	29 CFR 1910.20, 30 Years, except that: A) Background data to environmental (workplace) monitoring or measuring, such as laboratory reports and worksheets, need only be retained for one year as long as the sampling results, the collection methodology (sampling plan), a description of the

			<p>analytical and the mathematical methods used, and a summary of other background data relevant to interpretation of the results obtained, are retained for at least 30 years; and B) Material safety data sheets and ¶ (c)(v) (iv) records concerning the identity of a substance or agent need not be retained for any specified period as long as some record of the identity (chemical name if known) of the substance or agent, where it was used, and when it was used is retained for at least 30 years. (NOTE: MSDSs must be kept for those chemicals currently in use that are effected by the HAZ COMM standard IAW 1910. 1200(g); and C) Biological monitoring results designated as exposure records by specific occupational safety and health standards shall be preserved and maintained as required b the specific standard.</p>
--	--	--	---

NOTE 1: THIS LISTING IS NOT ALL INCLUSIVE! FOR PROGRAM DOCUMENTATION NOT COVERED IN THIS LIST, REFER TO GUIDANCE REQUIREMENTS OF SECNAVINST 5215.5C OR CONSULT YOUR ECHELON 2 SAFETY OFFICE. The current Records Disposition Manual is SECNAVINST 5212.5C, however, the instruction has been updated in sections. Most of the safety program documentation requirements are still covered by SECNAVINST P5212.5B, Change 1 of 27 August 1964. Unless otherwise specified, the retention period specified applies to the activity OSH office.

NOTE 2: All correspondence, files, and records that relate to insulation/asbestos are exempt from destruction and must be preserved until further notice. This encompasses all documents, both long term and short term; and originals and non-identical copies. Details are covered in SECNAVINST 5212. 10 A (Change 2, 22 June 1993). ACTIVITIES MUST READ THE INSTRUCTION THOROUGHLY. Contact the Navy Asbestos Litigation Support Office for assistance.

NOTE 3: RECORD DISPOSITION FOR TRANSFER OF RECORDS OF DECOMMISSIONED SHIPS AND DISESTABLISHED SHORE ACTIVITIES AND AVIATION SQUADRONS IS ALSO COVERED IN SECNAVINST 5212.5. Briefly:

1. Host Commands of disestablished tenant shore activities are required to: Publish guidance to be followed by disestablished tenant shore activities; provide local storage areas for records with a retention period of less than three years; maintain a record of storage box location (i.e. box list, floor plan, etc.) which permits easy access to stored records for reference and allows systematic disposal of records at the end of the three year retention period; conduct periodic reviews of stored records to ensure timely destruction of eligible records.
2. Disestablished shore activities shall: Follow the guidance of the host command in preparing and transferring records; transfer records with less than 3 years retention period to the host command following their guidance; mark both ends of all records storage boxes with the disposal month and year; provide a detailed list of the material to the host command and to the Immediate Superior In Command (ISIC).
3. Transfer records with more than 3 years retention period to the nearest FRC following transfer procedures outlined in Appendix C of SECNAVINST 5212.5. Provide copies of Standard Form 135 with a detailed list of records transferred to the host command and the ISIC. The FRCs screen all incoming records boxes. If correct transfer procedures are not followed or proper records transfer paperwork is not provided, the entire records shipment will be returned to the transferring commanding or the ISIC for correction. It is strongly recommended that activities contact the FRC in advance of disposal for assistance in preparing for records disposal.
4. Follow the most stringent requirements listed.

APPENDIX B-1

FEDERAL RECORDS CENTERS	
Area Served	Mailing & Shipping Address
NATIONAL CENTERS	
District of Columbia, Maryland, Virginia, and West Virginia, except U.S. court records for Maryland, Virginia, and West Virginia	Washington National Records Center Washington, DC 20409 301/763-7633 Shipping address for records only: 4205 Suitland Road, Suitland MD 20746
The entire personnel records of all separated Federal employees; medical and pay records of all Federal employees designated medical records of Army and Air Force military personnel and their dependents; and records of agencies in the St. Louis areas (Missouri only) of Scott AFB IL, and of the Memphis Service Center IRS Designated records of the Department of Defense and the US Coast Guard	National Personnel Records Center (Civilian Personnel Records) 111 Winnebago Street St. Louis, MO 63118 314/425-5722 National Personnel Records Center (Military Personnel Records) 9700 Page Boulevard St. Louis, MO 63132 314/263-8110
FEDERAL CENTERS	
AREA 5: Illinois, Wisconsin, Minnesota & US court records for Indiana, Michigan and Ohio Indiana, Michigan, and Ohio except US court records	Federal Records Center-Chicago 7358 South Pulaski Road Chicago, IL 60629 312/353-0162 Federal Records Center-Dayton 3150 Springboro Road Dayton, OH 45439 513/225-2853
Area 6: Kansas, Iowa, Nebraska, and Missouri except greater St. Louis area Greater St. Louis area (Missouri only)	Federal Records Center-Kansas City 2312 East Bannister Road Kansas City, MO 64131 816/926-7271 National Personnel Records Center

FEDERAL RECORDS CENTERS

(Civilian Personnel Records)	
Area 7: Texas, Oklahoma, Arkansas, Louisiana, and New Mexico	<p>Federal Records Center-Forth Worth PO Box 6216 Forth Worth, TX 76115 817/334-5515</p> <p>Send records only to: 4900 Memphill Street Building 1 - Dock 1 Forth Worth, TX 76115</p>
AREA 1: Maine, Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island	<p>Federal Records Center-Boston 380 Trapelo Road Waltham, MA 02154 617/647-8110</p>
AREA 8: Colorado, Wyoming, Utah, Montana, North Dakota, and South Dakota	<p>Federal Records Center-Denver PO Box 25307 Denver, CO 80225 303/236-0809</p>
AREA 2: New York, New Jersey, Puerto Rico, the Virgin Island, and the Panama Canal Zone	<p>Federal Records Center-New York Bldg. 22 Military Ocean Terminal Bayonne, NJ 07002 201/823-5431</p>
AREA 9: American Samoa, California, except Southern California, and Nevada except Clark County	<p>Federal Records Center-San Bruno 1000 Commodore Drive San Bruno, CA 94066 415/876-9006</p>
AZ; Clark City, WV; So Ca (Riverside, San Diego, San Louis, Obispo, Los Angeles, Ventura, Kern, Inyo, San Bernardino, Santa Barbara, Imperial, Orange)	<p>Federal Records Center-Los Angeles 24000 Avita Road Laguna Niguel, CA 92677 714/643-4220</p>
AREA 3: Delaware, Pennsylvania and only US court records for Maryland, Virginia and West Virginia	<p>Federal Records Center-Philadelphia 5000 Wiesahickon Avenue Philadelphia, PA 19144 215/951-7451</p>
AREA 10: Washington, Oregon, Idaho, Alaska, Hawaii, and Pacific Ocean areas except American Samoa	<p>Federal Records Center-Seattle 6125 Sand Point Way, NE</p>

FEDERAL RECORDS CENTERS	
	Seattle, WA 98115 216/526-6501
AREA 4: North Carolina, South Carolina, Tennessee, Mississippi, Alabama, Georgia, Florida, and Kentucky	Federal Records Center-Atlanta 15575 St. Joseph Avenue East Point, GA 30344 404/763-7651

APPENDIX B-2

GUIDELINES FOR DISPOSITION OF RECORDS AT BASES AND ACTIVITIES AFFECTED BY BASE REALIGNMENT AND CLOSURE

(BRAC) ACTIONS

1. The Department of the Navy must reimburse the National Archives and Records Administration (NARA) for expenses associated with "accelerated" (early) retirement of temporary records to Federal Records centers as a result of BRAC. Accelerated retirements are records transferred to a Federal Records Center ahead of the date they would normally be transferred (or authorized for transfer) per SECNAVINST 5212.5C, Navy and Marine Corps Records Disposition Manual. Take the following actions to minimize reimbursement costs. (Note: Permanent records, even if retired early, will continue to be accepted at FRCs at no cost.)
2. Reduce retirements to FRCs to the absolute minimum. For example:
 - a. Arrange to send non-permanent records to your ISIC or other functionally related command/activity until their authorized destruction date or eligibility for transfer to an FRC on their normal retirement date;
 - b. Ensure that duplicates and other non-record material are removed so that only official records are retained/retired;
3. NARA will charge for reboxing incorrect shipments such as shipments with damaged or nonstandard FRC boxes. Ensure that shipments to an FRC follow the procedures in SECNAVINST 5212.5C. Also, make sure that records are free of contamination such as mildew, mold, bug infestations, etc.
4. NARA will also charge for storing records covered by a "freeze", such as asbestos-related records, with either an expired disposal date or a disposal date of one year or less. Due to the potential for their long-term storage at an FRC, every effort should be made to find suitable, economical storage for them at a Navy activity.
5. These guidelines apply to records stored in standard NARA one cubic foot storage boxes. Nonstandard sized records must be identified and described to determine special storage and shelving requirements and associated costs.

1. After complying with the actions to reduce accelerated/early shipments of records, provide the following information for all records meeting the reimbursement criteria that you plan to send to an FRC. Refer to the SSICs in SECNAVINST 5212.5C for descriptions and disposition instructions. Make a separate entry for each SSIC.

a. Cubic feet (c.f.)

b. Description of the records

c. Month and year records are expected to be sent to an FRC (state the location of the FRC)

d. Number of months their retirement is accelerated (the number of months remaining until eligible for retirement under normal conditions per SECNAVINST 5212.5C)

e. For "freeze" records covered by paragraph 4 on the previous page, show the nature of the freeze and circumstances necessitating their shipment to an FRC.

APPENDIX B-4

AGREEMENT BETWEEN THE OFFICE OF FEDERAL RECORDS CENTERS, NATIONAL ARCHIVES AND RECORDS ADMINISTRATION, AND THE DEPARTMENT OF THE NAVY

I. PURPOSE.

This agreement sets forth the terms and conditions under which Federal Records Centers will accept records from Naval bases and installations affected by the Defense Base Closure and Realignment Act of 1990 (Pub. L. 101-510).

II. COVERAGE.

A. Accelerated accessions. Records that will be transferred to NARA Federal Records Centers ahead of their authorized schedule due to the Defense Base Closure and Realignment Act of 1990.

B. Accessions with a disposal date of one year or less, accessions containing interim x-rays, and records not scheduled for FRC retention. Under normal circumstances, these records would be retained at the base or installation until the retention period expired.

C. New accessions of records covered by a court or agency imposed disposal suspension order ("freeze"), with either an expired disposal date or a disposal date of one year or less. Under normal circumstances, these records would not be accepted for storage by NARA Federal Records Centers. However, in accordance with this agreement, the records centers will accept these records only from military bases and installations that are scheduled to close.

D. Improperly packaged records and records in damaged boxes. These are records that must be reboxed in order to be accessioned by the records center. This provision applies to both accelerated accessions and scheduled accessions received from closing military bases and installations. Although the centers will rebox records received in damaged boxes, the military unit must use standard FRC boxes to retire records to the centers.

III. PROCEDURES.

A. The Department of the Navy will:

1. By July 1 of each year, provide the NARA Office of Federal Records Centers (NC) with estimates of the total volume (in cubic feet) of records expected to be transferred to records centers by bases and installations scheduled for closure during the next fiscal year.

2. Identify each closing base or installation by name, location, and volume of records it expects to retire during next fiscal year.

B. The NARA Office of Federal Records Centers will:

1. For budgetary purposes, provide the Department of the Navy with a total estimate of all costs for the next fiscal year by August 1 of each year. All billings, however, will be based on actual cost.
2. By September 1 of each year, provide written notification to the Department of the Navy of the records centers that have available space to accept records covered by this agreement.

C. The Naval Bases and Installations will:

1. Excluding the exceptions covered by this agreement, adhere to the requirements of 36 CFR Part 1228 Subpart, and the procedures prescribed in Federal Records Center Field Bulletins for transfer of records to Federal Records Centers.
2. Show the words "Base Closure" in the description section of the SF 135, Records Transmittal and Receipt.
3. Identify new accessions of records covered by a freeze. Indicate the name of the freeze in the description section of the SF 135.

D. Authorized requesters will include in the description section of the request form the words, "Closed Base Records". Requests may be submitted to the records center on an Optional Form 11, Reference Request - Federal Records Center, or submitted via CIPS.

E. The NARA Federal Records Centers will:

1. Accept for storage and servicing, and without cost to the transferring agency, records that meet the requirements of 36 CFR Part 1228 Subpart, and the procedures prescribed in NARA Federal Records Center Field Bulletins for transfer of records to Federal Records Centers.
2. Based on the approved records disposition schedule, determine which accessions are accelerated retirements and keep a record of this information for billing purposes.
3. Keep a record of all new accessions with a disposal date of one year or less; accessions of interim x-rays; and accessions of records not scheduled for FRC retention.
4. Keep a record of all new accessions of records covered.
5. Keep a record of the time expended and the number of new boxes required to rebox records that were unacceptable for accessioning.

6. Keep a record of the number of reference services performed and records described in items 2 through 4 above.

7. Keep a record of shelving modifications accomplished for storage of x-rays not normally received at FRCs and the volume of x-rays disposed.

IV. REIMBURSEMENT.

A. The Department of the Navy will reimburse NARA quarterly for records storage.

1. For accelerated accessions, the Department of the Navy will reimburse NARA quarterly for the period that the records would ordinarily have been retained by the transferring office.

2. For accessions with a disposal date of one year or less, for interim x-rays, for records not scheduled for FRC retention, and for new accessions of records covered by a freeze, with either an expired disposal date or a disposal date of one year or less, the Department of the Navy will reimburse NARA quarterly for the period that the records are stored in the records center.

B. The Department of the Navy will reimburse NARA quarterly for accessioning services (reboxing), reference services, for recordkeeping costs, and for configuration of shelving to accommodate x-rays that are not normally retired to FRCs.

C. The schedule of rates of reimbursement for fiscal year 1996, beginning October 1, 1995, and ending September 30, 1996, are listed in Attachment A. The rates may be adjusted annually to include Pay Act increases, locality pay increases, mailing cost increases, increases in the cost of storage boxes, and increases in other overhead costs.

D. NARA will not charge for storage and servicing of permanent records or unscheduled records in which an SF 115, Records Disposition Request, is pending approval of NARA.

E. It is understood that official personnel records and employee medical records of former employees who held civilian positions that are subject to title 5 of the United States Code, and to the regulations and procedures issued by the U.S. Office of Personnel Management, are exempt from any storage costs required under the terms of this agreement. These records should be transferred to the National Personnel Records Centers in accordance with the applicable regulations and procedures.

V. BILLING.

NARA Central Office will bill the Department of the Navy quarterly for services rendered under this agreement. The bill will show all services and costs for the previous quarter. The request for payment will be made on SF 1081, Voucher and Schedule for Withdrawals and Credits, and will be submitted to:

The Department Of the Navy's Appropriation/Accounting Code to be charged is: _____

VI. SPECIAL PROVISIONS.

This agreement may be terminated by either Agency on 90 days advance written notice. All parties agree that revision or modification to the terms of this agreement may be made only with the consent of the authorizing officials of both agencies.

VII. AUTHORITY.

The Economy Act of 1932, as amended (31 U.S.C. 1535).

VIII. APPROVALS.

National Archives and Records
Administration

Department of the Navy

Assistant Archivist for
Office of Federal Records Centers

Date: _____

Date: _____

Attachment

for Records Affected by the Defense Base Closure
and Realignment Act of 1990 (Pub. L. 101-510)

Records Storage: \$0.405 per cubic foot per quarter.

Accessioning Services (reboxing records and correcting the SF 135):

Minimum Charge: \$10.00.

After 15 minutes: \$15.00 per hour.

New boxes: \$2.00 each.

Configuration of shelving for x-rays not normally retired to FRCs: \$3.82 per cubic foot.

Reference Services:

Records retrieval: \$1.83 per record search

Mailing Cost: Actual cost of service

Disposal of x-rays only: \$1.33 per cubic foot.

Recordkeeping (includes automated and manual systems): \$21.50 per hour

Office of Federal Records Centers National Archives and Records Administration

APPENDIX C

OSH REFERENCES

United States Code Annotated

29 USC 651 Seq.	Occupational Safety and Health Act of 1970
2 USC 522A	Privacy Act of 1974
5 USC	Freedom of Information Act

Code Of Federal Regulations

Title 29 CFR Part 1910	OSHA Standards for General Industry
Title 29 CFR Part 1915	OSHA Standards for Shipyard Employment
Title 29 CFR Part 1917	OSHA Standards for Marine Terminals
Title 29 CFR Part 1918	OSHA Standards for Longshoring
Title 29 CFR Part 1926	OSHA Standards for Construction
Title 29 CFR Part 1960	Basic Program Elements for Federal Employee OSH Programs and Related Matters
Title 40 CFR Parts 1-799	Protection of the Environment
Title 49 CFR Parts 100-199	Hazardous Material Transportation

Executive Order

12196 of 2 FEB 1980	Occupational Safety and Health Program for Federal Employees
---------------------	--

Federal Acquisition Regulation (FAR)

FAR 52.236-13	Accident Prevention
---------------	---------------------

Federal Standards

FED-STD-313C	Material Safety Data Sheets (MSDS); Preparation and Submission
--------------	--

Military Standards

MIL-STD-101B	Color Code for Pipelines and for Compressed Gas Cylinders
MIL-STD-1018	System Safety Program Requirements

Department Of Defense

DODINST 414519-R-1	Storage and Materials Handling
DODINST 6050.5 Series	DOD Hazardous Materials Information System (HMIS) Procedures
DODINST 6055.1 Series	DOD Occupational Safety and Health (OSH) Program
DOD INST 6055.5 Series	Industrial Hygiene and Occupational Health

Secretary Of The Navy

SECNAVINST 5100.10 Series	Department of the Navy Safety and Occupational Health Policy; Implementation of
SECNAVINST 5100.15 Series	Department of the Navy Awards for Achievement in Safety Ashore
SECNAVINST 12000.20 Series	Civilian Diving in the Navy
SECNAVINST 5212.10 Series	Mandatory Retention of Insulation/Asbestos-Related Records
SECNAVINST 5212.5	Disposal of Navy and Marine Corps Records
SECNAVINST 6100.5	Health Promotion Program

Chief Of Naval Operations

OPNAVINST 4110.2 Series	Hazardous Material Control and Management (HMC&M)
OPNAVINST 5040.7 Series	Naval Command Inspection Program
OPNAVINST 5100.8 Series	Navy Safety and Occupational Health Program
OPNAVINST 5100.12 Series	Navy Motor Vehicle Safety Program
OPNAVINST 5100.23 Series	Navy Occupational Safety and Health (NAVOSH) Program Manual

OPNAVINST 5102.1 Series	Mishap Investigation and Reporting
OPNAVINST 6050.4 Series	Pest Management Program (with Change 1)
OPNAVINST 9940.1 Series	Navy Diving Program
OPNAVINST 11010.20 Series	Facilities Project Manual
OPNAVINST 6100.2	Health Promotion Program
NAVY/MARINE CORPS MANUAL	Navy/Marine Corps Installation Restoration Manual, February 1992.

