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DRAFT BASE REALIGNMENT AND CLOSURE (BRAC) CLEANUP PLAN CNC CHARLESTON
SC
03/01/1994
DEPARTMENT OF THE NAVY



DEPARTMENT OF THE NAVY

COMMANDER NAVAL BASE
CHARLESTON, SOUTH CAROLINA 29408-5100

Ser: BCO/267

22 FEB 1994

MEMORANDUM

From: Naval Base Closure Office BRAC Environmental Coordinator
Subj: REVIEW OF DRAFT BRAC ENVIRONMENTAL CLEANUP PLAN (BCP) FOR
NAVAL BASE CHARLESTON
Ref: (a) COMNAVBASE (N4) ltr ser BCO/261 of 16 Feb 94
Encl: (1) Draft BRAC Cleanup Plan for Naval Base Charleston

1. The BRAC Cleanup Team (BCT) for Naval Base Charleston has prepared the enclosed BCP per the Department of Defense guidelines to expedite disposal and reuse of closing military bases. The BCP is a phased plan to be implemented for completing environmental actions in support of cleanup, reuse, and redevelopment of Naval Base Charleston. The original issue of the BCP is based on a "Bottom Up" review of existing and on going environmental programs at the Naval Base and a fence-to-fence environmental condition of property survey which have been completed. The BCP is a living document and will be reviewed quarterly to determine the need for updates as major actions are initiated and/or completed.

2. Reference (a) established the Base Closure Office (BCO) Environmental Closure Planning Subcommittee as the vehicle for accomplishing reviews of the BCP and obtaining information on Base environmental matters. Enclosure (1) provides a draft copy of the BCP in preparation for original issue. Upon review and incorporation of any comments, the BCP will be submitted to the Under Secretary of Defense for Acquisition.

3. Addressees are requested to coordinate the review of enclosure (1) with their respective activities and provide written comments to the BCO BRAC Environmental Coordinators (BEC) no later than 1200 on 28 February 1994. Comments will be reviewed by the BECs and submitted for incorporation for the final BCP to be ready for distribution by 7 March 1994. Questions concerning the BCP review should be addressed to Pat Franklin or Bobby Dearhart at 743-9985.

E. R. DEARHART

Distribution on page 2

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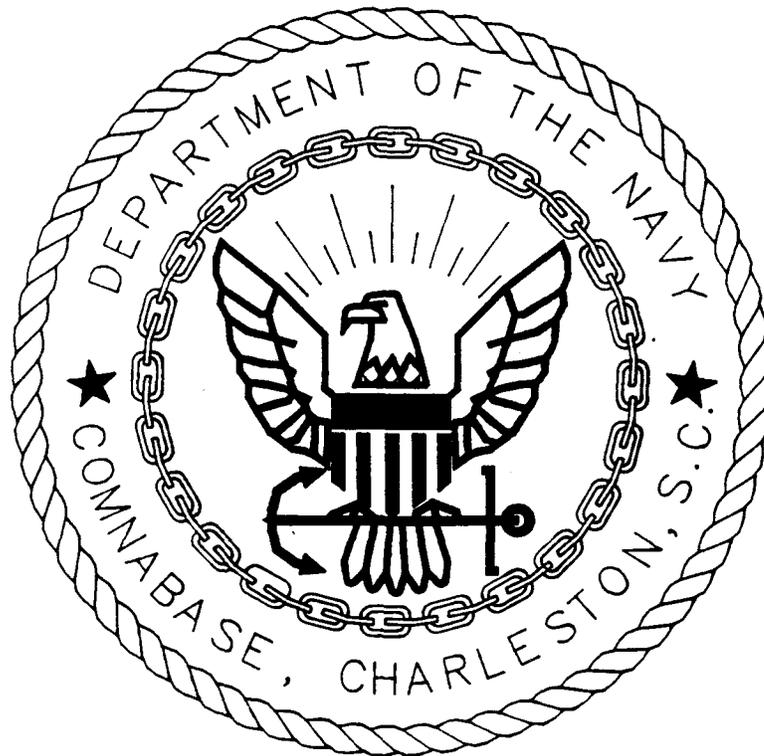
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**NAVAL BASE CHARLESTON
DRAFT BRAC CLEANUP PLAN**



BRAC CLEANUP TEAM

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March, 1994

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- Appendix F EBS File Structure Index

List of Acronyms

ACM	Asbestos Containing Material
ACBM	Asbestos Containing Building Material
AIRFA	American Indian Religious Freedom Act
AOC	Area of Concern
ARAR	Applicable or Relevant and Appropriate Requirements
ATSDR	Agency for Toxic Substance and Disease Registry
BCO	Base Closure Officer or Office
BCP	BRAC Cleanup Plan
BCT	BRAC Cleanup Team
BEC	BRAC Environmental Coordinator
BEST	Building Economic Solutions Together Committee
BPT	BRAC Project Team
BRAC	Base Realignment and Closure Act of 1988 and Defense Base Closure and Realignment Act of 1990, collectively
BTC	Base Transition Coordinator
CAMU	Corrective Action Management Unit
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CFR	<i>Code of Federal Regulations</i>
CNS	Charleston Naval Station
CNSY	Charleston Naval Shipyard
CRP	Community Relation Plan
CSTP	Conceptual Site Treatment Plan
DD	Decision Document
DEIS	Draft Environmental Impact Statement
DERA	Defense Environmental Restoration Account
DERP	Defense Environmental Restoration Program
DLA	Defense Logistics Agency
DOD	Department of Defense
DOE	Department of Energy
DPM	Defense Priority Model
DRMO	Defense Reutilization and Marketing Office
DRMS	Defense Reutilization and Marketing System
DSTP	Draft Site Treatment Plan
EA	Environmental Assessment
EBS	Environmental Baseline Survey
ECD	Estimated Completion Date
EE/CA	Engineering Evaluation/Cost Analysis
EIC	Engineer in Charge

List of Acronyms (Continued)

EIS	Environmental Impact Statement
EOD	Explosive Ordnance Disposal
EPA	Environmental Protection Agency
FBM	Fleet Ballistic Missile
FBMSTC	Fleet Ballistic Missile Submarine Training Center
FFA	Federal Facility Agreement
FFCA	Federal Facilities Compliance Act of 1992
FISC	Fleet Industrial Supply Center
FMWTC	Fleet and Mine Warfare Training Center
FOSL	Finding of Suitability to Lease
FOST	Finding of Suitability to Transfer
FS	Feasibility Study
FY	Fiscal Year
G-RAM	General Radioactive Materials
GW	Groundwater
IAG	Interagency Agreement
IRMs	Interim Remedial Measures
IRP	Installation Restoration Program
IRPIMS	IRP Information Management System
ISA	Internal Screening of Alternatives
ISC	Initial Site Characterization
LF	Landfill
LTM	Long-Term Monitoring
MCLs	Maximum Contaminant Levels
MSL	Mean Sea Level
NAVSTA	Naval Station
NCCPSD	North Charleston Consolidated Public Service District
NCP	National Oil and Hazardous Substance Pollution Contingency Plan
NEPA	National Environmental Policy Act, as amended
NFA	No Further Action
NAVRAMP	Naval Radon Assessment and Mitigation Program
NISE-EAST	Naval Command Control and Ocean Surveillance Center In Service Engineering - East
NNPP	Naval Nuclear Propulsion Program
NPDES	National Pollution Discharge Elimination System
NPL	National Priorities List
NRC	Navy Reserve Center

List of Acronyms (Continued)

NRMC	Navy Regional Medical Center
NSC	Naval Supply Center
NWS	Naval Weapons Station
O&M	Operation and Maintenance
OEA	Office of Economic Adjustment
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PA	Preliminary Assessment
PAO	Public Affairs Officer
PCB	Polychlorinated Biphenyl
pCi/l	Picocuries per liter
POC	Person of Contact
POI	Points of Interest
POL	Petroleum, Oils, and Lubricants
PWA	Public Works Administration
PP	Proposed Plan
QA/QC	Quality Assurance/Quality Control
RA	Remedial Action
RAB	Restoration Advisory Board
RAMP	RADON Assessment and Mitigation Program
RAP	Remedial Action Plan
RCRA	Resource Conservation and Recovery Act, as amended
RD	Remedial Design
REC	Regional Environmental Coordinator
RFI	RCRA Facility Investigation
RI	Remedial Investigation
ROD	Record of Decision
RPM	Remedial Project Manager
SARA	Superfund Amendments and Reauthorization Act
SCDHEC	South Carolina Department of Health and Environmental Control
SCS	Site Characterization Summary
SECNAV	Secretary of the Navy
SI	Site Inspection
SOUTHDIV	Southern Division NAVFACENGCOM
SOUTHNAVFACENGCOM	Southern Division Naval Facilities Engineering Command
SPCC	Spill Prevention, Controls and Countermeasures
STP	Site Treatment Plan
SWMU	Solid Waste Management Unit