Naval Facilities Engineering Command

NAVFACINST 5042.5 Series	Naval Command Inspection Program
NAVFACINST 5100.11 Series	Command Safety and Health Program
NAVFACINST 5100.14 Series	Navy Occupational Safety and Health (NAVOSH) Deficiency Abatement Program Ashore
NAVFACINST 5100.16 Series	Reporting of Unsafe/unhealthful Working Conditions
NAVFACINST 11320.22 Series	Navy Shore Establishment Fire Protection and Prevention Program
NAVFACINST 11010.44	Shore Facilities Planning Manual
NAVFAC MO-117	Maintenance of Fire Protection Systems
NAVFAC MO-322 VOL I/II/III	Inspection of Shore Facilities (Vols I-III)
NAVFAC MO-324	Inspection and Certification of Boilers and Unfired Pressure Vessels
NAVFAC P-300	Management of Transportation Equipment
NAVFAX P-307	Management of Weight Handling Equipment
NAVFAC P-313	Headquarters Organization Manual
NAVFAC P-1052	OSH Program Improvement Plan

Naval Supply Systems Command

NAVSUPINST 4440.120	Reporting of Quality Deficient Materials Obtained through the Supply System
---------------------	--

Bureau Of Medicine

BUMEDINST 6250.12 Series

Vector Control Certification for Medical Department Personnel

Naval Sea systems Command

NAVSEA OP-5

Ammunition and Explosives Ashore; Safety Regulations for Handling, Storage, Production, Renovation and Shipping

NAVSEA S6470-AA-SAF-010

NAVSEA Gas Free Engineering Program

NAVSEA 0901-LP-573-0000

Cranes and Booms (NSTM Chapter 573)

Space and Naval Warfare Systems Command

SPAWARSYSCOMINST 5100.12 Series

Navy Laser Hazards Prevention Program

U.S. Army Corps of Engineers

EM-385-1-1

Safety and Health Requirements Manual

National Fire Protection Association

NFPA 70

National Electric Code

INJURY COMPENSATION/HUMAN RESOURCE REFERENCES

Code of Federal Regulations

Title 20 Code of Federal Regulations Part 10 - Federal Employees' Compensation Act

United States Code

Title 5 United States Code Chapter 81

Department of Labor

Federal Employees' Compensation Act Procedures Manual

Department of Navy

Department of Navy Civilian Personnel Instruction 810 Dated 3 February 1988

Chief of Naval Operation

OPNAV Instruction 12810.1 DTD 26 January 1990

Department of Navy

Department of Navy Commanding Officer's Guide to the Federal Employees' Compensation Act Program (NAVSO P-3674)

Department of the Navy Federal Employees' Compensation Act Program Administrator's Handbook (OPNAV P14-23-85)

OTHER HUMAN RESOURCE REFERENCES

Code of Federal Regulations

Title 5 Code of Federal Regulations Part 339

OCCUPATIONAL HEALTH REFERENCES

Code of Federal Regulations

Title 29 Code of Federal Regulations Part 1910.20

Chief of Naval Operations

OPNAVINST 5100.23D

Secretary of Navy

SECNAVINST 5212.10

Bureau of Medicine

BUMED P-117 Manual of Medical Department

Code of Federal Regulations

Title 5 Code of Federal Regulations Part 293 Series

Secretary of Navy

SECNAVINST 5212.5

Bureau of Medicine

BUMED 6110.13 - Health Promotion Program

Chief of Navy Operations

OPNAVINST 6100.2

Secretary of Navy

SECNAVINST 6100.5

Department of Defense

DOD 400.20-M-4

APPENDIX D
BASE REALIGNMENT AND CLOSURE
FACILITY LAYAWAY
AND CARETAKER MAINTENANCE STANDARDS
SEPTEMBER 1994

Table of Contents

Chapter 1	INTRODUCTION	<u>Page</u>
1.	General.....	D-4
2.	Definitions.....	D-4
3.	Maintenance Levels.....	D-5
4.	References.....	D-7
5.	Points of Contact.....	D-7
Chapter 2	FACILITY LAYAWAY STANDARDS	
1.	General.....	D-8
2.	Facility Inspections.....	D-8
3.	Layaway Standards.....	D-9
	SECTION I. BUILDING LAYAWAY PROCEDURES.....	D-9
1.	Personal Property.....	D-9
2.	House Cleaning.....	D-9
3.	Building Shell.....	D-9
4.	Exterior Windows, Doors, and Other Openings.....	D-13
5.	Locks and Keys.....	D-16
6.	Heating, Ventilating, and Air Conditioning (HVAC) Systems.....	D-16
7.	Supplemental Ventilation.....	D-17
8.	Plumbing Systems.....	D-18
9.	Electrical Systems.....	D-20
10.	Fire Protection and Alarm Systems.....	D-21
11.	Miscellaneous Building Systems.....	D-22
12.	Elevators.....	D-23
13.	Pest Control Services.....	D-24
14.	Grounds.....	D-24
15.	Appliances.....	D-24

SECTION II. UTILITY PLANTS AND DISTRIBUTION	
SYSTEMS LAYAWAY PROCEDURES	D-24
1. General Utility System Requirements.....	D-24
2. Water Supply and Wastewater Disposal Facilities.....	D-26
3. Electrical Distribution Systems	D-26
4. Heating Systems and Boiler Plants	D-27
5. Refrigeration Equipment	D-32
6. Gas Distribution System	D-33
7. Cathodic Protection Systems	D-3

SECTION III. MISCELLANEOUS FACILITIES		D-3
1. Surfaced Areas and Drainage Structures		D-3
2. Waterfront Facilities		D-34
3. Graving Drydocks.....		D-34
4. Swimming Pools.....		D-35
5. Railroads		D-35
6. Other Miscellaneous Facilities.....		D-35

Chapter 3 CARETAKER MAINTENANCE STANDARDS

1. General	D-3
2. Interior Walk Through	D-36
3. Building Shell	D-3
4. Building Interiors	D-39
5. Heating, Ventilating, and Air Conditioning (HVAC) Systems	D-40
6. Plumbing Systems	
7. Electrical Systems	
8. Fire Protection and Alarm Systems	
9. Elevators	
10. Pest Control Services	
11. Grounds Maintenance	
12. Fences	
13. Surfaced Areas and Drainage Structures	
14. Utility Systems	
15. Railroads	
16. Graving Drydocks	

ATTACHMENTS

Attachment I	SAMPLE CARETAKER MAINTENANCE LEVEL PLAN.....	D-46
--------------	--	------

Attachment II REFERENCESD-47

ADDITIONAL GUIDANCE

DOD POLICY ON ASBESTOS AT BASE REALIGNMENT AND
CLOSURE PROPERTIESD-49

DOD POLICY ON LEAD-BASED PAINT AT BASE REALIGNMENT AND
CLOSURE PROPERTIESD-50

DOD POLICY ON RADON AT BASE REALIGNMENT AND
CLOSURE PROPERTIESD-52

NOTE:

This guide may be superseded by later guidance. Check current BRAC messages.

Chapter 1: INTRODUCTION

1. General . The purpose of this appendix is to provide facility layaway and caretaker maintenance guidance to Navy activities being closed pursuant to the 1988, 1991, and 1993 Base Realignment and Closure (BRAC) programs. Facility layaway standards are provided in Chapter 2, and caretaker maintenance standards are provided in Chapter 3.

a. Interim Guidance. This appendix provides the basis for a future revision of Military Handbook (MIL-HDBK) -1130, Inactivation, Caretaker Maintenance, Reactivation, and Closure of Shore Facilities. It is expected that the revised Military Handbook will contain more detailed and complete layaway and caretaker maintenance guidance in areas such as supplemental ventilation, refrigerant management, installation of remote monitoring stations, etc.

b. Applicability. This appendix applies primarily to Navy installations scheduled for closure. While some of the material will be for activities affected by realignment of missions, the appendix is directed primarily towards activities within the United States that will be completely or substantially closed and transferred or sold.

c. Discussion. Base realignment and closure present major, unprecedented challenges to the Navy and its impacted activities.

(1) Tenant organizations expect to maintain a high level of quality of life until their transfer or deactivation.

(2) The Navy expects the base Commanding Officer to take all those actions necessary to ensure the highest return on its real property investment at the time of transition, as well as to reduce maintenance of real property (MRP) expenditures to minimum essential levels.

(3) The public and Congress expect facilities transferred to other agencies or incorporated into the local community to be maintained consistent with their anticipated reuse.

(4) The activity Public Works Department (PWD) faces this mission with declining resources and an unstable workforce.

2. Definitions. The following definitions are applicable to this appendix.

a. Caretaker Maintenance. Includes the maintenance performed on laid away facilities to ensure continued weather tightness and security; protection from fire and vermin; and safe and efficient operation of required utility systems. (NOTE: Caretaker maintenance is performed by the closing activity prior to claimancy transfer, and by the NAVFAC Caretaker Site Office after claimancy transfer.)

b. Caretaker Site Office (CSO). A NAVFAC Engineering Field Division/Activity (EFD/EFA) detachment established at an activity identified for closure under a base closure law to manage real property in a caretaker status from claimancy transfer until disposal.

c. Facilities. Class 2 real property which is comprised of buildings, structures, and utilities.

d. Disposal. Legally transferring Navy-controlled real property at a closing activity to another DoD service, federal agency, state or local government or agency (i.e., redevelopment authority), or the private sector.

e. Layaway. The preparation of facilities for a period of inactivation prior to their disposal. Layaway includes securing facilities to limit unauthorized entry, termination/reduction of utilities, preservation of selected equipment, and ensuring facility weather tightness.

f. Operational Closure Date. The point at which all host and tenant activities have been disestablished or relocated, hazardous materials and wastes have been removed, personal property disposition plan has been completed, utility layaway/turnover plan prepared, and layaway or lease of all facilities (including family housing) has been completed.

g. Personal. Any property except land, fixed-in-place buildings, ships, and federal records.

h. Transfer. A closing activity specific agreement delineating detailed requirements and responsibilities for the closing site within the bounds of the executive memorandum of understanding; executed by the Commanding Officer of the closing activity and the Commanding Officer of the servicing NAVFAC EFD/EFA.

3. Maintenance Levels. Six maintenance levels will be used to describe the level of layaway and caretaker maintenance to be provided for facilities that do not remain in continuous use. These maintenance levels are dependent upon the potential/planned reuse of the facilities. Facilities with high reuse potential will require a higher level of maintenance than those with low reuse potential. Maintenance level definitions are provided in Table 1.

a. Caretaker Maintenance Level Plan. The selection of an appropriate maintenance level for each closing facility will be made by the base Commanding Officer in consultation with the community redevelopment authority (if present). Caretaker maintenance level plans should be completed not later than 12 months prior to operational closure. Initial draft plans generally will be developed much further in advance then revised as the community's redevelopment plan is refined. Plans should be incorporated into the Transfer Agreement (para 2.h above). Ongoing facility maintenance prior to layaway should be consistent with the maintenance level selected for each facility. Attachment I contains a sample caretaker maintenance level plan format which will satisfy the minimum requirements.

b. Historic Properties and Archeological Sites. The layaway and caretaker maintenance guidance provided in this appendix does not directly apply to historic structures, although it may

be used as a basis for the development of plans to deal with historic properties to the extent that it does not conflict with the National Historic Preservation Act (NHPA), the NAVFAC NO-913,

TABLE 1

MAINTENANCE LEVEL DEFINITIONS	
Level I	<p>IMMEDIATE REUSE. Reuse will commence at or before operational closure. Facilities, systems, and equipment shall be maintained at fully operational levels. Most services including installed utilities, mechanical systems, grounds maintenance, snow removal, and interior and exterior structural finishes and systems will be continued until actual turnover.</p>
Level II	<p>REUSE WITHIN SIX MONTHS OF OPERATIONAL CLOSURE. Heat and air conditioning remain operational with temperatures maintained at not less than 50 degrees F during the heating season and not more than 85 degrees F during the cooling season. Maintenance and repair is required to maintain the structural integrity, weather tightness, and utilities of the facility to limit deterioration. Fire protection and detection systems are maintained. Water is periodically turned on to faucets, toilets, urinal, etc., to keep drain traps "wet". Unnecessary electrical circuits are de-energized. Limited grounds maintenance is continued. Scheduled interior inspections are conducted to detect problems.</p>
Level III	<p>REUSE WITHIN SIX MONTHS TO TWO YEARS. Same as Level II except no heat is provided in southern tier locations and no air conditioning is provided in northern tier locations unless required for humidity control.</p>
Level IV	<p>REUSE NOT IDENTIFIED. Same as Level II except no heat or air conditioning will be provided. Supplemental ventilation may be required to control humidity. Water lines are drained and sewer traps are capped or routinely treated with nontoxic antifreeze. Fire protection systems may be disconnected. All utilities are turned off. Scheduled interior inspections include checks for damage from mold and mildew.</p>
Level V	<p>LEASED. All utilities will be provided to the facility on a fee basis up to operational closure. After operational closure Navy's capability to provide utility services will end. Services must be provided by the Redevelopment Authority or by local utility suppliers as arranged for by the Redevelopment Authority. No other maintenance, repair, or services will be provided to the facilities designated at this level.</p>
Level VI	<p>NO REUSE LIKELY. Facilities, systems, and equipment are abandoned in place and permanently closed. Windows and entrances are secured (or boarded if necessary). Unauthorized personnel and visitors are prevented from entering the facilities and grounds immediately adjacent. Only conditions adversely affecting public health, the environment, and safety will be corrected. All utilities are disconnected and properly terminated.</p>

Historic Structures Preservation Manual, and other applicable regulations.

(1) Prior to closure, realignment, or transfer, all activities must comply with NHPA and its implementing regulations. NHPA requires identification, evaluation, documentation, and protection of historic, archaeological, and other cultural resources, and interagency consultation in carrying out these responsibilities. NHPA Section 106 requires that each closure or realignment be examined, in consultation with the State Historic Preservation Officer (SHPO), for any effect (adverse or beneficial, direct or indirect) which it may have on historic, archeological, or other cultural resources and records, documents, drawings, and photographs associated with them. Section 106 compliance must be completed before the BRAC action may begin. Detailed procedures may be found in CFR 800.

(2) Activities must therefore review the effects of closure and disposal on their historic properties with the EFD/EFA Historic Preservation Officer, SHPO, and the Advisory Council on Historic Preservation. Decisions regarding layaway and maintenance will normally be documented in a Memorandum of Agreement between the parties. Expect the cost of layaway and caretaker maintenance to be higher than that of non-historic properties.

c. Facility Records. Basic information maps, as-built drawings, utility maps, project documentation, warranties, real property records, master preparing documents, and other facility related records should be retained by the activity in appropriate files. Like historic properties, facility records should be evaluated to determine if any are of historical significance and need to be archived. Custody of facility records and automated facility management systems should be transferred to the NAVFAC caretaker site office when one is established. Adequate provisions must also be made to make appropriate documents available to government agencies, community reuse organizations, and potential buyers.

4. References. MIL-HDBK-1130, Inactivation, Caretaker Maintenance Reactivation, and Closure of Shore Facilities, and Army PWB 420-10-8, Facilities Operation, Maintenance & Repair Guidance for Base Realignment and Closing Installation were used extensively in the development of this appendix. A complete list of references is provided as Attachment II.

5. Points of Contact .

a. Since this appendix cannot specifically address all BRAC situations, activities are encouraged to contact their geographic NAVFAC EFD/EFA for additional information and assistance. [List is found in Appendix F.](#)

b. Questions, comments, and suggested changes to this appendix should be directed to Chief of Naval Operations, Shore Activities Division (N44), Room 4B469, 2000 Navy Pentagon, Washington, DC 20350-2000.

Chapter 2: FACILITY LAYAWAY STANDARDS

1. General. This chapter provides layaway guidance and standards for each of the facility maintenance levels defined in Table 1 of Chapter 1. Layaway requirements will generally be dictated by the maintenance level into which a facility is placed, but there is no substitute for the use of experience and common sense when applying these standards to specific activity facilities and situations. The maintenance level definitions take into account the reuse potential of facilities and the projected length of the layaway period. Other factors which must also be considered include the local climate, current facility age and condition, type of construction, funding levels, environmental cleanup which may occur after layaway, and labor availability. The goal is to limit maintenance of real property (MRP) expenditures to the minimum necessary to limit facility deterioration and preserve the potential for long-term facility reuse.

2. Facility Inspections. A modified control inspection of each facility (including family housing) to be laid away may be required to identify critical deficiencies that must be corrected during the layaway process, and to gather other information that will be required to develop facility layaway plans.

a. Inspection Procedures. The scope of each inspection will depend on the maintenance level into which the facility is placed, its planned reuse, and the length of time since the last control inspection. Generally, the higher the maintenance level the more detailed the inspection will be. Information from the most recent annual inspection summary (AIS) may be useful in reducing the number of required inspections.

b. Critical Deficiencies. Critical deficiencies include those which, if left alone, would lead to worse, accelerated, or additional facility degradation and deterioration. Examples of critical deficiencies include roof leaks or other defects in the shell of buildings, inoperative heating systems in level II/III buildings, and termite or other structural pest infestations. Inspections must be thorough enough to identify all critical deficiencies. Generally, non-critical deficiencies need not be identified or corrected since facilities will be provided to the next user in "as is" condition.

c. Layaway Plans. Facility layaway plans will need to be developed for each facility or group of similar facilities based on completed facility inspections. These plans will identify critical deficiencies to be corrected and other specific layaway requirements based on the maintenance level into which the facility is placed. Plans for facilities in the same maintenance level may vary substantially from facility to facility depending on current facility condition, type of construction, the number and type of mechanical systems to be laid away or left in operation, and a number of other factors including reuse.

d. Correction of Deficiencies. Critical deficiencies normally will be corrected or ordered prior to operational closure and turnover to NAVFAC.

3. Layaway Standards. Layaway standards for buildings are included in Section I. Section II contains standards for the layaway of utility plants and distribution systems. Section III includes standards for miscellaneous facilities.

SECTION I. BUILDING LAYAWAY PROCEDURES

Table 2 provides a brief summary of layaway procedures for buildings that will be placed in maintenance levels II, III, IV, and VI. Additional amplifying/detailed information is provided in the referenced paragraph for each building component. No standards have been provided for maintenance level I buildings since they will remain in a fully operational status, or for maintenance level V facilities, which do not require layaway.

1. Personal Property.

a. Removal. Personal property that is mission related or to be used by other Navy Commands, or property that has been identified as not being needed for community reuse, is to be removed from buildings as part of the layaway process.

b. Storage. Where community reuse plans have not been determined or fully developed, personal property identified as related personal property or with potential for economic redevelopment under community redevelopment plans will be transferred to NAVFAC for continued storage until such time that a redevelopment plan has been approved. Personal property remaining will be inventoried and secured as part of the layaway process. Manufacturer's literature and any other available written instructions or procedures on personal property which would be of benefit to the new owner should be taped to or otherwise secured with the property.

2. House Cleaning. Ensure that hazardous materials have been removed from buildings in all maintenance levels. Scrap lumber, trash, and other debris should be removed from inside, around, and under buildings in all maintenance levels, and properly disposed of. Remove items from bulletin boards. Dumpsters should be removed to a central storage location or disposed of. Broom sweep floors, vacuum carpets, and clean bathrooms in maintenance level II, III, and IV buildings.

3. Building Shell. Obtaining and maintaining a weather tight shell is the most important consideration in building layaway and caretaker maintenance. Building shell deficiencies, such as roof leaks and holes in siding, must be identified and repaired as part of the layaway process in all maintenance level II, III, and IV buildings. In level VI buildings, correct deficiencies only to the extent required to prevent safety or environmental hazards (e.g., rain water could damage friable asbestos pipe insulation, making environmental cleanup and facility disposal more difficult and expensive). Repair actions should minimize the expenditure of funds while providing a fix that will last until the projected disposal of the facility, i.e., 6 months after operational closure for level II facilities, 2 years for level III facilities, and 5 years for level IV facilities.

TABLE 2

BUILDING LAYAWAY PROCEDURES

Components	Level II 1 - 80 Days	Level III 6 - 24 Days	Level IV 2 -5 Years	Level VI Until Demolition
Personal Property (Ref paragraph 1)	Inventory & secure in building, or remove	Same as Level II	Same as Level II	Remove
House Cleaning (Ref paragraph 2)	Remove debris & associated dumpster. Broom sweep floors, vacuum carpets, clean bathrooms & fixtures.	Same as Level II	Same as Level II	Remove debris & associated dumpsters
Building Shell (Ref paragraph 3)	Identify & repair roofing, exterior siding, & other structural components to ensure building shell is watertight. Clean, inspect, & repair gutters & down spouts.	Same as Level II	Same as Level II	Same as Level II <u>if</u> required to prevent safety or environmental hazards
Exterior Windows, Doors, and Other Openings (Ref paragraph 4)	Identify & repair to ensure building shell is watertight, pest tight, & secure. Lock shut. Install chimney caps; install screening over vents, grills louvers, etc.	Same as Level II	Same as Level II; consider boarding windows & glass in doors. Remove & store screens if economical	Nail doors & windows shut, no repairs unless required for security <u>or</u> to prevent safety/environmental hazards
Locks & Keys (Ref paragraph 5)	Change exterior locks & lock doors. Maintain key control & inventory. Post emergency notification signs on exterior of building	Same as Level II	Same as Level II	Change exterior lock on one entrance. Nail all other doors shut.