List of Acronyms (Continued)

TRC	Technical Review Committee
TSCA	Toxic Substance Control Act
TSD	Treatment, Storage, or Disposal
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank
VOC	Volatile Organic Compound

EXECUTIVE SUMMARY

INTRODUCTION

This BRAC Cleanup Plan contains the status, management and response strategy, and action items related to Naval Base Charleston's ongoing environmental restoration and associated compliance programs. These programs support full restoration of the base property, which is necessary to meet the requirements for property disposal and reuse activities associated with the closure of the installation. The Scope of the BRAC Cleanup Plan considers the following regulatory mechanisms: the Base Realignment and Closure Act; National Environmental Policy Act; Comprehensive Environmental Response, Compensation, and Liability Act as amended by the Community Environmental Response Facilitation Act; Resource Conservation and Recovery Act; and other applicable laws.

The BRAC Cleanup Plan is a planning document, and the information and assumptions presented may not necessarily have complete approval from the Component and/or Federal and State regulatory agencies. The BRAC Cleanup Plan is a dynamic document that will be updated regularly to reflect the current status and strategies of remedial actions. This document is the first in a series of updates/modifications and represents conditions and strategies as of March 1994.

Status of Disposal, Reuse, and Interim Lease Process

The disposal of Naval Base Charleston involves three interrelated activities: the National Environmental Policy Act environmental impact statement process, development of a disposal plan, and development of a community reuse plan. The first two items are the responsibility of the Component. The third is the responsibility of the Building Economic Solutions Together (BEST) committee. These three activities are in progress at Naval Base Charleston.

To date, property disposal at Naval Base Charleston has included a federal transfer of approximately 10 acres to the Department of State. As of 1 March 1994, there are no plans for additional transfer actions. Future property disposal at Naval Base Charleston could include Federal Transfer, Negotiated Sale, No-Cost Public Benefit Conveyance, Donated Property, or additional Interim Leases.

Status of Environmental Restoration Program

There are 39 identified Solid Waste Management Units (SWMUs) presently being investigated under an RFI. An additional 118 Potential Areas of Concern (PAOCs) are scheduled to undergo a RCRA Facility Assessment (RFA). The Component has initiated a fence-to-fence Environmental Baseline Survey which will be completed in May 1994. There are currently an additional 212 sites listed as PAOCs which may also require RFAs. Restoration-related compliance activities at Naval Base Charleston are currently limited to process closure procedures and identification of areas in need of interim remedial actions.

Summary of Current BRAC Cleanup Plan Action Items

Table ES-1 provides a listing of recommendations and issues associated with environmental restoration, compliance, and technical/management action items that require further evaluation and implementation by the BRAC Cleanup Team/Project Team.

TABLE ES-1 BCT/Project Team Action Items

Action Item	Program Review Item	Status	
		In Progress	To Be Performed
COMPLIANCE ACTIVITIES			
UST removal/compliance			
Determination if heating oil tanks will be removed	16	X	
Take steps to ensure compliance with SCDHEC UST regulations	16, 18	X	
Develop alternative for treating soils where analytical results show solely a petroleum release	15, 25		X
Perform sufficient number of EBS Phase IIs to project needs of the community where FOSTs and FOSLs are being obtained	27, 33		X
PCB issues			
Sample all machinery that may contain PCBs.			X
Hazardous Waste/Materials Management			
Determine fate of hazardous waste permit.			X
Wastewater Discharge			
Determine fate of NPDES permit.			X
Air Emissions			
Determine fate of air permits.			X
Asbestos			
Determine where asbestos must be abated.			X

TABLE ES-1 BCT/Project Team Action Items

Action Item	Program Review Item	Status	
		In Progress	To Be Performed
NEPA			
Prepared required NEPA documentation to support preparation of Decision Documents for remedial actions	27	X	
CERCLA 120(h)(3) CONSIDERATIONS			
Environmental Condition of Property			
Perform further studies to determine environmental condition for unevaluated properties	9	X	
	9	X	
Suitability for Property Transfer			
Determine required and acceptable deed restrictions or controls	28, 32		X
Integrate disposal and reuse priorities into restoration and compliance scheduling	31, 17, 18		X
Develop base reuse parcel map based on impact from BEST and the EIS	28	X	
Complete EBS and develop environmental condition of property map	22	X	
COMMUNITY RELATIONS			
Update Community Relations Plan	14	X	
Implement CR items from Section 4.2 regarding public meetings	14		X
Keep onbase and public Administrative Records current	14		X

TABLE ES-1 BCT/Project Team Action Items

Action Item	Program Review Item	Status	
		In Progress	To Be Performed
COMMUNITY RELATIONS	14		X
Develop proposed plans in fact sheet format	14		X
Ensure that all commentors receive responsiveness summary	14		X
Ensure development of Environmental Restoration Program fact sheets and accessibility to public	14		X
MANAGEMENT AND ADMINISTRATIVE SUPPORT ACTIVITIES			
Establish and maintain Data Base for information management	21		X
Establish background concentration levels for use in risk assessments	23		X

1.0 INTRODUCTION AND SUMMARY

As a result of past waste and resource management practices at Naval Base Charleston, some areas have become contaminated by various hazardous substances, pollutants, contaminants, or wastes. In response, a number of environmental restoration programs have been initiated at the base. In addition, compliance with applicable laws and regulations ensures that present waste and resource management practices conducted by the Component and property tenants are carried out in a manner that protects human health and the environment.

The purpose of this BRAC Cleanup Plan (BCP) is to summarize the current status of the Naval Base Charleston environmental restoration and associated environmental compliance programs as they relate to base closure activities. The BCP presents a comprehensive strategy for implementing response actions necessary to protect human health and the environment. This strategy integrates activities being performed under both the Installation Restoration Program (IRP) and associated environmental compliance programs to support full restoration of the base for prompt community reuse. The BCP is a dynamic document that will be updated regularly to incorporate newly obtained information and reflect the completion or change in status of any cleanup actions. This BCP was prepared with information available as of March 1994.

This BCP is a planning document. Information, schedules, and actions presented in this BCP do not necessarily represent those that have been or will be approved by the Navy or Federal and state regulatory agencies. It was necessary to make certain assumptions and interpretations to develop the estimates contained within this plan. As additional data become available, implementation programs and cost estimates could be dramatically altered. Such changes would then be reflected in future updates to the BCP.

Chapter 1 describes the objectives of the environmental restoration program, explains the purpose of the BCP, introduces the Project Team formed to review and implement the program, provides a brief history of the base, and outlines the property acquisition and tenant information.

Chapter 2 summarizes the current status of the Naval Base Charleston property disposal planning process and describes the relationship of the disposal process with other environmental programs.

Chapter 3 summarizes the current status and past history of the Naval Base Charleston IRP and associated environmental compliance programs, community relations activities that have occurred to date, and the present environmental condition of the base property.

Chapter 4 describes the basewide strategy for environmental restoration, including the strategies for dealing with each site on the base. This chapter also includes plans for managing underground storage tanks (USTs), and summarizes plans for managing responses under other compliance programs.

Chapter 5 provides master schedules of planned or anticipated activities to be performed throughout the duration of the environmental restoration program, including associated compliance activities.

Chapter 6 describes specific technical and/or administrative issues to be resolved and presents a strategy for resolving these issues.

In addition to the main text, the following appendices are included in this document:

- Appendix A — tables presenting funding requirements, as well as a summary table of past costs for the environmental restoration program.
- Appendix B — technical documents, listings of previous environmental restoration program deliverables by program and by site.
- Appendix C — no summaries of decision documents have been developed but will be added when they become available.
- Appendix D — summaries of each decision document for each site or operable unit for which a no further action (NFA) decision has been made (when available).
- Appendix E — working conceptual models for sites as they are developed.