Components	Level II 1 - 80 Days	Level III 6 - 24 Days	Level IV 2 -5 Years	Level VI Until Demolition
Heat (Ref paragraph 6.a)	Maintain systems operational. Sufficient (50 degrees F minimum) to prevent interior damage form freezing.	Maintain operational only if needed to prevent freezing (same temperature as level II) otherwise turn off & layaway	Turn off & Layaway systems	Minimal layaway to prevent safety & environmental hazards
Air Conditioning (Ref paragraph 6.b)	Maintain system operational. Sufficient (85 degrees F maximum) to prevent humidity	Maintain operational only if needed to prevent humidity damage (same temperature as level II), otherwise turn & layaway	Turn off & layaway system	Minimal layaway to prevent safety & environmental hazards
Supplemental Ventilation (Ref paragraph 7)	Not Applicable	Install passive ventilation if required to reduce high humidity & condensation	Same as Level III	Not Applicable
Water/Plumbing (Ref paragraph 8)	Inspect & repair leaks. Turn off if not required for fire protection, HVAC or other system	Same as Level II	Turn off & drain all lines. Block or cover traps, or fill with non-toxic antifreeze	Disconnect & cap
Hot Water Heaters (Ref paragraph 8)	Turn off electrical power & water	Turn off electrical power & drain. Post note that system has been drained.	Same as Level III	Disconnect & salvage if economical
Electricity (Ref paragraph 9)	Turn off & tape all breakers except those required for interior lighting & other essential service (e.g., HVAC, fire detection, sump pumps, etc.). Turn off main disconnect if no essential services required. Update service box wiring chart	Same as Level II	Same as Level II except not required for HVAC	Disconnect service outside building

Components	Level II 1 - 80 Days	Level III 6 - 24 Days	Level IV 2 -5 Years	Level VI Until Demolition
Fire Protection	Fire alarm, sprinkler,	Same as level II	Drain sprinkler	Drain & disconnect

System (Ref paragraph 10)	& special extinguishing systems will remain operational. Fire extinguishers will remain in place	except take special extinguishing systems out of service	system & secure fire alarm systems. Remove fire extinguishers	all systems
Gas (Ref paragraph 11)	Turn off, except as required for heat.	Same as Level II	Turn off & vent system. Preserve fittings	Disconnect & cap in coordination with utility company
Elevators (Ref paragraph 12)	Maintain operational status & certification	Same as Level II	Take out of service	Same as Level IV
Pest control services (Ref paragraph 13)	Inspect to identify potential problems & initiate appropriate control procedures	Same as Level II	Same as Level II	Not required
Grounds (Ref paragraph 14)	Remove trash under & around building. Remove dead/diseased plants & prune or remove those that could damage facility	Same as Level II	Same as Level II. Remove mowing obstacles	Remove trash under & around building. Remove mowing obstacles
Layaway Checklist	Post layaway checklist with utility service status/cut offs at building entrance	Same as Level II	Same as Level II/III	Not applicable

a. Roofing, Flashing, and Sheet Metal Work. Roofs must be made watertight. In situations where roofs are beyond economical repair and must be replaced, roof replacement costs should be minimized. Overlay of the existing roofing system to eliminate demolition costs should be considered provided no structural concerns exist. Expedient repair procedures to extend roof life and avoid replacement, such as using elastomeric roof coatings to repair leaks, is recommended. Generally, repairs should be accomplished, in accordance with accepted industry standards set forth by the National Roofing Contractors Association, the Roofing Industry Educational Institute, and the Single Ply Roofing Institute. Contact the geographic EFD/EFA for further expert roofing guidance.

(1) Generally, roofing systems should be repaired in like kind. For example, the use of bituminous roofing materials to repair single ply roofs such as polyvinyl chloride (PVC) is not recommended and can be worse than no repair at all. If the membrane type is unknown or is not available, an elastomeric roof compound and reinforcing mesh can be used.

(2) Cap and counter flashing should be firmly attached and watertight. Should replacement be necessary due to deterioration and/or damage, materials should match in kind to prevent galvanic corrosion. Elastomeric roof coatings and reinforcing mesh may be practical for waterproofing joints, holes, and splits. Deteriorated caulking should be cleaned, backed, and caulked with new caulking.

(3) Roof drainage systems such as gutters, down spouts, scuppers, and roof drains must be working properly with all or most water removed from the roof within 48 hours after rainfall. Drainage systems should include strainers to prevent clogging from debris during the layaway period. Drainage systems which do not work or become clogged could cause structural failure due to excessive loads from ponded water. Ensure that run-off from drainage systems is directed away from foundation walls.

b. Exterior Surfaces. Repair or replace siding and other exterior components as required to ensure building shell is weather tight. Repair caulking failures and shrinkage cracks around door frames, window frames, and other joints in wood and masonry structures. Cracks around windows and doors can be beneficial in providing ventilation to the interior of level IV buildings, and so should be caulked only if needed to keep out moisture and insects. Open cracks in masonry walls which could allow moisture to penetrate should be sealed with backer rod and caulk. Tighten or replace fasteners, screws, bolts, brackets, and nails securing exterior components.

c. Interiors. Apply waterproof mortar or other waterproofing material at points where damaging moisture wells up through holes and cracks in concrete floors, walls, wall and floor structures, etc. Seal seeping expansion joints.

d. Painting. Exterior painting of doors, windows, siding, and other surfaces should be limited to the extent necessary to prevent deterioration. Painting may also be required to prevent the flaking and peeling of exterior lead containing paint. (NOTE: The issue of lead containing paint is currently being addressed by DoD and further guidance is pending.)

4. Exterior Windows , Doors and other Openings. Deficiencies in windows, doors, and other openings must be identified and repaired as part of the layaway process in all maintenance level II, III, IV facilities.

a. Screens. Leave screens in place in level II and III buildings. Remove, mark, and store screens on level IV buildings if the value of the screens exceeds the cost of removal. If stored, screens should be leaned against a wall inside the building. Store next to the window from which removed if screens are custom fitted; otherwise, store together in a remote location to reduce traffic obstructions during building inspections.

b. Windows. Windows are critical in maintaining a weather tight building shell. Broken windows in level II and III buildings should be repaired or replaced. Broken windows in level IV buildings may be repaired, replaced, or boarded shut using the procedures specified below. Broken windows in level VI buildings should be repaired or boarded up only if required to maintain adequate security, or to prevent safety or environmental hazards (e.g., rain water could damage friable asbestos

pipe insulation, making environmental cleanup and facility disposal more difficult and expensive). Limited boarding of non-damaged windows in level IV and VI buildings should also be considered if needed to provide adequate security and reduce vandalism.

(1) Boarding Considerations. Consider the following:

(a) PROS:

- Makes building entry more difficult
- Makes it easier to determine if entry has been made since most intruders will not take the time to replace window covering
- Reduces vandalism/rock throwing damage
- Reduces interior facility temperature due to decreased exposure from the sun

(b) CONS:

- Installation is labor intensive and expensive
- Damages window frames/exterior walls, particularly walls of dryvit, stucco, and metal
- May contribute to a gloomy, rundown appearance which is not desirable when showing facilities to potential reusers
- Makes it more difficult to detect entry if intruder is careful to replace window coverings
- Lack of sunlight and reduction of natural air leakage around windows encourages the growth of mold and mildew

(2) Boarding Recommendations. In areas where adequate security is provided, window boarding is of limited value. Accordingly, limit boarding in level IV buildings to:

- Windows which are within rock throwing range of fence lines
- Facilities which contain high value or easily pilferable personal property
- Facilities which are located in or close to urban areas, such as off base housing units
- Facilities which will be closed for long periods of time prior to operational closure of the entire activity
- Other facilities with unique security requirements

(3) Boarding Procedures. Plywood or other sheathing which is not properly installed tends to warp and pull away from the window. Improper installation can also cause significant unnecessary damage to window frames and exterior siding. There are a number of boarding methods available, including those discussed below. In each case plywood should be painted to protect from delamination. Matching existing building trim color will improve appearance. Caulk the seam between the plywood sheet and the wall only if necessary to obtain a watertight seal, such as when window glass is broken.

(a) On double hung windows, bring the upper and lower sash to the mid-point of the opening and secure plywood using long carriage bolts anchored into horizontal wooden bracing or strong backs on the inside face of the window.

(b) Painted (1/2 inch to 3/4 inch) exterior plywood or 1/2 inch OSD sheathing may be nailed or screwed directly to wood frame windows.

(c) Recessed windows in masonry structures may have a 2 inch by 2 inch or 2 inch by 4 inch frame attached to masonry, with plywood nailed or screwed to the frame; or plywood may be held into place with wooden wedges which are driven into notches cut near the four corners of the plywood sheet.

(d) Plywood may also be pressure fitted into recessed windows with simple jacking assemblies made of bolts, other common hardware, and wooden blocks attached to the inside plywood surface. Contact the geographic EFD/EFA for additional details on this and other boarding methods which may be used.

c. Doors. In level II, III, and IV buildings large spaces between the bottom of doors and the threshold should be covered with a rubber strip to prevent rain or snow from entering the building. Roll-up, swing-out, sliding, and other non-standard doors should be locked or blocked on the inside and made as windproof and weather-tight as possible.

(1) Main Entry Doors. One exterior door to each level II, III, IV, and VI building should be designated as the point of entry/exit. This door should be in the most accessible location, and should be located away from the prevailing weather, whenever possible. To identify the point of entry, an 8 by 10 inch bright yellow board with the words "AUTHORIZED PERSONNEL ONLY" stenciled (in black) thereon should be securely mounted to the center of the entry door.

(2) Non-Entry Doors. Secure exterior non-entry doors in level II and III buildings as specified in paragraph 5, "Locks and Keys." Secure non-entry doors in level IV buildings by either changing the locks (see paragraph 5) or by installing heavy duty dead bolts on the inside of doors. In level VI buildings nail or tack weld non-entry doors shut.

d. Other Miscellaneous Openings. Ensure that all miscellaneous openings in level II, III, and IV buildings, such as chimneys, vents, grills, skylights, hatches, and louvers are screened, capped, or otherwise closed to prevent the entry of water, birds, rodents, and other pests. Damage resulting from the presence of pests can be extensive.

5. Locks and Keys.

a. Exterior. Key control in level II and III buildings should be obtained by changing existing locks on all exterior doors, or by installing hasps and padlocks on doors not already equipped with standard locking devices, except where there are a large number of external doors (e.g., Bachelor Enlisted Quarters) and adequate control exists. Key control in level IV buildings should be obtained by changing existing locks on the main entry door at a minimum, and all other non-entry doors that are not otherwise blocked or dead bolted (see paragraph 4.c, "Doors"). Padlocks should be master-keyed and should be of the noncorrosive type. If locks are replaced, place old exterior lock cores and available keys in a bag and leave inside the facility for the new owner. Where feasible, maintain all keys and establish key control at a single location.

b. Interior. If there is an established system for control and identification of interior locks and keys, use this system to mark and store keys. Otherwise, leave keys to interior locks in the appropriate lock, or bag and hang on door knob.

6. Heating, Ventilating, and Air Conditioning (HVAC) Systems.

a. Heating Systems. When determining whether or not heating systems should remain operational, consider the use of thermostatically controlled heat wire or tape (heat tracing) as an alternate method of preventing pipes from freezing.

(1) Levels II and III (With Heat). Deficiencies in heating systems in level II buildings will be identified and corrected as necessary to maintain systems in fully operational condition. If heat is to be provided, systems in level III buildings will be repaired and maintained to the same standards. Minimal heating will be provided as required to reduce high humidity levels and prevent pipes from freezing. Temperatures should be maintained at not less than 50 degrees. Existing thermostats and controls may require adjustment or replacement to maintain temperatures at this level, if economical to do so.

(2) Level III (No Heat) and Level IV. Provide normal seasonal shutdown maintenance for direct fired forced air, electric heating coil, and similar systems. Layaway boilers and related equipment in accordance with the procedures specified in Section II of this chapter.

(3) Level VI. Provide minimal layaway as required to alleviate safety hazards and environmental problems.

b. Air Conditioning Systems.

(1) Levels II and III (With AC). Deficiencies in air conditioning systems in level II buildings will be identified and corrected as necessary to maintain systems in fully operational condition. If air conditioning is to be provided, systems in level III buildings will be repaired and maintained to the same standards. Minimal cooling will be provided as required to reduce high humidity levels. Temperatures should be maintained at not more than 85 degrees.

(2) Level III (No AC) and Level IV.

(a) **Chill Water Systems.** Refrigerant should be pumped down and stored in receivers. Any excess refrigerant should be removed to appropriately marked containers and returned to the supply system for eventual recovery by the National Defense Stockpile. Receiver valves should be closed, tested for leakage, and repaired as necessary. Preserve refrigeration equipment in accordance with the manufacturer's recommendations and tag compressor as "OUT OF SERVICE." Drain water from the system (or add non-toxic antifreeze) and close valves.

(b) **Direct Expansion System.** Refrigerant should be pumped down and stored in receivers. Any excess refrigerant should be removed to appropriately marked containers and returned to the supply system for eventual recovery by the National Defense Stockpile. Preserve the refrigeration equipment in accordance with the manufacturer's recommendations and tag the unit as "OUT OF SERVICE." Disconnect evaporator drains which are connected to the sanitary sewer system and cap.

(c) **Air Cooled Condensers.** Lubricate any items that require lubrication during normal periodic maintenance.

(d) **Water Cooled Condensers (Cooling Towers).** Shut off water supply to condenser. Drain water from condenser and clean/neutralize and preserve in accordance with the cooling tower and chemical manufacturers' recommendations. Tag as "OUT OF SERVICE." Disconnect condenser drains which are connected to the sanitary sewer system and cap. Lubricate any items that require lubrication during normal periodic maintenance.

(e) **Humidifying Systems.** Humidifying systems should be shut down, flushed with water, cleaned, and drained.

(3) **Level VI.** Provide minimal layaway as required to alleviate safety hazards and environmental problems. At a minimum refrigerant should be removed from equipment, put into appropriately marked storage containers, and returned to the supply system for eventual recovery by the National Defense Stockpile.

7. **Supplemental Ventilation.** To date there are no known significant problems with mold, mildew, or other related deterioration in weather tight maintenance level III and IV buildings at activities in various parts of the country, even though none were equipped with supplemental ventilation. Notwithstanding, supplemental ventilation may be required in some buildings to prevent fungal growth and condensation. Both of these conditions will lead to accelerated deterioration of building interiors. Ventilation of confined spaces is not a new concept. Crawl-space areas of houses and other buildings have been ventilated for decades by vents provided for that purpose.

a. **General.** Once closed up, a building interior will still be affected by the temperature and humidity of the exterior. Without proper ventilation, moisture from condensation may form on interior surfaces. Studies have shown that good air movement within a laid away building and greater equilibrium between interior and exterior humidity levels and temperatures, will help

reduce or eliminate condensation problems. Decisions on whether or not to provide supplemental ventilation in any given building must be made on a case by case basis, depending on the geographic location, type of construction, size and configuration, and the inclination of a building to be either dry or damp. Assistance in determining supplemental ventilation requirements may be obtained from the geographical EFD/EFA.

b. Types of Ventilation. Depending on the building, either passive or mechanical ventilation may be used. Passive methods take advantage of natural air flow, while mechanical methods incorporate the use of existing air-handling equipment.

(1) Passive Ventilation. Passive ventilation requires the strategic installation of louvers in windows (which are left open) located on opposite sides throughout the building, and on each floor, to ensure air flow. There is no exact science for determining how much ventilation should be provided for a given building, but there are general guidelines available. All interior room and closet doors are wedged in a fully open position to allow air circulation throughout the building. Exit stairwell fire doors should remain closed. Since louvers must be manufactured to fit, be sure to field verify window sizes prior to ordering. Ensure louvers are well screened to prevent the entry of birds and other pests. In some buildings limited passive ventilation may be provided simply by propping open existing louvers and vents, if this will not allow rain to enter the building during severe weather.

(2) Mechanical Ventilation. Some buildings cannot be vented passively due to a lack of windows or poor interior configurations. Mechanical ventilation, which takes advantage of existing air handling equipment, should be considered in these situations.

(a) Air handler fan controls normally operate based on the time of day or interior building temperatures. For mechanical ventilation to be affective, controls must be replaced with components that sense and compare inside and outside relative humidity (RH). The control system should be set to ensure fans do not deliver outside air above 70 percent RH, and to ensure the air handler is providing fresh air to the building only if the inside RH is above 80 percent.

(b) To be effective it is very important to locate the indoor humidistat in a space that tends to have the highest humidity. Humidistats must also be calibrated at least semiannually to ensure the system is operating properly.

8. Plumbing Systems.

a. Levels II and III. Inspect all water supply and drain lines as required to find and repair all leaks. If not required to maintain fire protection, HVAC, or other systems, domestic water should be secured at the interior master valve or exterior curb valve. If water to building must be left on, turn off water at all hot water heaters/storage tanks (after power is secured) and other tanks and reservoirs not required to maintain operating systems. Drain hot water heaters/storage tanks and other tanks and reservoirs if there is any possibility of leakage and post notice that systems have been drained.

b. Level IV. Secure domestic water supply at the exterior curb valve or interior master valve.

(1) Freeze Protection. Where freezing conditions are possible, open all interior and exterior faucets and drain all hot and cold water service lines through valves, clean out plugs, and other areas located at low points in the system. Use compressed air to remove remaining water. If there is no curb valve and the main service line is to remain active, one should be installed, and the line pumped out between it and the master valve.

(2) Tanks. To eliminate the possibility of leaks, freezing, and to minimize corrosion, drain all hot water heaters/storage tanks and other tanks and reservoirs, and post notice that systems have been drained.

(3) Traps. A number of procedures may be used to block traps in fixtures and floor drains which are connected to the sanitary sewer system to prevent the entry of sewer gases. Blocking or covering traps is preferable to keeping them wet, when practical, as this eliminates the requirement to periodically replenish antifreeze as it evaporates.

(a) Block Traps. Accessible P-Traps may be disconnected and drained, a wadded piece of paper (e.g., newspaper) inserted just inside the drain opening, and just enough foam insulation sprayed into the opening to seal it. Toilets and urinals may be unmounted and placed aside, and their drain lines blocked using jimmy caps, pipe caps, and other devices. In some buildings it may be easier to temporarily block sewer lines at manholes or other accessible locations. Take care not to block drain lines that serve roof drains, floor drains, or other drains and connections that must remain open.

(b) Cover Traps. In areas not subject to freezing conditions an acceptable alternate procedure is to place a bead of caulking compound around toilet rims, floor drains, etc., and cover with a piece of 15 pound felt paper, heavy plastic, or other equivalent material cut to fit. This will prevent sewer gases from escaping.

(c) Keep Traps Wet. In areas which may subject to freezing traps may be kept "wet" by adding a non-toxic antifreeze to all fixtures, traps, and floor drains. Although this procedure will require period antifreeze replenishment after layaway, it may be the most practical solution for floor drains, bath tubs, showers, and other traps which are not easily accessible.

Check with the geographic EFD/EFA for sources of non-toxic antifreeze, and ensure that the anti-freeze selected meets federal, state, and local environmental requirements for introduction into the sanitary sewer system.

c. Level VI. Secure domestic water supply at the curb valve or disconnect and cap off main service line. Block traps in all fixtures and floor drains which are connected to the sanitary sewer system to prevent the entry of sewer gases. This may be accomplished by blocking traps with foam, jimmy caps, pipe caps, or other devices as discussed in level IV above; or by blocking sewer lines at manholes

or other accessible locations. Take care not to block drain lines that serve roof drains, floor drains, or other drains and connections that must remain open.

9. Electrical Systems.

a. Interior Electrical Systems. In level II, III, and IV buildings all non-essential circuits should be secured by opening circuit breakers/removing fuses and taping breakers securely in the open position. Taping breakers will avoid accidental energizing of circuits with secured equipment (e.g., drained hot water heater). Circuits for interior lighting should be left energized as required to permit periodic facility inspections. Update service box wiring charts as appropriate to indicate circuits to remain energized, circuits secured, etc. All electrical panels and enclosures should be sealed as much as practical to minimize moisture and pest intrusion. Electric lamps should be left in place. Switches for all electrical and mechanical equipment not remaining in operation should be left in the "OFF" position.

(1) Levels II and III. Care should be exercised not to de-energize circuits required for HVAC systems, fire and intrusion detection alarms, sump pumps, elevators, and other essential electrical services. These circuits should be well marked for easy identification by maintenance personnel. If there are no such essential services required, the main disconnect should be turned off prior to securing the building.

(2) Level IV. All circuits with the exception of interior lighting should be de-energized if at all possible. This will permit the main disconnect to be de-energized and used as a master switch for interior lighting during periodic inspections. If fire detection systems must remain active, they should be rewired if required so that they are connected prior to the main disconnect. Take care not to de-energize sump pumps and other essential electrical services.

(3) Level VI. Permanently disconnect electric service outside of building. Electric lamps may be removed if economical.

b. Motors, Generators, and Control Equipment. Motors, generators, and control equipment in level III and IV facilities should be laid away. Motors in dry locations and those totally enclosed should be protected in plastic. All motors and generator sets on permanent mounts should be protected/preserved in place. Motors and generators in damp locations should be cleaned, covered, and removed to dry storage. Motors, generators, control panels, switch boxes, circuit breakers, fuses, and control devices should be protected from dirt, dust, water, and mechanical damage by being covered with shrouds. Prior to shrouding, equipment should be cleaned, lubricated, and securely blocked and braced to prevent movement. Lubrication procedures that apply to the specific equipment should be followed in preparing for inactivation.

(1) Commutators. When accessible, lift the brushes and apply wax-free, Grade A, grease-proof paper around the commutator; then let the brushes rest against paper wrapping commutator. Rust-preventive compound should not be applied to the commutator.

(2) **Exposed Steel Shafts.** Exposed steel shafts of motors and generators should be cleaned with solvent and coated with corrosion-preventive compound. Care should be taken to keep corrosion-preventive compound out of bearings, commutators, brushes, brush holders, collector rings, windings, and similar parts.

(3) **Bearings and Journals.** Grease or oil-lubricated journals, bearings, or similar surfaces should be lubricated as recommended by the manufacturer. Journal boxes and bearings should be wrapped in plastic or waterproof paper for protection from dust and dirt.

c. **Batteries.** When possible, lead acid batteries in level II and III buildings should be stored in a charged condition using a float charge. If it is not possible to float charge the batteries, the electrolyte should be drained, and the battery should be placed in dry storage. Nickel-alkali batteries should be fully discharged and placed in storage without draining off the electrolyte. When stored, batteries should be placed in environmentally approved areas. Leads should be disconnected and taped and terminals should be protected with corrosion-preventive compound. Batteries in level IV and VI facilities should be removed and properly disposed of.

10. Fire Protection and Alarm Systems.

a. **General.** Generally water supply will be maintained to fire hydrants throughout the activity. In areas where water is secured, hydrants should be clearly and permanently marked "OUT OF SERVICE."

b. **Halon Extinguishing Systems.** Disconnect halon extinguishing systems in all maintenance level III, IV, and VI buildings regardless of the potential for reuse of the building. Halon extinguishing systems in level I, II, and V buildings should also be disconnected unless there is a clearly established reuse requirement for both the facility and the extinguishing system. Halon (including halon fire extinguishers) should be transferred to the Defense Logistics Agency, which is the agent for the Department of Defense for halon reclamation.

c. **Base-Wide Fire Reporting Systems.** Base-wide fire alarm reporting systems, such as telegraphic, telephonic, and radio systems, should be maintained in an operational status. For buildings where fire alarm systems are disconnected/de-energized, the base fire reporting system should be modified to remove these buildings from the data bank. This is especially true for radio alarm systems in order to prevent stacking countless trouble conditions on the base reporting system.

d. **Level II Buildings.** All fire protection systems (except halon systems) should be maintained in an operational status, including fire alarm systems, sprinkler systems, individual building fire pumps, fire extinguishers, and any special extinguishing systems such as carbon dioxide, dry chemical, and wet chemical systems.

e. Level III Buildings. All fire alarm and sprinkler systems should be maintained in an operational status. Fire extinguishers should be left in place. All special extinguishing systems, such as carbon dioxide, dry chemical, and wet chemical systems, should be taken out of service.

f. Level IV Buildings. Fire protection systems should be deactivated in level IV buildings that do not contain personal property, are not of high value, and do not pose a danger to adjacent buildings which require fire protection. Drain piping in sprinkler systems to prevent freezing, taking particular care to locate and open all auxiliary drains on trapped piping sections. Conversion of wet pipe to dry pipe systems should be avoided if possible due to high maintenance costs and the continued danger of freezing. Fire alarm systems should normally be disconnected to avoid high maintenance costs and false alarms. Remove all fire extinguishers. Fire pumps should be laid away in accordance with the procedures specified elsewhere in this chapter.

g. Level VI Buildings. Sprinkler systems should be deactivated and drained, and alarm systems disconnected in all level VI buildings that do not pose a danger to adjacent buildings which require fire protection.

11. Miscellaneous Building Systems.

a. Gas Lines. Gas lines should be shut off and locked on the outside of all maintenance level II, III, and IV buildings, except when needed in level II/III buildings to provide heat. If not already lockable, consider replacing existing cocks with lock and key type cocks. In level IV buildings lines should be disconnected and capped off at meter outlet, bled through equipment, and adequately ventilated. Lines should be permanently disconnected from level VI buildings and capped off in coordination with utility company.

b. Air Compressors. Unfired pressure vessels in all facilities should be drained of air and moisture. Preserve compressors larger than 100 CFM in level III and IV facilities in accordance with the manufacturer's instructions, including the driver (engine/motor).

c. Air Handler Units. Permanent filters should be removed and cleaned in all level II and III facilities.

d. Engines. In maintenance level II facilities, drain or disconnect fuel supply and run engines to remove fuel in lines, carburetors, fuel pumps, etc. Engines in level III and IV facilities should be laid away in accordance with the following procedures.

(1) Diesel Engines. Diesel engines should be run for at least 5 minutes at a speed of not more than 15 percent above the normal operating speed, under no load. Lubricating oil should then be drained, and a yellow tag should be attached either to the crankcase oil filler cap or in a conspicuous place on a radial engine. This tag should read:

"CAUTION: This engine was treated for storage on (date). When the engine is placed in service, refill lubricating oil sump with _____."

Fuel lines and injectors should be drained and filled with flushing oil. All openings in engines and accessories, including breathers, air intakes, exhausts, exhaust expansion joints, and openings in starters and generators, should be closed with plastic sheeting or waterproof paper and taped. After all unprotected exterior surfaces of engines are dry, all taped surfaces and all engine accessories, except electrical wiring and accessories, should be sprayed with a preservative compound.

e. Gasoline Engines. Gasoline engines should be run on unleaded, undyed gasoline for at least 10 minutes beyond the time required to run out any leaded gasoline in the lines and carburetor. Interior surfaces of engines should be treated with crankcase preservative oil as follows: remove spark plugs; while the engine is rotating, spray sufficient oil through spark plug holes for adequate protection to cylinder walls, valve heads and stems, and valve guides using an air-atomizing type of spray gun. For L-head type engines, the oil may be poured in spark plug holes instead of spraying. Replace all spark plugs, or seal the holes with suitable threaded metal plugs and gaskets. For valve-in head engines, valve covers should be removed, and the preservative oil sprayed over rocker mechanisms, interiors of valve covers, between cylinder blocks and side plates, over push rods, and into oil filler and crankcase ventilator pipes. The entire fuel system, including carburetor, fuel pump, strainer, and fuel lines, should be drained; and all parts should be dry. The lubricating oil system should be drained, and a yellow tag attached to the oil filler cap with the following information:

"CAUTION: This engine was treated for storage on (date). When the engine is placed in service, refill oil sump with _____."

Exterior surfaces should be cleaned; openings sealed; and surfaces sprayed with preservative compound.

f. Manufacturer's Literature. Manufacturer's literature and any other available written instructions or procedures on mechanical equipment and systems which would be of benefit to the new owner, should be taped to equipment or left in a conspicuous location in the building.

12. Elevators. Any elevator, dumbwaiter, or escalator remaining in operational status must continue to be maintained, inspected, and certified in accordance with ASME A17.1, Safety Code for Elevators and Escalators; ASME A17.2, Inspectors, Manual for Elevators and Escalators; and NAVFAC MO-118, Inspection of Vertical Transportation Equipment.

a. Level II and Level III. Maintain elevators in fully operational condition, including required inspections, testing, and certification.

b. Level IV. In most cases elevators in level IV buildings should be taken out of service.

(1) **Out of Service.** Elevators taken out of service shall have power feed lines disconnected from the main disconnect switch. Suspension ropes will be removed, cars and counterweights shall be lowered to the bottom of hoistway, and doors will be barricaded or sealed in the closed position on the hoistway side. Securely fasten signs to doors on each floor indicating that the unit is out of service. Layaway motors, generators, and other elevator components in accordance with the guidance provided in this chapter.

(2) **Remaining in Service.** It may be necessary to maintain one or more elevators operational in high-rise or other buildings to allow access to upper floors for maintenance personnel, showing of the building to potential reusers, asbestos cleanup crews, etc. Continue to maintain elevators in fully operational condition, including required inspections, testing, and certification.

13. **Pest Control Services.** Inspect each level II, III, and IV facility to identify existing and potential pest problems. Initiate treatment or prevention procedures for potentially damaging pests, such as rodents and birds. Ensure that all pest access points, such as chimneys, vents, grills, and louvers are screened, capped, or otherwise closed. Consider placement of rodent bait blocks where rodent activity is likely. An on-site assessment of needed pest control requirements and other assistance may be requested from the EFD/EFA Applied Biologist.

14. **Grounds.** Shrubs and trees adjacent to buildings should be pruned or removed as necessary to prevent damage to buildings and electrical service lines, and to minimize fire hazards. Around buildings in maintenance levels IV and VI, consider removal of stones along walks, isolated flower beds, unnecessary shrubs or trees, ornamental fences (except those of masonry, concrete, or steel secured to pavement, concrete posts or piers), and similar obstructions to tractor-operated moving equipment.

15. **Appliances.** If refrigerators are left in place, tape a block of wood to the inside edge of freezer and refrigerator doors to block open and allow ventilation.

SECTION II. UTILITY PLANTS AND DISTRIBUTION SYSTEMS LAYAWAY PROCEDURES

Unless otherwise specified, the following layaway standards are generally equivalent to maintenance level IV for buildings. Utility system layaway should be provided to the minimum extent necessary to prevent further system deterioration, and should consider current system condition and reuse potential. Generally, deficiencies in systems that will not continue in operation should not be corrected at time of layaway.

1. **General Utility System Requirements.** The following layaway standards apply in general to all utility systems, whether associated with buildings or utility plants and distribution systems.

a. Draining of Lines and Appurtenances. All water lines, coils, cylinder water jackets, condensers, pumps, water pans, flash tanks, etc., should be flushed with fresh water and drained.

b. Journals and Journal Boxes. Journals and journal boxes containing oil-lubricated bearings should be drained and refilled with engine preservative oil (MIL-L-21260, Lubricating Oil, Internal Combustion Engine Preservative and Break-In) and tagged to drain and refill with the proper lubricant before placing in operation. Grease lubricated bearings, journals, etc., should be lubricated with grease of the same type as that normally used in operating the equipment. Journal boxes and bearings should be wrapped with waterproof paper.

c. Air Ducts and Outside Openings. All supply or discharge air ducts and other outside openings should be blocked-closed securely.

d. Exterior Surfaces. Precision machined surfaces should be coated with preservative conforming to MIL-C-11796C, Corrosion Preventive Compound, Petrolatum, Hot Application, and wrapped or covered with grease proof barrier material conforming to MIL-B-121F, Barrier material, Grease proofed, Waterproofed, Flexible. Unpainted and exposed nonprecision metal surfaces should be coated with preservative conforming to MIL-C-16173E, Corrosion Prevention Compound, Solvent Cutback, Cold Application.

e. Pumps. Pumps should be flushed with fresh water and drained. Interior surfaces including such parts as impellers, rotors, pistons, air chambers, vanes, valves, cylinder walls, and oil-air steam or water passages should be coated with engine preservative oil (MIL-L-21260). Preservative should be applied by spraying or fogging while slowly actuating the pump. Shafts should be covered by corrosion preventive compound conforming to MIL-C 11796C. All openings should be sealed with waterproof. Petcocks should be left open. Where there is a possibility that pump pits may be flooded, the pump should be raised above floor level.

f. Fan Wheels and Shafts. Fan wheels and shafts should be removed and repainted when required. Casings and housings should be dismantled to the extent necessary to clean and repaint properly. The units should be reassembled after painting. Bearing surfaces and journals should be protected with adhesive tape, PPP-T-60E, Tape: Packaging, Waterproof, to prevent paint from entering bearing surfaces.

g. Gears.

(1) Exposed gears. The gears should be coated with preservative conforming to MIL-C-16173E.

(2) Enclosed gears. Gear housing will be drained and refilled completely with fresh oil (over the specified oil level). Briefly rotate the gears through the fresh oil to coat them for protection against pitting and rusting. Equipment will be marked with instructions to drain oil in gear housings down to specified oil level before placing equipment in operation.

(3) Tension adjusting mechanism. All springs, packing glands, and tension adjusting mechanisms will be relieved of pressure whenever practicable.

h. Signs. "OFF LIMITS" signs will be posted conspicuously and maintained on inactive utilities plants and systems. Signs shall be bilingual/multilingual as appropriate to the demographics of the closing-base community.

2. Water Supply and Wastewater Disposal Facilities. Water supply must be maintained to all maintenance level I, II, and III buildings, and to all level IV buildings with active fire protection systems.

a. Potable Water Systems. Potable water systems will be laid up/operated in accordance with paragraph 2.5.5 of MIL-HDBK-1130.

b. Wastewater Systems. Wastewater systems will be laid up/operated in accordance with paragraph 2.5.7 of MIL-HDBK 1130, and the following:

(1) Sludge beds. Sludge beds should be cleaned, and salt or sodium borate applied to prevent growth of vegetation.

(2) Pumps and lines carrying waste water or sludge should be drained and washed.

(3) Mechanical equipment. All equipment should be cleaned, oiled, or greased, and protected, when applicable as prescribed for water purification plant equipment.

3. Electrical Distribution Systems. Electrical service will most likely need to be maintained to provide power to buildings in maintenance levels I, II, and III; to operate utility systems (e.g. lift stations, boilers, etc.); to provide security lighting; and for many other possible reasons. Only the minimum essential amount of power should be supplied to these areas.

a. Substations. Substation transformer requirements should be reduced to a minimum consistent with load requirements. Where more than one three-phase transformer or transformer bank supplied the load, transformers or banks not required by the remaining facilities should be de-energized. Transformer banks consisting of three single-phase transformers connected delta-delta, should be connected open delta when the maximum kVA demand is 50 percent or less of the capacity of the three transformers. Consider the installation of smaller transformers where the maximum kVA demand is less than 20 percent of the reduced transformer capacity remaining in service. Gaskets and bushings on all inactive equipment with reuse potential should be inspected and replaced if necessary, and all bolts tightened to minimize or prevent the entrance of moisture.

b. Distribution Systems. All system components that serve inactive areas should be de-energized by sectionalization. Distribution transformers not required should be de-energized and gaskets, bushings, and bolts inspected/replaced similar to that for substation transformers. Deficiencies

in distribution system poles, lines, manholes, etc. which constitute a safety or property hazard should be corrected. Inspect all service entrance wires and cables to ensure that adequate drip loops are present to prevent water from being carried into buildings.

c. Street and Protective Lighting. Street and protective lighting should be reduced to the minimum level required to meet security and safety requirements. On series lighting systems that can be completely de-energized, disconnect both the primary and secondary leads from constant current transformers. Time clocks and photoelectric type control switches on inactive systems should be removed from outdoor locations and placed in dry storage.

4. Heating Systems and Boiler Plants. Heating systems and boiler plants should be placed in one of the four layaway classifications specified in Table 3 on the following page. Decisions on whether to place a given system (whose continued operation is no longer required) in long term layaway or to abandon with minimal layaway, must be based on a thorough analysis of the known reuse potential, the age and condition of the system, and the cost of layaway. Contact the geographic EFD/EFA for more specific guidance and assistance.

a. Boiler Plants. Boiler plants will deteriorate rapidly if not properly preserved, and could adversely affect the reuse potential of a large number of facilities. Improper layaway could also result in a fire, explosion, or negative environmental consequences. Boiler plants that will be placed in layaway class C, as defined in Table 3, should be laid away in accordance with the following procedures. Ensure that all equipment taken out of service is appropriately tagged, including a brief summary of major services performed.

(1) Boilers. When the boiler is taken out of service, let the boiler cool until the water is below the atmospheric boiling point. While maintaining boiler temperature between 180 degrees F and 200 degrees F, drain off the boiler water from the bottom drain. After the drain, flush out the boiler until the flush water runs clear. When the boiler cools sufficiently, remove the washout plugs (cast iron boilers) or all the handhole and manhole covers (steel boilers) and wash through these openings with high pressure water. This will normally remove any sludge or loose scale. If there is evidence that hard scale has formed on the internal surfaces, the boiler should be cleaned by chemical means as prescribed by a qualified water treatment specialist.

(a) Drying. The boiler must be completely dried since any moisture left on the metal surfaces will cause corrosion to occur on long standing. Boiler tubes and other components which will not drain by gravity shall be blown out with compressed air. Moisture not removed by this process should be removed by circulating hot air or by a light fire in the furnace. All piping connections to the boiler shall be tightly blanked or capped.

(b) Cleaning. When the boiler is cool and dry, clean the tubes and other fire side heating surfaces thoroughly of soot, carbon, and dirt accumulations using a wire brush and vacuum cleaner (use a flue brush to clean the tubes). Scrape the surfaces down to clean metal. Clean the smokeboxes and other areas where soot or scale may accumulate. Soot is not corrosive when it is

perfectly dry, but can be very corrosive when it is damp. For this reason, it is necessary to remove all the soot from a boiler at the beginning Of the nonoperating period.

TABLE 3

LAYAWAY DEFINITIONS FOR BOILERS

Class A	Operational. Systems will remain in full operational status. Continue standard operation and maintenance procedures
Class B	Short Term Layaway With Known Or Very High Ruse Potential. System will be laid away for not more than 12 months at the end of the normal heating season or during other temporary periods or non-use. If the non-use period is 6 months or less, layaway using either the dry or wet storage procedures specified in Appendix C of NAVFAC MO-324, <u>Inspection & Certification of Boilers & Unfired Pressure Vessels</u> . If the period of non-use is more than 6 months but less than 12 months, layaway using the cry storage procedures specified in the NAVFAC MO-324.
Class C	Long Term Layaway With Reuse Potential. System has good reuse potential because of its location, age, and condition but not within the next 12 months. Layaway using the dry storage procedures specified below.
Class D	No Or Low Reuse Potential. System has low reuse potential due to its location, age or condition. Provide minimal layaway as required to alleviate hazards and environmental problems.

(c) Corrosion Prevention. Swab the fire side heating surfaces with neutral mineral oil to protect against corrosion. Place a tray of quicklime at a rate of 2 pounds or silica gel at a rate of 5 pounds for 30 cubic feet of boiler volume in pans in all drums and in the shells of horizontal return tube or fire box type boilers equipped with manholes. Serious damage can be done to the boiler if desiccants are not removed before the boiler is filled with water and fired when returning the unit to service, therefore desiccants are not recommended for boilers that cannot be entered through manholes. Large signs shall be placed in conspicuous places around the boiler to indicate the presence of moisture-absorbing materials. These signs should read similar to the following:

IMPORTANT - Moisture absorption material has been placed in the waterside and furnace areas of this boiler. This material must be removed before any water is placed in the unit and before boiler is fired.

(d) Drums and Tubes. The interior surfaces of the drum should be cleaned and treated to inhibit corrosion. Follow the manufacturer's instructions carefully when reassembling.

(e) Superheaters. Individual elements of balljoint type superheaters should be disconnected and washed out with hot water. Water should then be blown out with compressed air. After the elements have dried, they should be plugged.

(f) Economizers. Economizers should be washed and dried by portable heating equipment.

(g) Air Heaters. Deposits on the gas side of air heaters should be removed carefully. Tubular and regenerative types should be cleaned thoroughly by lancing or by washing with an alkaline solution followed by clean water. Tubular heaters may require turbinizing or wire brushing.

(h) Fans, Ducts, and Dampers. All deposits should be removed. Dampers should be closed to prevent air circulation. When necessary, wood barricades should be built into the ducts.

(i) Soot Blowers. All soot should be removed from blowers and de-energized.

(j) Soot and Ash Hoppers. Soot and ash hoppers should be cleaned thoroughly and closed tightly.

(2) Feed-Water Heaters, Deaerators, Vent Condensers, Water Heating Equipment, Tanks, and Receivers. Feed-water heaters, deaerators, vent condensers, water-heating equipment, tanks, and receivers should be drained completely; take care to remove all water from trays, tubes, and coils. Silt, scale, and lime should be removed; wire brushing may be necessary to eliminate all corrosion blisters in tanks and receivers. Blowdown tanks should be drained. Clean flues of all deposits of soot and carbon; remove and store baffles. Heaters should be left open. All steam and water lines should be drained, and openings capped or blanked off. Tightly cap vent pipes. Overflow and oil traps should be thoroughly cleaned and reassembled. Manholes, handholes, and clean out doors should be left uncovered. Gauge glasses and thermometers should be protected against breakage.