1.1 Environmental Response Objectives

The objectives of the base closure environmental restoration program at Naval Base Charleston are as follows:

- Protect human health and the environment.
- Strive to meet reuse goals established by the community reuse committee.
- Comply with all Federal, state, and local statutes and regulations.
- Conduct an environmental baseline survey (EBS).
- Continue efforts to identify all potential contaminated areas.
- Incorporate any new sites into the RFI Work Plan as appropriate.
- Establish priorities for environmental restoration and restoration-related compliance activities (so that property disposal and reuse goals can be met).

- Initiate selected removal actions to control, eliminate, or reduce risks to manageable levels.
- Complete RFIs and risk assessments as soon as practicable for each site in order of priority which takes into account both environmental concerns and redevelopment plans.
- Develop, screen, and select remedial actions (RAs) that reduce risks in a manner consistent with statutory requirements.
- Commence RAs for environmental and property disposal and reuse priority areas as soon as practicable.
- Advise the real estate arm of SOUTHNAVFACENGCOM and the Base Closure Office of property that is deemed suitable for transfer by deed and properties that are not suitable for transfer because they are either not properly evaluated or pose an unacceptable human health or environmental risk.
- Conduct long-term RAs for groundwater and any necessary 5-year reviews for small quantity wastes left onsite.
- Establish interim and Long-Term Monitoring (LTM) plans for RAs as appropriate.

1.2 BCP Purpose, Updates, and Distribution

This BCP presents, in summary fashion, the status of the Naval Base Charleston's environmental restoration and compliance programs and the comprehensive strategy for environmental restoration and restoration-related compliance activities. It lays out the response action approach at the installation in support of base closure. In addition, it defines the status of efforts to resolve technical issues so that continued progress and implementation of scheduled activities can occur. The Naval Base Charleston BCP Strategy and Schedule is designed to streamline and expedite the necessary response actions in order to facilitate the earliest possible disposal and reuse activities. The BCP Schedule is contingent upon availability of funding.

The BCP will be updated as major actions are initiated and/or completed. The Naval Base Charleston BCP will be reviewed quarterly to determine the need for updates. The BRAC Environmental Coordinator will be responsible for the updates.

1.3 BCT/Project Team

The Naval Base Charleston BRAC Cleanup Team (BCT) has been established and is composed of two BRAC Environmental Coordinators (BECs) representing DOD, an EPA Region IV representative, and a South Carolina Department of Health and Environmental Control

(SCDHEC) representative. A copy of the BCT Partnering Charter is shown in Figure 1-1. Formal BCT meetings are held each month and provide the mean of conducting periodic program reviews and attainment of consensus on decisions with Federal and state regulators. An ongoing dialogue is accomplished by having an EPA team member located onsite and having access to the SCDEHC local district office. The BRAC Cleanup Project Team includes representatives of EPA Region IV, SCDHEC, SOUTHNAVFACENGCOM, CNSY, and other key participants including the Building Economic Solutions Together (BEST) Committee and other technical consultants. Table 1-1 lists the team members and specifies their roles and responsibilities.

1.4 Brief History of Installation

Naval Base Charleston is located on the banks of the Cooper River in Charleston County, South Carolina, approximately 5 miles north of the city of Charleston. The installation consists of two major areas; an undeveloped spoil area on the east bank of the Cooper River on Daniel Island in Berkeley County, and a developed area on the west bank of the Cooper River. The developed portion of Naval Base Charleston lies on a peninsula, bounded on the west by the Ashley River and on the east by the Cooper River. Naval Base Charleston facilities adjacent to the main developed area include the Naval Regional Medical Center (NRMC) and the Chicora Tank Farm, both located within 0.5 mile of the western boundary of the installation. Figure 1-2 shows the site location of Naval Base Charleston.

In addition to the areas listed above, there are four non-contiguous properties that are integral parts of the Naval Base Charleston. These are the Short Stay recreational facility in Monck's Corner, the degaussing facility in downtown Charleston, the Navy Annex facility adjacent to the Charleston Air Force Base, and the Naval Electronics facility on Sullivan's Island. These facilities are described in greater detail in Section 1.5 of this plan. All site locations are shown in Figure 1-2 except for the Short Stay facility; it's location is shown in Figure 1-2(a).