(3) Automatic Control Equipment and Meters. Automatic control equipment and meters left in place should be covered with plastic or waterproof paper. Where instruments are removed from mountings, all openings in connections on heating systems should be plugged, and the openings in the instruments should be sealed with waterproof tape. Pipe connections from controls to heating equipment should be disconnected and drained thoroughly. Covers on all controls and instruments should be fastened securely in place to exclude dust and moisture. All containers for water, ink, or acid on carbon-dioxide meters and instruments containing mercury should be drained completely and all openings should be tightly closed to exclude dust. Mercury should be disposed properly to ensure compliance with environmental requirements and OPNAVINST 5090.1(Series), Environmental and Natural Resources Program Manual.

(4) Combustion Equipment. Combustion equipment discussed in the following paragraphs, consists of stokers, oil burners, and gas burners.

(a) Stokers. Stokers should be run until all coal has been removed from the worm and hopper. Oiled sawdust should then be run through the worm until all surfaces are covered with an oil film. Remove all coal, clinkers, and ashes from the tuyere grates, ashpit, and dead plates. Housings on gearboxes should be securely fastened in place; oil in gearboxes should be retained. Hoppers and heater pipes should be tightly closed either with wood or metal covers. Stokers with hydraulic power to ram-type feeds should be left with oil in the pumps and piping for hydraulic power; all openings on reservoirs should be tightly closed. Pneumatic spreader-type stokers should have all blowers tightly closed. Securely fasten cover plates on air intakes in place.

(b) Oil Burners. The firing ends of burners should be covered with heavy dustproof and weatherproof paper tightly fastened in place. If a burner can be swung out from firing ports, the entire burner should be covered. All oil should be drained from pumps, valves, lines, and reservoirs into the oil tanks. All openings on oil tanks should be tightly closed, the vent should be turned down, and a wire screen fastened securely over vent openings.

(c) Gas Burners. Gas should be shut off outside the buildings and lines bled slowly through the gas burners. Areas in which the gas distribution is to be discontinued should be cut off from the remainder of the system by the closing of valves. All burners should be thoroughly cleaned. Primary air openings should be closed to exclude dust. Louvers should be fastened in a closed position. When equipment is disconnected from the distribution system, pipe openings should be capped or blanked off. Weights should be removed from regulator arms.

(5) Water Softeners (Zeolite). For steel type softeners, the softener will be generated in the usual manner, then drained by the lowest drain connection or drain plug. The top manhole, handhole, or plug should be removed. Water lines should be drained and openings capped or blocked off. Softener tanks, valves, and piping should be cleaned and painted. The inside of the tank should be scraped and cleaned above the zeolite bed and painted with a bitumastic base paint. Manhole covers should be left open, or plugs taken out and fastened securely to the tank or piping. The brine or salt tanks should be emptied, scraped, washed clean, and painted with a bitumastic base paint both inside and out. Salt should be removed and disposed of. For wood gravity-type softeners, the softener will be regenerated and filled with water to prevent drying. Pipelines will be disconnected, cleaned, and painted. Multiport valves of either manual or automatic type will be greased internally. Hydraulic valve lines will be drained and cleaned.

(6) Miscellaneous Equipment. In general, all exposed machined surfaces not otherwise protected should be treated with rust-preventive compound or paint.

(a) Unit Heaters. Steam and water unit heaters should have supply and return lines disconnected; heaters should be thoroughly drained. On gas or oil-fired heaters, secure fuel lines outside the building line.

(b) Pressure-Reducing Valves. Open and drain equalizing pipes between diaphragm chambers and low sides of systems, and thoroughly clean the interiors of valves. Remove plugs from drain holes and leave drains open. Loosen valves without drains loosened to permit drainage of moisture. Open vents and leave open on the low-pressure side of valves.

(c) Strainers. Strainers should be drained and thoroughly cleaned; drain plugs should be left open to permit drainage of moisture.

(d) Radiators and Convectors. Completely drain radiators and convectors, and tightly cap or cover all openings.

(e) Steel Smoke Pipes and Stacks. Steel smoke pipes and stacks should be cleaned internally with a wire brush and coated with discarded engine crankcase oil or mineral oil of similar quality. If possible, stacks not dismantled should have tops tightly closed off with metal caps or boards. When the tops of stacks cannot be closed off, stacks should be blanked off at boilers to prevent moisture from entering smoke boxes and tubes.

(7) Controls, Instruments, and Miscellaneous Parts. Controls and instruments that are to remain in place, such as gauges, thermometers, thermostats, and other miscellaneous parts should be properly secured. Vents should be plugged or covered to exclude dust, according to the manufacturer's recommendations.

b. Steam Supply and Return System.

(1) Piping. Steam and return lines should be completely drained of all condensate by removing all vent and drain plugs, and if necessary, drilling and tapping drain holes at the low points. Systems should be dried by operating a vacuum pump, or by introducing compressed air into the system for approximately 24 hours. Drain plugs then should be screwed in with only a few turns to facilitate future drainage of moisture. All openings should be covered tightly with caps, blank flanges, or wooden plugs, firmly fastened in place.

(2) Traps and strainers. Traps and strainers should be cleaned and drained.

(3) Pressure reducing valves. Equalizing pipe between diaphragm chamber and low side of system should be opened and drained. The lower section of the valve should be loosened to provide drainage. Vents on the low pressure side of the valve will be opened.

c. Small Heating Plants.

(1) Steam and hot water. Boilers and combustion equipment should be processed substantially in accordance with paragraph 4.a above. Desiccants will not be used in cast iron or steel boilers that cannot be entered through manholes. Manhole and handhole gaskets should be greased with a mixture of cup grease and graphite. The boiler should be closed tightly.

(2) Space and unit heaters.

(a) Direct-fired equipment. Direct coal-fired space heaters should be laid up by removing all deposits of soot and ashes. Coal should be removed from bunker or bin. Grates should be left in place. Firing equipment such as shakers, lid lifters, etc., should be placed in the firebox and the door closed and securely wired. The ash pan should be left in place and the ash door closed and securely wired. Draft controls in stacks should be blocked closed. Oil should be drained from

reservoirs on oil-fired units and the openings closed. All primary and secondary air openings should be closed on gas-fired units. Smoke or vent pipes should be completely removed and stored in the same building.

(b) Indirect-fired equipment. The supply and return lines or indirect-fired steam and water unit heaters should be disconnected and the condensate and water drained from the lines.

d. Water Heating Equipment. Direct-fired booster storage water heater tanks should be drained completely. Heaters should be opened and all deposits of silt and scale should be removed. Water lines should be drained and openings capped or blocked off. Heaters should be left open. External vent pipes should be capped. Interior smoke or vent pipes should be completely removed and stored in the same building.

5. Refrigeration Equipment.

a. Mechanical Refrigeration Equipment. The refrigeration system should be pumped down and the refrigerant stored in receivers. When receiver capacity is inadequate to store complete charge, excess refrigerant should be removed, placed in appropriately marked containers, and returned to the supply system for eventual recovery by the National Defense Stockpile. Receiver connections and valves should be tested for refrigerant leaks. The crank cases should be filled with the oil normally used in operating the equipment, to cover seal and main bearings. The compressor should be red tagged as follows: "DO NOT OPERATE UNTIL EXCESS OIL HAS BEEN REMOVED". The valve plate should be flooded and seal housing filled with oil normally used in operating the equipment. Cooler and condenser coils should be wire-brushed and cleaned with compressed air. When air-cooled condensers are heavily filmed with kitchen greases, dry cleaning solvent should be used to remove grease deposits. Cooling towers should be drained and cleaned. After drying the bottom, drain should be left open.

b. Ice Plant and Brine Systems. Refrigerant should be removed from the equipment, placed in appropriately marked containers, and returned to the supply system for eventual recovery by the National Defense Stockpile. Brine tanks, water tanks, piping systems, strainers, and traps should be thoroughly flushed with fresh water and drained. Blowers, agitators, crane equipment, can fillers, ice-dump equipment, exposed surfaces of brine coolers and cooling coils, and all unprotected metal surfaces should be protected with paint. Ice cans should be cleaned, repainted as required, and stored in a dry place.

c. Refrigerated Spaces. Interior surfaces of cold storage rooms and refrigerators should be cleaned. Movable shelving, floor gratings, and dunnage should be removed, cleaned, and dried; meat hooks should be removed, cleaned, and packed in suitable cartons. These parts should be stored in cold storage rooms or refrigerators. Meat tracks, scales, door hinges, and miscellaneous hardware should be cleaned and coated with a light film of preservative. Door gaskets should be cleaned with doors fastened in a partially open or open position. To ease the weight on the hinges, blocks should be placed under doors. Exterior openings should be covered to exclude the weather.

6. Gas Distribution System.

a. Gas Mains. When gas is required at the activity, inactive areas should be cut off from the remainder of the activity by closing (and tagging accordingly) all valves on distribution lines at the boundaries of the area. Where there is no requirement for gas at the activity the main shutoff valve should be closed and locked tightly to prevent leakage. Where equipment is disconnected from the distribution system, the pipe openings should be capped. Plug cocks should be lubricated. Parts subject to corrosion should be greased and coated. Packing on stop valves should be lubricated with a few drops of graphite-bearing oil or the packing should be covered with graphite-bearing grease. Plugs from drains and drips should be removed at all low points and lines blown thoroughly before the gas is turned off, in order to be able to remove water and light oils which are condensed from the gas. Drain plugs should be replaced securely. Drip pots should be removed, emptied of condensate, and replaced. Cathodic protection systems should be operated and maintained for lines that have not been purged.

b. Gas Meters. Meters should be disconnected and drained. Weights should be removed from the regulating arms. Supply lines to meters should be capped.

c. Liquefied Petroleum Gas. The liquefied petroleum gas supplier should be notified to remove all privately owned containers and regulating equipment from the activity. Arrangements should be made with the supplier for the removal of entire stocks of liquefied petroleum gas stored in permanently installed systems.

Caution: Safety practices prescribed in NFPA 58, Storage and Handling of Liquefied Petroleum Gases, and standing safety orders should be observed when working around liquefied petroleum gas tanks and systems.

7. Cathodic Protection Systems. Generally deficiencies in cathodic protection systems should be identified and corrected so that systems may remain in operation.

SECTION III. MISCELLANEOUS FACILITIES

1. Surfaced Areas and Drainage Structures.

a. Blocking Roads and Streets. Once tenant activities have departed and portions of the base are inactivated, roads and streets which are no longer required for daily public access should be blocked off at intersections with a combination of concrete traffic barriers and removable cones and barrels. Cones or barrels may be easily removed and replaced by maintenance crews, fire and security personnel, and, others needing street access, but will keep most curiosity seekers from driving through inactive areas.

b. Drainage Structures. All storm sewers, drainage ditches, culverts, inlets, catch basins, and other drainage structures should be cleaned and repaired as necessary to prevent flooding and storm damage to roads, runways, tracks, and structures.

2. Waterfront Facilities. Waterfront facilities will be laid away in accordance with the procedures specified in paragraph 2.3.3 of MIL-HDBK 1130.

3. Graving Drydocks. There are three major milestones which need to be taken into consideration when determining the appropriate layaway requirements of a drydock: 1) the condition of the drydock at the point of the BRAC decision, 2) the condition required to maintain mission support, and 3) the condition required to support community reuse. The fundamental premise is that - facilities should not be allowed to deteriorate prior to community reuse (i.e., that "facility maintenance and repair prior to operational closure should be consistent with continuing mission/safe operations, but in no case lower than the minimum levels required to support the use of such facilities for non-military purposes").

a. BRAC Decision.

(1) Drydocks which were not in mission-support use and were flooded at the time of the BRAC decision will remain in this condition with no additional maintenance or preservation required for layaway (assuming that they do not need to be recertified for subsequent mission requirements), except as may be required to prevent safety or environmental hazards. This is akin to maintenance level VI.

(2) Drydocks in either certified or dry layaway condition at the time of the BRAC decision will be laid away and maintained in accordance with paragraph 3(b) below.

b. Mission Use.

(1) Drydocks needed for mission requirements will be maintained in certified condition, irrespective of community reuse.

(2) Drydocks which were certified at the time of the BRAC decision will be placed (laid away) in dry layaway condition once the drydock is no longer needed for mission requirements.

(3) Drydocks which were not certified at the time of the BRAC decision will be maintained (laid away) in dry layaway condition (assuming that they do not need to be recertified for subsequent mission requirements).

c. Community Reuse. Once the Community Redevelopment Plan has been submitted or a separate bilateral accord is negotiated with the community regarding drydock use:

(1) Drydocks not identified for reuse shall be flooded and abandoned (maintenance level VI) once they are no longer needed for mission requirements.

(2) Drydocks which are included in the Community Redevelopment Plan are to be maintained in dry layaway condition once they are no longer needed for mission requirements.

d. Dry Layaway Condition. The following general guidelines apply to ensure dry layaway condition.

(1) Maintenance of certification-level status is not required since dry layaway condition meets minimum requirements to support the use of drydocks for non-military purposes.

(2) Because the specific actions required to preserve individual drydocks will vary depending on both the current condition and planned community reuse, specific technical layaway requirements will need to be locally developed for each activity in close coordination with the supporting EFD/EFA. As with other facilities, the objective is to maintain the drydock condition status quo relative to its condition at mission cessation (i.e., neither increasing the condition beyond that existing at mission cessation, nor, on the other hand, allowing the drydock to deteriorate beyond the condition at mission cessation), while minimizing the expenditure of funds. For example, if a drydock's pumps require future overhaul to ensure long term use, but dry conditions can be maintained using portable pumps at less cost, then portable pumps should be used.

e. Special circumstances. Maintenance of the drydocks in dry layaway condition is predicated on the activity's ability to legally pump the drydock. If for whatever reason pumping cannot legally occur (i.e., discharge permits are revoked or permit waivers cannot be obtained) pumping is to cease and the activity is to notify the Community Redevelopment Authority of the Situation prior to the drydock flooding.

4. Swimming Pools. Swimming pools in maintenance level II should be laid up as prescribed for normal seasonal shutdown. Swimming pools in maintenance levels III and IV should be drained and equipment protected against deterioration in the same manner as other similar equipment. Pools subject to structural damage due to hydrostatic pressure or frost upheaval should either not be drained, or should be filled with sand. Pumps and chemical feeders should be stored with valves left in half-open or closed position. Sedimentation basins, filters, storage tanks, and clear wells will be drained, and where possible, outlets must be arranged so that they will not hold water. Remove and dispose of chlorine cylinders, calcium hypochlorite, acids, and other chemicals.

5. Railroads. Railroads will be laid away in accordance with the procedures specified in paragraph 2.3.5 of MIL-HDBK 1130.

6. Other Miscellaneous Facilities. Contact the geographical EFD/EFA for specific guidance on the layaway of other miscellaneous facilities.

Chapter 3: CARETAKER MAINTENANCE STANDARDS

1. GENERAL. The chapter provides standard for routine caretaker maintenance of facilities which have been closed and placed in a laid away status. Caretaker maintenance is performed by the closing activity prior to claimancy transfer, and by the NAVFAC Caretaker Site Office after claimancy transfer.

As with the layaway standards provided in Chapter 2, there is no substitute for the use of experience and common sense when applying the standards provided to specific activity facilities and situations. The maintenance level definitions described in Chapter 1 take into account the reuse potential of facilities and the projected length of the layaway period. Other factors affecting facility maintenance which must also be considered include the local climate, current facility age and condition, type of construction, funding levels, and labor availability. The goal is to limit MRP expenditures to the minimum necessary to limit facility deterioration and preserve the potential for long-term facility reuse.

a. Caretaker Standards. Caretaker maintenance standards for buildings are summarized in Table 4 on the following page. Additional amplifying / detailed information is provided in the referenced paragraph for each building component and for non-building components such as utility systems and surface areas. Where maintenance standards are essentially the same as the layaway standards already provided in Chapter 2, they are repeated in full. Since caretaker maintenance is not required in maintenance level I and V buildings, no standards are provided.

b. Historic Facilities. As noted in Chapter 1, decisions regarding how and to what level to maintain historic facilities will normally be documented in a Memorandum of Agreement between the activity, State Historic Preservation Officers (SHPO), and the Advisory Council on Historic Preservation. The following standards do not necessarily apply to historic facilities.

2. Interior Walk Through. Brief interior walk through inspections should be conducted periodically in all facilities to check for obvious potential problems, that left unchecked, could result in rapid building deterioration. These types of problems would typically be identified by building occupants in active facilities. Examples include roof leaks; bird, bat, or other obvious pest infestations; broken windows; leaking pipes; mold and mildew caused by excessive humidity; and other similar problems. Inspections should be made at least monthly in level II and III buildings, at least quarterly in level IV buildings, and annually in level VI buildings. Walk through should be made in all level II, III, and IV buildings after severe storms.

3. Building Shell. Section I, Paragraph 3, Chapter 2 discusses the absolute critical importance of maintaining building shell weather tight. As in building layaway, repair actions should minimize expenditure of funds while providing a fix that will last though the projected disposal of the facility, i.e., 6 months after operational closure for level II facilities, 2 years for level III facilities, and 5 years for level IV facilities. Brief inspections of building shells should be made during periodic walk through inspections. More detailed inspections should be conducted after severe weather, at least semi-annually in maintenance level III buildings, and at least annually in maintenance level IV buildings.

TABLE 4

BUILDING CARETAKER MAINTENANCE PROCEDURES

Component	Level II (1-180 Days)	Level III (6-24 Days)	Level IV (1-5 Years)	Level VI Until Demolition
Security Inspections	Conduct daily exterior inspection	Same as Level II	Same as Level II	Same as Level II
Interior Walk Through (Ref paragraph 2)	At least monthly & after severe storms	Same as Level II	At least quarterly & after severe storms	Annually & after severe storms
Building Shell (Ref paragraph 3)	Inspect after severe weather. Keep gutters, drains, & downspouts clean.	Inspect at least semi-annually & after severe weather. Keep gutters, drains, & down spouts clean.	Inspect at least annually & after severe weather. Keep gutter, drains & down spouts clean	Applicable only if required to prevent safety of environmental hazards
Exterior Windows, Doors, and Other Openings (Ref paragraph 3)	Inspect after severe weather.	Inspect at least semi-annually	Inspect at least annually	Repair only if required for security
Building Interior (Ref paragraph 4)	Minimal required to ensure structural soundness of floors, roof framing, & other structural members	Same as Level II	Same as Level II	Applicable only if required to prevent safety or environmental hazards
Heat (Ref paragraph 5)	Perform scheduled operational checks & PM inspections on operating systems	Same as Level II	Not Applicable	Not Applicable
Air Conditioning (Ref paragraph 5)	Perform scheduled operational check & PM inspections on operating systems	Same as Level II	Not Applicable	Not Applicable
Water/Plumbing (Ref paragraph 6)	Monthly turn water on to toilets, urinals, faucets, fountains, etc. to keep traps wet and seals good	Same as Level II	Add antifreeze to traps & fixtures as required due to evaporation	Not Applicable

Component	Level II (1-180 Days)	Level III (6-24 Days)	Level IV (1-5 Years)	Level VI Until Demolition
Electricity (Ref paragraph 7)	Check after severe thunderstorms. Check operating equipment during walk through inspections	Same as level II	Not Applicable	Not Applicable
Fire Protection Systems (Ref paragraph 8)	Visual inspection quarterly of operational systems; routine maintenance semi-annually, quarterly for fire pumps	Visual inspection semi-annually of operational systems; routine maintenance annually, quarterly for fire pumps	Same as Level III if systems are active, otherwise not applicable	Not Applicable
Elevators (Ref paragraph 9)	Continue routine maintenance, continue inspections as required by ASME a 17-3, ASME A 17-2, & NAVFAC MO-118	Reduce maintenance level, continue inspections as required by ASME A 17-1, ASME A 17-2, NAVFAC M)-118	Not applicable unless elevator remains in service. If in service, same as level II	Not applicable
Pest Control (Ref paragraph 10)	Identify potential problems during walk through inspection & initial appropriate control procedures	Same as Level II annual/biannual termite inspection	Same as level III	Not Applicable
Grounds Maintenance (Ref paragraph 11)	Maintain grass between 1 1/2" & 6"	Same as Level II	Same as Level II	Maintain grass between 1 1/2" & 8"
Installed Mechanical Equipment	Perform scheduled PM inspections only on operating systems	Same as Level II	Not Applicable	Not Applicable

a. Steps, Platforms, and Ramps. Exterior wood steps, platforms, ramps, or similar components should be limited to one per building (where required) and maintained only to the extent necessary to provide safe access during inspections or other visits to the interior of the building.

b. Windows and Doors. Broken windows in level II and III buildings should be replaced. Broken windows in level IV buildings may be replaced or boarded shut using the same procedures specified in Section I, Paragraph 4.b, Chapter 2. Broken windows in level VI buildings should be boarded up only if required to maintain adequate security, or to prevent safety or environmental hazards (e.g., rain water could damage friable asbestos pipe insulation, making environmental cleanup and facility disposal more difficult and expensive).

c. Roofing, Flashing, and Sheet Metal Work. Roofs must be periodically inspected and maintained watertight throughout the layaway period. Inspect if interior inspections indicate potential leaks and after severe storms.

(1) Generally roofing systems should be repaired in like kind. For example, the use of bituminous roofing materials to repair single ply roofs such as polyvinyl chloride (PVC) is not recommended and can be worse than no repair at all. If the membrane type is unknown or is not available, an elastomeric roof compound and reinforcing mesh can be used.

(2) Cap and counterflashing should be firmly attached and watertight. Should replacement be necessary due to deterioration or damage, materials should match in kind to prevent galvanic corrosion. Elastomeric roof coatings and reinforcing mesh may be practical for waterproofing joints, holes, and splits. Deteriorated caulking should be cleaned, backed, and caulked with new caulking.

(3) Inspect gutters, down spouts, scuppers, and roof drains as often as necessary to ensure they are clear of debris and working properly. This will vary depending on the rate of accumulation of leaves, pine straw, and other debris.

d. Exterior Surfaces. Repair or replace siding and other exterior components as required to ensure building shell is weathertight. Repair caulking failures and shrinkage cracks around door frames, window frames, and other joints in wood and masonry structures. Cracks around windows and doors can be beneficial in providing ventilation to the interior of level IV buildings, and so should be caulked only if needed to keep out moisture and insects. Open cracks in masonry walls which could allow moisture to penetrate should be sealed with backer rod and caulk. Tighten or replace fasteners, screws, bolts, and nails securing exterior components. When large areas require replacement, lower grade materials such as smooth surface roll roofing covered with battens may be used.

e. Interiors. Apply waterproof mortar or other waterproofing material at points where damaging moisture wells up through holes and cracks in concrete floors, walls, wall and floor junctures, etc. Seal seeping expansion joints.

f. Painting. Interior painting should be performed only if needed to prevent deterioration of metal surface. Exterior painting of doors, windows, siding and metal should be limited to the extent necessary to prevent deterioration. Exterior painting may also be required to prevent the flaking and peeling of lead containing paint. (NOTE: The issue of lead containing paint is currently being addressed by DoD and further guidance is pending. Contact your local BRAC Environmental Coordinator for current guidance in this area.)

g. Other Miscellaneous Openings. Ensure that screens and caps blocking miscellaneous openings, such as chimneys, vents, grills, and louvers, remain securely in place.

4. Building Interiors. Maintenance of interior of buildings should be confined to that necessary to ensure structural soundness of floors, roof framing, and other structural members, and to eliminate hazards to personnel. Metal surfaces should be painted when necessary to prevent deterioration.
5. Heating, Ventilating, and Air Conditioning (HVAC) Systems. Minimal preventive maintenance should be performed on operating mechanical systems in maintenance level II and III buildings. PM should be limited to filter changes and seasonal start up and shutdown requirements, such as lubrication, belt changes, and other maintenance actions required to ensure continuous and efficient operation of HVAC systems.
6. Plumbing Systems.
 - a. Level II and Level III. During monthly walk through inspections water should be turned on briefly at each faucet, water fountain, and shower, and each urinal and toilet flushed once to keep traps wet and seals in faucets and flushometers functioning properly. Check for leaks in buildings in which the water has not been secured.
 - b. Level IV. Check and replenish antifreeze in traps and fixtures as required due to evaporation during monthly walk through inspections.
7. Electrical Systems. Check the operation of and perform routine maintenance as needed for operating sump pumps, security systems, and other operating electrical equipment during periodic walk through inspections and after severe thunderstorms.
8. Fire Protection and Alarm System.
 - a. Water Storage Tanks. Ground level, underground, and elevated water storage tanks used to supply water for fire protection should continue to be maintained. Tanks should be inspected and maintained at least every 6 months. Water levels in these tanks should be verified weekly.
 - b. Base Fire Pumps. Fire pumps used to boost pressure in the base's underground water distribution system should continue to be maintained. Base fire pumps should be inspected and started on a weekly basis. Fuel driven pumps should have their fuel supply checked weekly.
 - c. Level I Buildings. Continue to maintain all systems until facility turnover in accordance with NAVFAC Manual MO-117, Maintenance of Fire Protection Systems.
 - d. Level II Buildings. Visually inspect systems quarterly during periodic walk through inspections. Provide routine maintenance every 6 months to all systems except fire pumps, which should be run and maintained quarterly.

e. Level III Buildings. Visually inspect systems every 6 months during periodic walk through inspections. Provide routine maintenance annually except fire pumps, which should be run and maintained quarterly.

f. Level IV Buildings. Maintain active systems to the same extent as in level III buildings.

9. Elevators. Any elevator, dumbwaiter, or escalator remaining in operational status must continue to be maintained, inspected, and certified in accordance with ASME A17.1, Safety Code for Elevators and Escalators; ASME A17.2, Inspectors' Manual for Elevators and Escalators; and NAVFAC MO-118, Inspection of Vertical Transportation Equipment.

a. Level II. Maintain elevators in fully operational condition, including required inspections, testing, and certification. Continue routine maintenance at preclosure levels.

b. Level III. Maintain elevators in operational condition and certification current by continuing required inspections and tests. Continue routine maintenance, but at a reduced level by reducing PM frequency. At a minimum elevators should be operationally checked for smooth car movement with no unusual noise or vibration. All safety systems, leveling devices, doors, and safety edges should be operating properly. Check for proper equipment lubrication, and check equipment rooms, hoistway, and pits for cleanliness.

c. Level IV. Elevators in level IV buildings which remain operational should be maintained in fully operational condition, including required inspections, testing, and certification. Continue routine maintenance at preclosure levels.

10. Pest Control Services. Pest control services must continue to be provided to the extent necessary to prevent damage to facilities. Inspectors should be trained and on the lookout for evidence of pest problems during all periodic walk through inspections of level II, III, and IV facilities. The type and extent of services required will vary widely depending on the location of the activity and the type of facilities. Contact the EFD/EFA Applied Biologist for activity specific guidance. Examples of pests that may need to be controlled include the following:

a. Weeds. Weeds grow and enlarge pavement cracks, create fire hazards, damage and obscure fences, retard drying, provide habitats conducive to pest population growth, damage exterior surfaces of buildings, and promote decay by blocking vents. Low level maintenance may require annual, biennial, or triennial herbicide applications.

b. Fire Ants and Africanized Bees. These pests may interfere with the maintenance and showing of closed facilities and grounds. Control procedures should be implemented when they do.

c. Other Insects. Termites, carpenter ants and bees, and powder post beetles can cause serious structural damage. Annual or biennial inspections for these pests should generally be made in all level III and IV facilities.

d. Birds and Bats. Birds and bats establish indoor roosts, fouling surfaces and rendering spaces unfit for human occupation. Pigeon and bat droppings may also create serious health hazards. Check for the presence of these pests during periodic building walk through inspections and implement control procedures when required.

e. Mosquitos and Biting Flies. Mosquitos and biting flies may create a public health and morale problem in adjacent civilian community. Control procedures for these pests may need to be continued after closure if breeding areas are located on base.

f. Rodents. Inspect for evidence of rodents and replace bait blocks as necessary during periodic building walk through inspections.

11. Grounds Maintenance. Grounds in areas of the activity which are not presently in operation should be maintained to the minimum extent necessary to protect against fire and erosion, and to assure proper forest and wildlife management where applicable. Base "curb appeal" should be maintained by maintaining areas along main roadways and active facilities in a relatively high level of maintenance.

a. Grass Cutting. Grass within 25 feet of combustible structures should be cut as frequently as required to protect against fire hazards. Otherwise, grass cutting should be performed in accordance with the following general guidelines. Grass should never be cut shorter than 1 ½ inches, and all areas should be cut at least once annually.

TABLE 5
 GROUNDS MAINTENANCE REQUIREMENTS

Area	Max Height (Inches)	Min Height (Inches)	Edge	Trim	Shrub & Hedge Maintenance
Level I Facilities	3	1 ½	No	No	Yes
Level II, III, and IV Facilities	6	1 ½	No	No	No
Level VI Facilities	14	8	No	No	No
Airfields	14	8	No	No	No
All Other	24	6	No	No	No

b. Tree and Shrub Pruning. Shrubs, and trees should be pruned and trimmed only as needed to prevent damage to buildings and electrical service lines; and to prevent low hanging limbs from interfering with traffic on roads and streets.

c. Golf Courses. For level II, golf courses should normally be maintained in "semi-playable" condition, including full care of greens and tee boxes, but reduced mowing on fairways, rough practice putting greens, and driving ranges. For levels III and IV, maintain in accordance with Table 5, Grounds Maintenance Requirements.

12. Fences. Perimeter fences and other fences required for security should continue to be inspected and repaired at normally required frequencies.

13. Surfaced Areas and Drainage Structures.

a. Roads and Streets. Resurfacing of bituminous pavements should be discontinued, and seal coats applied only to forestall major deterioration of the pavement structure. Roads and streets required for daily public access should be maintained in good condition with pot holes filled, joints and cracks sealed, and markings and signs maintained. All other roads and streets should be maintained only to permit safe passage at reasonable speeds. Markings, signs, and signals should not be maintained or renewed.

(1) Blocking. Roads and streets not required for daily public access should be blocked off at key intersections with a combination of concrete traffic barriers and removable cones and barrels. Cones or barrels may be easily removed and replaced by maintenance crews, fire and security personnel, and others needing street access, but will keep most curiosity seekers from entering closed areas.

(2) Mowing. Mowing of shoulders and right-of-ways should be limited to that required to maintain required "curb appeal", for proper drainage, fire inspection, control of noxious weed growth, and to prevent formation of insect breeding places.

(3) Snow Removal. With the exception of roads and streets required for daily public access, snow removal should be provided only to the extent required to provide access for maintenance personnel, fire protection, security, and similar activities. Remove snow around fire hydrants to make them accessible for firefighting requirements. Snow and ice removal should also be provided if required to maintain critical drainage system openings.

(4) Bridges. Bridges should be periodically inspected for verification of structural integrity in accordance with NAVFAC MO-126, Inspection of Bridges and Trestles. Corrosion or physical damage that threatens the continued survivability of bridges should be repaired as necessary.

b. Storm Sewers and Drainage Ditches. Storm sewers and ditches should be maintained as required to prevent erosion and damage to roads, runways, tracks, and structures. Keep ditch banks

free of debris, silt, and mud. Drainage structures such as culverts, inlets, and catch basins should be kept clean and at full efficiency to prevent flooding damage.

14. Utility Systems. With the exception of the items noted below, utility plants and systems remaining in use should continue to be maintained and operated in accordance with established standards. Operating logs, records, and maps should be maintained, and reports, samples, and tests should be made in accordance with standard procedures.

a. Heating Systems and Boiler Plants.

(1) External sweating and corrosion. Periodically to guard against sweating and corrosion on the external surfaces of laid away boilers, furnaces, tanks, unfired pressure vessels, and the like, portable heating equipment may be used at safe points to keep metal surfaces above the dew point, particularly during protracted spells of damp weather accompanied by rising temperature.

(2) Desiccants. The fire side of boilers should be opened and inspected every 6 months. Desiccants should be replaced when the absorbing properties are no longer effective.

CAUTION: See Chapter 2, subparagraph 4.a(1)(c), concerning use of desiccants.

b. Utility Distribution Systems. Generally existing cathodic protection systems should continue to be operated and maintained.

(1) Gas. Gas distribution systems should be checked with a pressure gauge every 90 days to ensure that valves are not leaking gas into the inactive portions of the system. If a cathodic protection system is installed, it should be kept in operation.

(2) Steam. Inactive underground steam distribution systems should be inspected every 30 days. Manholes and pump pits should be pumped out when flooded. Waterproof coatings on insulation of overhead steam distribution systems should be maintained. Damaged or deteriorated pipe supports should be repaired or replaced.

c. Wastewater Collection System. When the base population declines to a low level it may be necessary to periodically flush certain sanitary sewer lines. Float controls in lift station wet wells should be adjusted to maintain waste water elevation at low level to ensure frequent pumping.

d. Water Distribution System. When the base population declines to a low level it may be necessary to periodically open fire hydrants or other lines to allow water to run through portions of the distribution system serving active buildings. Otherwise water may sit in the distribution system for so long that it is no longer adequately chlorinated.

15. Railroads. Railroads that will be abandoned will receive only the minimum maintenance necessary to maintain safety to life and adjacent structures until salvage and demolition. Railroads that

will be sold will receive minimum maintenance. Switches should be oiled or greased annually. Maintenance on rails, ties, and ballast should be discontinued. However, damaging vegetation in ballast, roadbed, and ditches should be controlled with herbicides or soil sterilants.

16. Graving Drydocks. Because the specific actions required to maintain individual drydocks will vary depending on both the current condition and planned community reuse, specific technical caretaker maintenance requirements will need to be locally developed for each activity in close coordination with the supporting EFD/EFA.

APPENDIX D

ATTACHMENT I: SAMPLE FACILITY LAYAWAY AND CARETAKER MAINTENANCE LEVEL PLAN

Caretaker maintenance level plans must be developed by the activity and supporting NAVFAC Engineering Field Division/Activity (EFD/EFA) not later than 12 months prior to operational closure. These plans will be updated and used throughout the closure period to plan and track the accomplishment of facility layaway. Plans should include the following information at a minimum for each facility:

- Facility Number
- Facility Name/Description (e.g., Training Building, Barracks, etc.)
- Identification as historic facility, if appropriate
- Caretaker maintenance level assigned
- Actual closure dates
- Actual layaway dates

APPENDIX D

ATTACHMENT II: REFERENCES

ASME Publications are available from the American Society of Mechanical Engineers, New York, NY 10017.

ASME A17.1 Safety Code for Elevators and Escalators

ASME A17.2 Inspectors' Manual for Elevators and Escalators

US Air Force Report on Operations and Maintenance Costs of Facility Inactivation and Preservation: available from Air Force Civil Engineering Support Agency, Directorate of Systems Engineering, Tindall AFB, FL.

Army PWB 420-10-8. Facilities Operation, Maintenance & Repair Guidance for Base Realignment and Closing Installations: available from U.S. Army Center for Public Works, Attn: CECPW-FP, Fort Belvoir, VA 22060-5516.

USACERL Technical Report M-91/23, Layaway Procedures for US Army Facilities, Volumes I, II, and III: available from U.S. Army Civil Engineering Research Laboratory, P.O. Box 9005, Champaign, IL 61826-9005.

Military and Federal Specifications, Military Handbooks, NAVFAC Operation and Maintenance (MO) Manuals, and OPNAV Instructions are available from DODSSP, Subscription Services Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094. Government activities must use the MILSTRIP ordering system using stock numbers obtained from NAVSUP Publication 2002.

MIL-C-11796	Corrosion Preventive Compound, Petrolatum, Hot Application
MIL-C-16173E	Corrosion Prevention Compound, Solvent Cutback, Cold Application
MIL-B-121F	Barrier Material, Greaseproof, Waterproofed, Flexible
PPP-T-60E	Tape: Packaging, Waterproof
MIL-L-21260	Lubricating Oil, Internal Combustion Engine, Preservative and Break-In

MIL-HDBK-1130 Inactivation, Caretaker Maintenance, Reactivation, and Closure of Shore Facilities

NAVFAC MO-117 Maintenance of Fire Protection Systems

NAVFAC MO-118 Inspection of Vertical Transportation Equipment

NAVFAC MO-126 Inspection of Bridges and Trestles

NAVFAC MO-324 Inspection and Certification of Boilers & Unfired Pressure Vessels

NAVFAC MO-913 Historic Structures Preservation Manual

OPNAVINST 5090.1(Series) Environmental and Natural Resources Program Manual

NFPA 58, Storage and Handling of Liquefied Petroleum Gases; available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

National Park Service Technical Note 31, Mothballing Historic Buildings; available from Preservation Assistance Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127.

41 CFR Subpart 101-47.4. Management of Excess and Surplus Real Property, available from the General Services Administration, Washington, DC.

APPENDIX D

DOD POLICY ON ASBESTOS AT BASE REALIGNMENT AND CLOSURE PROPERTIES

Department of Defense (DoD) policy with regard to asbestos-containing material (ACM) is to manage ACM in a manner protective of human health and the environment, and to comply with all applicable Federal, State, and local laws and regulations governing ACM hazards. Therefore, unless it is determined by competent authority that the ACM in the property does pose a threat to human health at the time of transfer, all property containing ACM will be conveyed, leased, or otherwise disposed of as is through the Base Realignment and Closure (BRAC) process.

Prior to property disposal, all available information on the existence, extent, and condition of ACM shall be incorporated into the Environmental Baseline Survey (EBS) report or other appropriate document to be provided to the transferee. The survey report or document shall include:

- reasonably available information on the type, location and condition of asbestos in any building or improvement on the property,
- any results of testing for asbestos;
- a description of any asbestos Control measures taken for the property;
- any available information on costs or time necessary to remove all or any portion of the remaining ACM; however, special studies or tests to obtain this material are not required;
- results of a site-specific update of the asbestos inventory performed to revalidate the condition of ACM.

Asbestos-containing material shall be remedied prior to property disposal only if it is of a type and condition that is not in compliance with applicable laws, regulations, and standards, or if it poses a threat to human health at the time of transfer of the property. This remediation should be accomplished by the active Service organization, by the Service disposal agent, or by the transferee under a negotiated requirement of the contract for sale or lease. The remediation discussed above will not be required when the buildings are scheduled for demolition by the transferee, the transfer document prohibits occupation of the buildings prior to the demolition, and the transferee assumes responsibility for the management of any ACM in accordance with applicable laws.

APPENDIX D

DOD POLICY ON LEAD -BASED PAINT AT BASE REALIGNMENT AND CLOSURE PROPERTIES

Department of Defense (DoD) policy with regard to lead-based paint (LBP) is to manage LBP in a manner protective of human health and the environment and to comply within applicable Federal, State, and local laws and regulations government LBP hazards. The Federal requirements for residential structures/dwellings with LBP on Base Realignment and Closure (BRAC) properties differ, depending on: (1) the date of property transfer, and (2) the date of construction of the residential housing being transferred.

DoD policy is to manage LBP at BRAC installations in accordance with either 24 CFR 35 or P.L. 102-550, at the Service's discretion, until January 1, 1995, and thereafter, solely in accordance with P.L. 102-550. Residential structures/dwellings are as defined in the applicable regulation and any regulation issued pursuant thereto. The Military Components may apply this policy to any other structures they deem appropriate.

On January 1, 1995, and thereafter, the provisions of the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X of P.L. 102-550) concerning the transfer of Federal property for residential use take effect. These provisions, codified at (in pertinent part) 42 U.S.C 4822, 4851-4856, and 15 U.S.C. 2688, are applicable to target housing, which is housing constructed prior to 1978, with limited exceptions for housing for the elderly or persons with disabilities or any 0-bedroom dwelling.

Target housing constructed after 1960 and before 1978 must be inspected for LBP and LBP hazards. The results of the inspection must be provided to prospective purchasers or transferees of BRAC property, identifying the presence of LBP and LBP hazards on a surface-by-surface basis. There is no Federal LBP hazard abatement requirement for such property. In addition, prospective transferees must be provided a lead hazard information pamphlet and the contract for sale or lease must include a lead warning statement.

Target housing constructed before 1960 must be inspected for LBP and LBP hazards, and such hazards must be abated. The results of the LBP inspection will be provided to prospective purchasers or transferees of BRAC property identifying the presence of LBP and LBP hazards on a surface-by-surface basis and a description of the abatement measures taken. In addition, prospective transferees must be provided with a lead hazard information pamphlet and the contract for transfer must include a lead warning statement.

The inspection and abatement discussed above will not be required when the building is scheduled for demolition by the transferee and the transfer document prohibits occupation of the building prior to the demolition; the building is scheduled for non-residential use; or, if the building is scheduled for

residential use, the transferee conducts renovation consistent with the regulatory requirements for the abatement of LBP hazards.

Effective January 1, 1995, DoD BRAC properties shall be transferred in accordance with any regulations implementing the Residential Lead-Based Paint Hazard Reduction Act of 1992. The Act also made Federal agencies subject to all Federal, State, interstate, and local substantive and procedural requirements respecting LBP and LBP hazards (see 15 U.S. 2688). Therefore, there may be more stringent local requirements applicable to Federal property transfers.

APPENDIX D

DOD POLICY ON RADON AT BASE REALIGNMENT AND CLOSURE PROPERTIES

In response to concerns with the potential health effects associated with radon exposure, and in accordance with the Indoor Radon Abatement provisions of Subchapter III of the Toxic Substances Control Act, 26 U.S. C. 2661 to 2671, the Department of Defense (DoD) conducted a study to determine radon levels in a representative sample of its buildings. In addition, as part of DoD's voluntary approach to reducing radon exposure, DoD has applied the Environmental Protection Agency (EPA) guidelines for residential structures with regard to remedial actions.

DoD policy is to ensure that any available and relevant radon assessment data pertaining to Base Realignment and Closure (BRAC) properly being transferred shall be included in property transfer documents.

DoD policy is not to perform radon assessment and mitigation prior to transfer of BRAC property unless otherwise required by applicable law.

APPENDIX E

SAFETY AND HEALTH INTEGRATED CLOSURE CHECKLISTS

As part of Base Realignment and Closure (BRAC), activities may be required to vacate and close presently occupied buildings. Plans for these buildings include the transfer of real and personal property to the community for reuse via the Engineering Field Activity or transfer of the property to another branch of the Federal Government. This requires the property to be safe for reuse (consistent with current use) and compliant with existing occupational safety and health and environmental laws.

There are five major elements in completing an integrated safety and health closure of buildings and surrounding properties (herein termed the “Site”). These elements include:

- A Survey of Current/Historical Use of the Site
- A Physical Inspection of the Site
- Sampling Plans and Procedures
- Site Cleanup and Remediation
- Final Action/Documentation

If the safety and health aspects of these five elements are not covered by the Base Closure Team (BCT), or otherwise fully covered in BRAC plans, a Safety and Health Site Closure Team will be needed. The team should include Command Environmental Staff, Occupational Safety and Health Office representatives, and industrial hygiene support. Other key personnel required to support the team include the Facility Manager, the Production Group Manager, Equipment Manager, and Material Manager as well as representatives from the Materials Engineering Division, Utilities and Safety Engineering Branch, and supporting Naval Medical activity. The Facility Manager is responsible for coordination of all actions required to properly close the Site and normally leads the BCT. His/her tasks include scheduling all meetings and inspections and ensuring that the project progresses towards a timely completion. Safety and Health Team actions must be under the direction of the facility or BCT Manager.

The first step in an integrated site closure is to conduct a survey of current and historical use of the Site which will identify processes and materials which may be a potential safety and health or environmental concern. Areas of concern include hazards, mandatory repairs requiring long lead times, and hazardous waste which must be removed within 90 days of shop closure. Refer to Checklist I for information to be gathered during the survey of current and historical use of the Site.

During the next phase, the physical inspection of the Site, a walk-through survey of the Site is made to identify the location of potential safety and health or environmental concerns. Historical and current use

information can be used to structure the physical inspection. Refer to Checklist II for guidance on the Physical Site Inspection.

Once the Site inspection has been completed, a sampling plan of the areas of potential safety and health or environmental concern should be completed. This sampling plan should include all safety and health information required to complete the plan as well as a strategy to determine the level of environmental contamination on the Site. Sampling may be conducted after appropriate review and approval of the plan. Checklist III contains information for establishing and completion of a sampling plan.

Upon completion of sampling, any cleanup or remediation of the Site should commence to render the property fit for reuse. A Site safety and health plan to protect remediation and other personnel must first be prepared. Cleanup standards for Site contamination must also be established. Checklist IV is to be used during Site cleanup and remediation.

After cleanup and remediation is finished, any final actions to complete the Site turnover should be taken. Final actions may include a final sampling plan to validate cleanup levels. In addition, any documentation that must be transferred when the base is closed should also be prepared at this time. Site closure documents include a Health and Safety Plan, Environmental Cleanup Plan, Equipment Cleaning/Removal Plan, Layaway Plan, Caretaker Plan and Disclosure Statement. Refer to Checklist V for final action and documentation guidance.

NOTES:

- (1) The actions included in this appendix are necessary to ensure closure safety and health, and should be covered in BRAC plans. They are provided as guidance to commanding officers and OSH managers.
- (2) Personnel involved in the site closure team may be required to have medical examinations due to potential hazardous exposures. In addition, certain specialized tests and monitoring equipment will be required as determined by safety and industrial hygiene staff.
- (3) The following checklists are not intended to be all inclusive but rather as aids in structuring the analysis and the identification of real or potential hazards to site personnel and visitors and to the site itself.

APPENDIX E-1

CHECKLIST I CURRENT/HISTORICAL USE OF THE SITE

CURRENT/HISTORICAL USE	ACTION COMPLETED Y/N	SCHEDULED COMPLETION DATE	COMMENTS
1. The Facility Manager and the Environmental, Safety, and Health (ES&H) Team will describe the Site (a building, portion of a large building, and any surrounding property) and identify any unusual boundary conditions required (i.e., work center impact beyond the facility “five-foot-line”, tanks, storage or loading area, waste handling areas, cleaning or flushing areas, exhaust or emissions stack fallout areas, and similar areas).			
2. The Facility Manager and the ES&H Team will describe the history and current use of the Site to identify contamination sites and pathways (hazardous chemicals or processes previously used such as plating lines, radioactive work, etc.)			
3. The Facility Manager and the ES&H Team will identify any history of radioactive material use at the site, identify locations of radioactive material usage and any Nuclear Regulatory Commission licenses previously or currently held by the facility. Coordinate with the radiation Safety Officer.			
4. The Facility Manager and the Environmental Manager will review IH surveys and note any historically or archaeologically significant buildings or structures on the Site.			
5. The Facility Manager and the ES&H Team will obtain the Authorized Hazardous Materials List (AHML) used for each shop and identify any spills documented in the Site.			
6. The Facility Manager and the ES&H Team will review the Environmental Baseline Survey.			
7. The Facility Manager and the ES&H Team will identify Hazardous Waste (HW) Permitted Facilities.			
8. The Facility Manager and the ES&H Team will identify HW Accumulation Areas (HWAA).			
9. The Facility Manager and the ES&H Team will identify above ground storage tanks.			
10. The Facility Manager and the ES&H Team will			

CURRENT/HISTORICAL USE	ACTION COMPLETED Y/N	SCHEDULED COMPLETION DATE	COMMENTS
identify underground storage tanks.			
11. The Facility Manager and the ES&H Team will identify asbestos/man-made vitreous fiber (MMVF) contamination information for the Site from the Asbestos Survey and conduct an Asbestos Survey if necessary.			
12. The Facility Manager and the ES&H Team will identify airborne emissions sources and abatement devices.			
13. The Facility Manager and the Environmental Manager will identify natural constraints (seismic fault lines, potential landslide areas, steep slopes, flood areas, wetlands/endangered species habitat).			
14. The Facility Manager and the ES&H Team will acquire a list of unabated OSH deficiencies from the OSH office and the latest industrial hygiene survey.			
15. The Waste Management Branch Representative will provide the Environmental and Facility Managers with a list of chemicals removed from the Site and any equipment.			
16. The Facility Manager will be responsible for identifying Site considerations in accordance with the Guide for Decontaminating Buildings, Structures and Equipment at Superfund Sites, EPA 600/2-85/028.			
17. The Facility Manager will determine the appropriate layaway level for each Site. (Refer to Appendix C, Chapter 1, Table 1 for definitions of layaway levels.)			

APPENDIX E-2

**CHECKLIST II
PHYSICAL SITE INSPECTION**

PHYSICAL SITE INSPECTION	ACTION COMPLETED Y/N	SCHEDULED COMPLETION DATE	COMMENTS
1. The ES&H Team will identify the appropriate personal protective equipment to be worn and precautions to be taken by the survey team while conducting the Physical Site Inspection. (Refer to OPNAVINST 5100.23 Series.)			
2. The Facility Manager will provide Site layout plans for markup to each member of the survey team.			
3. The Facility Manager will inspect building shells and determine the repair necessary to preserve building integrity, determine structural soundness, and issue necessary documentation to start the repair process.			
4. The Facility Manager will consult with appropriate activities (Fire Department, OSH Representative, etc.) regarding building locks and keys.			
5. The Utilities Engineer will survey the Site.			
5a. The Utilities Engineer will identify any space critical utility deficiencies and initiate the necessary documentation to correct.			
5b. Utilities Engineer will determine the utilities which can be immediately shut off for maximum cost savings.			
6. The Environmental Manager will conduct an initial thorough survey of the Site and provide a plan view of the Site showing:			
6a. Spills or stains. For stains which may require soil testing later, note the dimensions of the stain in inches and the location from some fixed point;			
6b. Areas of chipped or damaged paint and damaged piping insulation if lead contamination is likely.			
6c. Suspected contaminated ductwork and ventilation fans for equipment already removed or remaining in place. If it is not known which chemicals may be present in the ductwork, coordinate with Materials Engineering and the Occupational Safety and Health Office.			

PHYSICAL SITE INSPECTION	ACTION COMPLETED Y/N	SCHEDULED COMPLETION DATE	COMMENTS
6d. Electrical transformers, switchers, and capacitors that are not marked air cooled or Polychlorinated Biphenyl (PCB) free. Search the Site for unlisted transformers and switches.			
6e. Areas where acutely hazardous materials were used and/or generated or where hazardous waste was produced.			
7. The Environmental Manager will inspect Permitted Hazardous Waste Facilities for stains or spills.			
8. The Environmental Manager will search the Site for any sign of past or present underground or above ground storage tanks.			
9. The Environmental Manager will inspect the edge of paved areas, docks, drains, etc. for indications of industrial waste water discharge.			
10. The Environmental Manager will inspect the location of production equipment.			
11. The Environmental Manager will identify equipment suspected of containing hazardous waste residue.			
12. The Environmental Manager will note any unusual odors while inspecting the Site. Attempt to identify the source of any odors detected.			
13. The Environmental Manger will inspect the Site for indications of fill material (e.g., dredge spoils, abrasive blast media, demolition waste, etc.).			
14. The Environmental Manager will note pools of liquid, sumps, ponds, and piles.			
15. The Environmental Manager will note drums/containers left on the parcel.			
16. The Environmental Manager will note any items of concern that are not specifically noted elsewhere in this checklist.			
<p>17. The Environmental Manager will note areas that were not inspected due to safety, natural, or physical constraints (unexploded ordnance, landslides, fenced off areas, etc.).*</p> <p>* NOTE: If there is unexploded ordnance, contact NAVORDCEN.</p>			

PHYSICAL SITE INSPECTION	ACTION COMPLETED Y/N	SCHEDULED COMPLETION DATE	COMMENTS
<p>18. The Environmental Manager will provide 35 mm photographs of stained areas, safety concerns, and large utilities. For each photograph, provide description, building number, site reference number, scale (e.g. use a yardstick to show dimension of spill/stain), equipment if applicable, date, time, and the primary feature of the photograph. NOTE: Camera Permit Required.</p>			

APPENDIX E-3

**CHECKLIST III
SITE SAMPLING PLAN AND PROCEDURES**

SITE SAMPLING PLAN AND PROCEDURES	ACTION COMPLETED Y/N	SCHEDULED COMPLETION DATE	COMMENTS
1. The Occupational Safety and Health Office, Equipment Manager, Materials Engineering Representative, and Waste Management Branch Representative will provide input to the Environmental Manager on the development of the sampling plan.			
2. The sampling plan will identify sampling locations based on known spills and visual staining. Select sampling locations based on suspected contaminants of concern for that location developed from Site history, shop practices, equipment locations, and the authorized chemical list compiled from the current/historical survey.			
3. The sampling plan will specify wall sampling requirements based on shop practices, possible contamination from hazardous materials used, and loose or chipped building paint with likely lead content.			
4. The sampling plan will list the personnel protective equipment (PPE) required and precautions that must be taken during sampling. (Refer to OPNAVINST 5100.23 Series.)			
5. The sampling plan will include cleanup, handling, and disposal requirements of samples and sampling equipment.			
6. The sampling plan will specify sampling procedures for each location.			
7. The sampling plan will determine which samples can be done by the materials laboratory and which can be referred by the Materials Engineering Representative to an outside contractor.			
8. The sampling plan will determine quality Assurance Protocols (split samples, etc.)			
9. The sampling plan will identify chain of custody procedures and forms.			
10. The Environmental Manager must ensure that unnecessary samples are not submitted for analysis.			
11. The Materials Engineering Representative and Waste Management Representative will take samples			

SITE SAMPLING PLAN AND PROCEDURES	ACTION COMPLETED Y/N	SCHEDULED COMPLETION DATE	COMMENTS
for analysis per sampling plan.			
12. The Radiation Safety Officer will be notified if radiation surveys are required. A sampling plan will be developed for any areas of historical radioactive material use.			
13. The Materials Engineering Representative and Waste Management Representative may modify the sampling plan with proper documentation by the sampling team based on actual field conditions.			
14. The Materials Engineering Representative and Waste Management Representative will provide the Environmental Manager with all sampling documentation, locations tested, and results which will be included in the cleanup plan.			
15. Upon completion of the analysis, the results of the sampling are to be reviewed by the ES&H Team for design of their particular cleanup procedures.			

APPENDIX E-4

**CHECKLIST IV
SITE CLEANUP AND REMEDIATION**

SITE CLEANUP AND REMEDIATION	ACTION COMPLETED Y/N	SCHEDULED COMPLETION DATE	COMMENTS
HEALTH AND SAFETY REQUIREMENTS:			
1. The ES&H Team will use the sampling results, the most recent Industrial Hygiene Survey of the Site, and the planned actions of the cleanup team to develop an OSH report.			
2. The ES&H Team will determine if an Industrial Hygiene Survey (site specific) is necessary and inform the Facility Manager.			
3. The ES&H Team will inspect the Site and compile an Initial OSH Report to be provided to the Facility Manager. The OSH Report is to identify potential Site safety problems which need to be corrected before cleanup can commence.			
4. The OSH Report shall identify safety and health hazards for personnel unfamiliar with the site.			
5. The OSH Report shall identify and provide direction for reduction of safety concerns necessary before building cleanup can start.			
6. The OSH Report shall include a plan view of the Site showing confined spaces and site specific safety concerns (i.e., electrical lock-outs, fall and trip hazards, radioactive sites, accessible or exposed equipment or controls, fire hazards, inadequate signs or labels, inadequate rails or ladders).			
7. The OSH Report shall compile a database of expected hazards to be encountered that will be used for developing the Site safety and health plan.			
8. The OSH Report will identify requirements for electrical safety, weight handling equipment, unabated OSH deficiencies, confined space entry, etc.			
9. The OSH Report will establish PPE requirements, both general and specific, for handling materials unique to the area to be cleaned.			
10. The OSH Report will establish ventilation requirements for cleanup work and confined space work.			

SITE CLEANUP AND REMEDIATION	ACTION COMPLETED Y/N	SCHEDULED COMPLETION DATE	COMMENTS
11. The OSH Report will give guidance for the safe handling of materials which are hazardous due to toxicity, flammability, or violent chemical reactivity characteristics.			
12. The OSH Report will list grounding requirements for the safe transfer of flammable liquids.			
13. The OSH Report will provide decontamination requirements and establish stations for showering and changing.			
14. The OSH Report will establish communications systems needed during cleanup, including posting signs in hazardous work areas and in areas where lead or asbestos work is being conducted.			
15. The OSH Report will list required engineering controls including high efficiency particulate air (HEPA) filter vacuum requirements and vacuum cleaning areas.			
16. Industrial Hygiene survey will be completed during cleanup operations as determined by servicing Industrial Hygiene activity.			
17. Utilities Engineer will designate to the OSH Representative and the Safety Engineer, after consultation with the Fire Department and the Safety engineer, those utilities which must be kept operating for security, safety lighting, equipment maintenance, cleanup operations, and/or fire prevention.			
18. Utilities Engineer will determine supplemental ventilation requirements, where necessary.			
19. Utilities Engineer will be responsible for submitting the necessary paperwork to shutoff all unneeded utilities and track the shutoff progress.			
20. Prior to cleanup actions, the Facility Manager will inform the Energy Conservation Manager or appropriate authority when building is unoccupied.			
CLEANUP PLAN:			
1. The Environmental Manager will prepare the Environmental Cleanup Plan. The Cleanup Plan is to be implemented to eliminate or reduce the level of hazardous contamination in the Site and the equipment therein.			
2. The Cleanup Plan will include general cleaning instructions as well as any other actions needed to reduce the level of contamination. The plan will be			

SITE CLEANUP AND REMEDIATION	ACTION COMPLETED Y/N	SCHEDULED COMPLETION DATE	COMMENTS
based upon the Current/Historical Use Survey, the Physical Site Inspection, and the sampling results.			
3. The plan will be reviewed by the Occupational Safety and Health Office and the Waste Management Representative.			
4. General cleaning instructions for the Site. Areas will be designated as one of the following types: a) Areas in which hazardous wastes were generated or found; b) Areas where hazardous waste, but not acutely hazardous waste, were generated or found (not listed in 40 CFR 261; and c) Areas in which there was no regular use of hazardous materials or generation of hazardous materials.			
4a. Areas on the Site which generated hazardous waste or where hazardous materials were found by sampling will require a thorough washing and cleaning of all walls, ceilings, equipment, etc. These areas include, but are not limited to grinding, blasting, painting, stripping, degreasing, coating, and plating operations.			
4a.1. For these areas, note the approximate square footage of the wall and floor areas which will require cleaning. Also note any unusual cleanup procedures needed, such as: berms required to collect rinse water; removal of contaminated waste water and disposal requirements; triple rinse requirements/ sampling/ testing; blast media removal; radioactive materials use or disposal; and utilities, ducts, piping, etc. to be cleaned.			
4a.2. If there is a special legal or procedural requirement, cite a reference.			
4b. Areas on the Site with hazardous waste. For areas where hazardous waste (but not acutely hazardous) were generated or found by sampling, the area is to be vacuumed using a vacuum equipped with HEPA filters. Any stained areas are to be cleaned using a cleaning agent approved for use on the Site such as Envirosolv.			
4b.1. For these areas, note the approximate floor/ ground space to be cleaned and all disposal requirements.			
4c. Areas on the Site with non-hazardous materials. Areas where hazardous materials were not used, debris removal and general cleanup is sufficient for cleaning. The Industrial Hygienist will be consulted concerning safety procedures to be followed if dust is generated or			

SITE CLEANUP AND REMEDIATION	ACTION COMPLETED Y/N	SCHEDULED COMPLETION DATE	COMMENTS
disturbed. Provide an estimate of the approximate number of dumpsters for non-hazardous debris to be removed.			
5. Identify any repairs to be made and materials to be removed.			
5a. For each location noted in the Site plan view, provide:			
5a.1. Specific chemicals/materials to be removed;			
5a.2. Cleaning instructions;			
5a.3. Sizes of stained areas, damaged paint areas, and length of piping with damaged insulation;			
5a.4. Waste disposal instructions.			
6. The Environmental Manager will draft a letter to the activity with the cleanup plan and schedule as enclosures.			
7. The Waste Management Branch Representative will arrange for the removal and disposal of all hazardous materials remaining on the Site.			
8. The Utilities Engineer and Facility Manager will use either the existing Defense Business Operating Fund (DBOF) maintenance funding or the existing Maintenance Service Agreement (MSA) funding to remedy deficiencies.			
9. Utilities Engineer may use closure funding as an alternative when either existing DBOF or MSA funding is not available.			
EQUIPMENT CLEANING/REMOVAL PLAN:			
1. The Equipment Manager will determine the disposition of equipment not to be transferred to another Activity. This includes determining if the equipment will be sent to Defense Reutilization and Marketing Office (DRMO) (as scrap or in reusable condition) or will remain in place. All efforts to sell or dispose of equipment and furniture in place should be used.			
2. The Shop Foreman will arrange through the Waste Management Branch Representative for the removal of all hazardous materials from any remaining equipment.			
3. The Equipment Manager is to check oil and vital fluids needed to maintain the equipment in accordance with the layaway standards.			

SITE CLEANUP AND REMEDIATION	ACTION COMPLETED Y/N	SCHEDULED COMPLETION DATE	COMMENTS
4. The Equipment Manager will develop a closure plan. The closure plan will identify:			
4a. Equipment locations as of the closing day of the shop;			
4b. Location of remaining equipment.			
5. The closure plan will include the Equipment Manager's required action for each piece of remaining equipment. For equipment containing maintenance material, a sampling plan may be required.			
6. The closure plan will include , if required, each piece of Class 3 and 4 equipment will have a brief maintenance plan for long term non-usage.			
7. The closure plan will require the Equipment Manager to arrange for the abatement of hazards created by removal of equipment including but not limited to covering of pits or trip hazards. The Equipment Manager will consider the applicability of having scrap items processed for their recycling value.			
8. The Equipment Manager is responsible for preparing a letter to the Local Reuse Authority listing the remaining equipment. Identify and tag for removal equipment the Reuse and Redevelopment Authority does not want and provide this list to the Facility Manager.			
9. The Equipment Manager will ensure that the Occupational Safety and Health Office reviews plans and conducts a final review after all equipment clean-up and layaway activities have been completed.			

APPENDIX E-5

**CHECKLIST V
FINAL ACTION/DOCUMENTATION**

FINAL ACTION/DOCUMENTATION	ACTION COMPLETED Y/N	SCHEDULED COMPLETION DATE	COMMENTS
POST CLEANUP SAMPLING PLAN			
1. A post cleanup sampling plan will be developed. This plan will include taking of samples from a number of previously tested and cleaned areas. The purpose of this procedure is to ensure that acutely hazardous and hazardous materials have been removed to acceptable levels and that the information is available for inclusion in the Disclosure Statement			
DOCUMENTATION			
1. The Facility Manager and the ES&H Team will determine record requirements for reuse documentation.			
2. Task specific checklist/sign-off sheet.			
3. Plan approval sign-off sheet.			
DISCLOSURE REQUIREMENTS			
1. Information on any remaining or friable asbestos will be provided.			
2. Unabated OSH deficiencies or remaining safety and health issue will be reported.			
3. The locations of confined spaces will be identified.			
4. The locations of energy disconnect/lockout/tagout, etc. will be identified.			
5. Any remaining lead-based paint coatings will be identified.			
6. Areas where mercury was used or remains will be identified.			
7. Monitoring equipment locations and requirements will be provided.			
8. Utility and maintenance cost estimates for specific buildings on the Site will be provided.			
9. Post cleanup sampling results will be provided.			
ACTION		SCHEDULED	

FINAL ACTION/DOCUMENTATION	COMPLETED Y/N	COMPLETION DATE	COMMENTS
10. If deficiency will not be corrected, the Facilities Manager shall include a section in the Disclosure Statement describing the uncorrected utility deficiency for future tenant(s)			

APPENDIX F

INNOVATIVE COST REDUCTION STRATEGIES

1. During BRAC, implementation of injury cost controls can be used to reduce or control accountable Federal Employees' Compensation Act (FECA) costs. Cost reduction strategies focus on initial actions or steps associated with employees who experience legitimate injuries or illnesses and continuing actions that can be taken by management to control post-injury costs.

2. There are ten initial actions/steps that can be taken to control the costs associated when employees experience legitimate injuries or illnesses. For optimum cost control, the following sequential guidelines are offered:

- a. Ensure employee reports injury/illness to supervisor.
- b. Allow the supervisor to determine the initial action which will either direct the employee to report for medical evaluation or return the employee to work without medical evaluation.
- c. When the employee reports for initial medical evaluation, provide transportation to the treatment facility and use government providers whenever possible.
- d. Upon medical provider evaluation, ensure the employee is informed of the evaluation, treatment options, and fitness to return to work.
- e. When the employee makes a medical treatment decision without consulting the supervisor first, the employee should be required to notify the supervisor of medical evaluation.
- f. Ensure the medical provider gives the employee the appropriate treatment as indicated by the medical condition.
- g. When an employee returns to work upon completion of short term medical treatment and has no restrictions, ensure the employee's treatment was accurate. Perform either an ergonomics evaluation of the employee's work site or a mishap prevention evaluation.
- h. When an employee returns to work upon completion of short term medical treatment and has restrictions, adjust the employee's work assignment as necessary and coordinate with the medical provider to ensure proper understanding of restrictions.
- i. When an employee receives long term medical treatment, including significant time away from work, determine if the employee will return to work. If it seems likely that the employee will

return, follow the guidelines suggested in step 8 above. If not, provide guidance in job selection and retraining, if feasible.

j. If the employee is to receive long term compensation, periodically repeat step 9 above.

3. Continuing actions that can be taken by management to control/reduce post injury costs during BRAC include:

a. Implementation of methods for efficient and cost effective processing of FECA claims.

b. Implementations of methods for efficient and cost effective post injury/illness medical case management.

c. Reviewal of FECA claims, statistics, and costs to identify problems and opportunities for improvement.

d. Establish systems for continuous long term improvement. These systems may include: FECA goals/objectives, performance measurements, preventive programs (wellness, ergonomics, medical screening), FECA guidance and training, disability management councils, and alternatives to compensation (disability retirement counseling, career counseling, OWCP re-employment program).

APPENDIX G

TECHNICAL EXPERTS/POINTS OF CONTACT

Asbestos Records	Navy Asbestos Litigation Support Office (703) 602-4060 Ext. 345 DSN: 332-4060
Records Disposition See Federal Records Center (FRC) list for office nearest your activity	Navy, Records Management Office (202) 433-4217 DSN: 288-4217
Radiation	Naval Sea Detachment Radiological Affairs Support Office (804) 887-4704 DSN: 953-4704
Ordnance	Naval Sea Systems Command Naval Ordnance Center (N71) (301) 743-6076/81 DSN: 354-6076/81
Laser	Space and Naval Warfare Systems Command (Code 223-2) (703) 602-7235 DSN: 332-7235
Deficiency Abatement Program	Naval Facilities Engineering Command (Code 40K2) (804) 444-5193 DSN: 564-5193

**NAVAL FACILITIES ENGINEERING COMMAND HEADQUARTERS
BASE CLOSURE DIRECTORATE**

(CODE 60)

60	Director	(703) 325-0480
60A	Senior Executive	325-0480
60A1	Senior Economist	325-0708
60A2	Senior Engineer for MIS Impl	325-5919
60S	Secretary	325-0480

Resources Management Division

61	Director	325-7317
611	Program Analyst	325-0506
612	Program Analyst	325-4195
613	Information Systems Analyst	325-4196
614	Administrative Assistant	325-4197
615	Budget Analyst	325-4213

Program Coordination Division

62	Director	325-4216
621	Air Stations West	325-4198
622	Air Stations East	325-4207
623	San Francisco	325-0480
624	Charleston	325-4208
625	Great Lakes	325-0480
626	National Capitol Region	325-4209
627	Pensacola/Memphis	325-4211
628	Reserves	325-0480

Caretaker Clemency Division

63	Director	325-4212
631	Facilities Engineer	
632	Northdiv/Lantdiv/ Pacdiv/West Coast	325-0480
633	Southdiv/San Francisco	325-4214

FAX (703)325-0136

DSN prefix is 221-XXXX

**NAVAL FACILITIES ENGINEERING COMMAND
ENGINEERING FIELD DIVISION/ACTIVITY**

BRAC POC'S

Atlantic Division (Code 20B)	(804) 445-2403
Northern Division (Code 09TA/1)	(610) 595-0519
Pacific Division (Code 19)	(808) 474-5934
Southern Division (Code 09P)	(803) 743-0777
Southwestern Division (Code 60)	(619) 556-0252
Western Division (Code T40)	(415) 244-3500
EFA Chesapeake (Code 09AO)	(202) 685-3147
EFA Midwest (Code 44)	(708) 688-2600 x 120
EFA Northwest (Code 20)	(206) 396-5976

POINTS OF CONTACT FOR INJURY COMPENSATION PROGRAM ISSUES

Department of Defense

Chief, Injury and Unemployment (703) 325-2009
Compensation Branch
Department of Defense
Civilian Personnel Management Services
246 Eisenhower Avenue, Suite 164
Alexandria, VA 22331-0900

Department of Navy

Office of Civilian Personnel Management (804) 444-3744
Eastern Region
5301 Robin Hood Drive, Suite 113
Norfolk, VA 23513-2429

Office of Civilian Personnel Management (619) 532-3880
Western Region
9040 Friars Road, Suite 550
San Diego, CA 92188-0410

POINTS OF CONTACT FOR OCCUPATIONAL HEALTH

Chief, Bureau of Medicine and Surgery
Navy Department
Attention: MED 2421
2300 E Street N.W.
Washington, DC 20372
(202) 653-1487
DSN: 294-1487
FAX: (202) 653-1895

Commanding Officer
Navy Environmental Health Center
Occupational Medicine Directorate
2510 Walmer Avenue
Norfolk, Virginia 23513-2617
(804) 444-7575 (Ext. 242)
DSN: 564-7575 (Ext.242)
FAX: (804) 444-3672

POINTS OF CONTACT FOR ECHELON 2 OSH MANAGERS

NAME	CODE	COMM PHONE	DSN	FAX
BUMED	MED-2422	202-653-0243	294-0243	-1895
CHNAVPERS	PERS 01655	703-614-1484	224-1484	703-693-6649
CINCLANTFLT	N4633A	804-444-1944	564-1944	-6835
	N4633B	804-444-3567	564-3567	-6835
	N4633C	804-445-4086	565-4086	-6835
CINCPACFLT	N466	808-471-0758	474-0758	474-3927
CINCUSNAVEUR	N74	01144715144238	235-4268	-4585
CMC	SD	703-614-1202	225-1202	703-695-3231
CNET	OOX	904-452-8785	922-8785	-3869
CNO (FSA)	NO9BF	202-685-1526	325-1526	-1541/43
COMNAVAIRSYSCOM	AIR8.0D	703-604-3221/ 8912	664-3221	-3125

COMNAVCOMTELCOM	N45	202-764-2677/8	764-2677	-2681
NAME	CODE	COMM PHONE	DSN	FAX
COMNAVFACENCOM	40K	703-325-0435	221-0435	-0183/2156
COMNAVOCEANCOM	N513A	601-688-5394	485-5394	-5376
COMNAVRESFOR	005	504-948-5403	363-5403	-1466
COMNAVSEASYS		703-602-4060		
	07E3	EXT 357	332-4060	-4032
	07E32	EXT 359	332-4060	-4032
	07E31	EXT 360	332-4060	-4032
COMNAVSECGRU	N444A	207-764-0765	764-0764	-0891
COMNAVSPACECOM	N41	703-663-6180	249-6180	-6148
COMNAVSPECWARCOM	N41	619-437-0880	577-0880	-3943
COMNAVSUPSYSCOM	421	804-444-1096	564-1096	-8987
COMSC	NOOM3	202-685-5043	325-5043	-5049
COMSPAWARSSYS	OOF/10-11D	703-602-7235	332-7235	-7578
DIRSSP	2016	703-607-0136	327-0136	-2175
ONI	ONI4C	301-669-5550	294-5550	-4629
ONR	91A	703-696-4135	226-4135	-5383

LOCAL

Contact the Occupational Health/Preventive Medicine Directorate or the Command Employee Assistance Program Counselor.

APPENDIX H ADDITIONAL SUPPORTING DOCUMENTS

APPENDIX H-1

PERTINENT FEDERAL REGULATIONS AND DoD DIRECTIVES AND MANUALS

**This appendix contains CFRs, DoD Directives and Manuals
pertinent to base closure and realignment**

40 CFR	Clean Air Act Regulations
40 CFR 1500-1508	Regulations for Implementing the Procedural Provisions of NEPA
40 CFR 240-257	Solid Waste Management Regulations
40 CFR 260-281	Hazardous Waste Regulations Under RCRA
40 CFR 300-355,370,372	Installation restoration: CERCLA and SARA Regulations
41 CFR 101-147	Federal Property Management Regulations
DoDD 1015.1	Establishment, Management, and Control of NAFIs
DoDD 4001.1	Installation Management
DoDD 4160.21	DoD Personal Property Utilization and disposal Program
DoDD 4165.50	Administration & Operation of the Homeowners Assistance Program
DoDD 4700.4	Natural resources Management Programs, Jan. 24, 1989
DoDD 5410.10	Coordination of Clearance of Announcements of Personnel Reductions, Closures of Contract Operations within the United States
DoDD 5410.12	Economic Adjustment Assistance to Defense-Impacted Communities
DoDD 6050.1	Environmental Effects in the United States of DoD Actions
DoDD 4000.19	Interservice Support Agreement
DoDD 4120.14	Environmental Pollution, Prevention, Control and Abatement

APPENDIX H-2

SERVICES INSTRUCTIONS AND GUIDANCE DOCUMENTS PERTINENT TO BRAC

**Contains Service regulations, instructions,
and guidance documents pertinent to base closure and realignment.**

8AFR 87-4	Disposal of Real Property
AFR 126-7	Historic Preservation
AFR 19-2	Environmental Impact Analysis Process
AFR 19-7	Environmental Pollution Monitoring
AFR 190-1	Public Affairs Policies and Procedures
AFR 67-91	Installation Realignment
AFR 87-10	Removal of Installation Real Property from Excess Installations
AFR 87-3	Granting Temporary Use of Real Property
AR 25-55	DA Freedom of Information Program
AR 200-1	Environmental Protection and Enhancement
AR 200-2	Environmental Effects of Army Actions
AR 215-1	administration of MWR Activities and NAF Instrumentalities
AR 220-1	Unit Status Reporting
AR 405-80	Granting Use of Real Estate
AR 405-90	Disposal of Real Estate
AR 420-47	Solid and hazardous Waste Management
AR 420-74	Natural Resources-Land, Forest, and Wildlife Management
AR 420-76	Pest Management
AR 5-9	Interservice Support Installation Area Coordination
AR 700-113	Basic Policies and Principles for Carrying Out the Economic Adjustment Program
AR 870-20	Historical Properties and Museums

APPENDIX H-3

LIST OF BRAC MESSAGES

Guidance For Base Closure and Realignment

MSG #	TOPIC
001	BRAC Implementation Guidance
002	BRAC CO's Conference
003	Disposal of Real Estate Identified as Excess
004	Summary Plans for BRAC Action
004A	Change 1 - Requirement for Quarterly Submittal
005	BRAC II Construction Program and Milestones
006	Disposal of Non-Real property Identified as Excess
007	Protection and Maintenance of Excess and Surplus Real Property
008	Disposal of Non-Real Property Identified as Excess
009	Environmental Issues Impacting Base Closure
010	Economic Adjustment Assistance
011	Environmental Documentation for Disposal of Bases to be Closed in Compliance with the BRAC Act of 1990
012	Collection of Historical Records and Materials
013	Environmental Restoration at Base Closure Sites
014	BRAC Implementation Guidance
015	Interim Use of Base Closure Properties
016	Involvement of Indian Tribes in the Base Closure Process
017	Environmental Issues Impacting Base Closure (Asbestos)
018	Disposal of Non-Real (Personal) Property and Closing Bases
019	Commercial Activities (CA) Program; Waiver of Requirements at Base Closure Sites
020	Major Clemency for Navy Base Disposal
021	Implementation of 1993 Closure and Realignments
022	Civilian Personnel Issues Related to Base Closure and Realignment Implementation
023	Controls on Use of Base Closure Account Funds
024	Disposition of Personal Property on Closing and Realignment Bases
025	Base Closure-93 Project Documentation Required for Design Authorization
026	Base transition Coordinator Status Report for Closing and Realignment Bases
027	Base Realignment and Closure (BRAC) Transportation Funding Policy

- 028 Base Realignment and Closure (BRAC) Layaway and Maintenance Responsibilities
- 028A Base Realignment and Closure (BRAC) Layaway and Caretaker Maintenance Level Plan
- 029 Navy Policy on Disposition of Personal Property on Closing and Realignment Bases
- 030 BRAC Clean-up Plans
- 031 Homeowners Assistance Program
- 032 Base Realignment and Closure (BRAC) Facility Layaway and Care Maintenance Standards
- 032 (Pending Release)
- 034 Asbestos, Lead Paint, Radon Policies At BRAC Properties.
- 035 Implementation of 1995 Closure and Realignments
- 035A Change 1 - Submission Dates Delayed

APPENDIX I

Glossary of Terms, Acronyms, and Definitions

ACM asbestos-containing material

AIS annual inspection summary

ASME American Society of Mechanical Engineers

BRAC Base Realignment and Closure

BUMED Bureau of Medicine and Surgery

Caretaker maintenance Maintenance performed in facilities which have been laid away to ensure continued weather tightness and security, protection from fire and vermin, and safe and efficient operation of required utility systems.

CFR Code of Federal Regulations. The CFR is a codification of general and permanent regulations published in the Federal Register by the Executive departments and agencies of the Federal Government. For the purposes of this guidance, detailed procedure may be found in 40 CFR.

CNO Chief Naval Operations

CSO Caretaker Site Office. The Caretaker Site Office is a Naval Facility (NAVFAC) Engineering Field Division/Activity detachment established at an activity identified for closure under a base closure law to manage real property in a caretaker status from claimancy transfer until disposal

Disposal The legal transfer of Navy-controlled real property at a closing activity to another DOD service, federal agency, state or local government or agency (redevelopment authority), or the private sector.

DOD Department of Defense

DOL Department of Labor

DON Department of Navy

EBS Environmental Baseline Survey

EFA Engineering Field Activity

EFD Engineering Field Division

Facility Class 2 real property which is comprised of buildings, structures, and utilities.

FAR Federal Acquisition Regulations

FECA Federal Employees' Compensation Act

FRC Federal Records Centers

GMT General Military Training

Hazardous material (HM) For the purpose of preparing the Material Safety Data Sheet, a hazardous material is defined as a material having one or more of the following characteristics: (a) has a flashpoint below 200 °F (93.3 °C) closed cup or is subject to spontaneous heating or polymerization with release of large amounts of energy when handled, stored, and shipped without adequate control; (b) has a threshold limit value below 1000 ppm for gases and vapors, below 500 mg/m³ for fumes, and below 30 ppcf for dust; (c) a single oral dose which will cause 50 percent fatalities to test animals when administered in doses of less than 500 mg per kilogram of test animal weight; (d) is a strong oxidizing or reducing agent; (e) causes first degree burns to skin in short time exposure or is systemically toxic by skin contact; (f) in the course of normal operations, may produce dusts, gases, fumes, vapors, mists or smokes with one or more of the above characteristics; (g) produces sensitizing or irritating effects; (h) is radioactive; or (i) the item has special characteristics which in the opinion of the manufacturer could cause harm to personnel if used or stored improperly.

Hazardous waste (HW) Any discarded or abandoned hazardous substance as defined in 40 CFR 261 or applicable state regulations where the state has been granted enforcement authority by EPA. It may include any discarded liquid, semi-solid, solid, or containerized gaseous material. Hazardous waste does not include HM with expired shelf-life unless determined as such by a Defense Reauthorization and Marketing Office (DRMO).

HRO Human Resource Office

HVAC Heating, Venting, and Air Conditioning

ICPA Injury Compensation Program Administrator

Industrial Hygiene (IH) Survey An examination of the condition of industrial hygiene and occupational health of a command. This examination is performed by industrial hygienist or technicians under the supervision of an industrial hygienist.

ISIC Immediate Superior In Command

Layaway The preparation of facilities for a period of inactivation prior to their disposal. Layaway includes securing facilities to limit unauthorized entry, termination/reduction of utilities, preservation of select equipment, and ensuring facility weather tightness.

Layaway Plan Developed for each facility or group of facilities based on completed facility inspections. These plans should identify critical deficiencies to be corrected and other specific layaway requirements based on the maintenance level into which the facility is placed.

LBP lead-based paint

MRP maintenance of real property

NAVOSH Navy Occupational Safety and Health

NARA National Archives and Records Administration

NHPA National Historic Preservation Act; specifically Section 106

OSHA Occupational Safety and Health Administration

OCPM Office of Civilian Personnel Management

PPE Personal Protective Equipment

PVC polyvinyl chloride. A type of bituminous roofing material used to repair single ply roofs.

PWD Public Works Department

RFR Radio Frequency Radiation

RASO Radiation Safety Office

RIF Reduction in Force

ROICC Resident Officer in Charge of Construction

SHPO State Historic Preservation Officer

TAT Task Action Team

Transfer A specific agreement of a closing activity delineating detailed requirements and responsibilities for the closing site within the bounds of the executive memorandum of understanding; executed by the Commanding Officer of the closing activity and the Commanding Officer of the servicing NAVFAC EFD/EFA.