The majority of the land use adjacent to the main base is industrial and low-income residential. Industrial facilities are located to the north and south of the main part of the base; low-income residential and minor commercial facilities are located along Spruill Avenue, which parallels the western border of the base.

Naval Base Charleston covers approximately 3,300 acres. Navy activities and commands which maintain real property on the base include:

- | | | |
|----|---------------------------------------|----------------|
| 1) | Charleston Naval Shipyard (CNSY) | 1,908.22 acres |
| 2) | Naval Station (NAVSTA) | 1,153.11 acres |
| 3) | Fleet Industrial Supply Center (FISC) | 192.11 acres |

EPA/SCDHEC/DOD
NAVAL BASE CHARLESTON
BRAC CLEANUP TEAM
PARTNERING CHARTER

Goal: To execute appropriate environmental response actions in an expeditious and effective manner in order to facilitate the reuse of the Naval Base Charleston, while protecting human health and the environment.

Mission: To structure an effective program for environmental response actions that will be a model for similar efforts elsewhere.

Vision: The BRAC Cleanup Team (BCT) is empowered and operates cohesively to achieve our environmental goal.

We, the partners, commit to teamwork to achieve these objectives:

- Conduct "bottom-up" review and prepare BRAC Cleanup Plan (BCP)
- Ensure effective communication among BCT and Project Team members
- Ensure innovative management, planning and coordination of multiple activities while embracing a bias for cleanup instead of study
- Determine innovative technologies that can be applied to expedite remedies and opportunities for application of presumptive remedies
- Eliminate barriers to a cost-effective program
- Seek consensus on short and long-term budget and implementation plans
- Foster community participation
- Resolve conflicts through a coordinated work effort to avoid adversarial relations
- Maintain professionalism and enthusiasm, and encourage communication to make the partnership educational and enjoyable
- Reinforce the partnered relationship with honest feedback and continual improvement throughout the life of the program
- Utilize a systematic approach to problem solving
- Utilize technical resources of all organizations

J. Ann Ragan

Patricia V. Zwick

W. G. T. Biehl *ERL*

Signed: November 4, 1993

TABLE 1-1 CURRENT BCT/PROJECT TEAM MEMBERS

BCT MEMBERS				
Name	Title	Phone	Organization	Role/Responsibility
Pat Franklin	BRAC Environmental Coordinator (BEC)	(803) 743-0691 (SOUTHDIV) (803) 743-8127 (BRAC Office) (803) 743-9947 (fax)	SOUTHDIV c/181 NAVBASECHAS c/N4BEC	DOD BCT Member
Bobby Dearhart	BRAC Environmental Coordinator (BEC)	(803) 743-2443 (Shipyard) (803) 743-8127 (BRAC Office) (803) 852-1931 (pager) (803) 743-9947 (fax)	CNSY c/2308 NAVBASECHAS c/N4BEC	DOD BCT Member
Doyle Brittain	Senior Remedial Project Manager (RPM)	Atlanta: (404) 347-3016 (404) 347-5205 (fax) Local: (803) 743-8127	EPA Region IV Waste Management Division	Federal BCT Member
Ann Ragan	Federal Facility Liaison	Columbia: (803) 734-4721 (803) 734-5199 (fax) Local: (803) 743-8127	SCDHEC Environmental Quality Control Division	State BCT Member
CURRENT BRAC CLEANUP PROJECT TEAM MEMBERS				
Name	Title	Phone	Organization	Role/Responsibility
Steve Beverly	Attorney Advisor	(803) 743-0708	SOUTHDIV c/09CB	Legal Counsel
Pat Cline	Natural Resources	(803) 743-0588	SOUTHDIV c/243	Natural Resources
Thuane Fielding	Environmental Engineer	(803) 743-0513	SOUTHDIV c/1876 Environmental Division	RPM
Daryle Fontenot	Environmental Engineer	(803) 743-0607 (803) 743-0465 (fax)	SOUTHDIV c/1841 Petroleum Division	UST
Tony Hunt	Environmental Engineer	(803) 743-0525	SOUTHDIV c/1877 Environmental Division	RPM
Ron Johnson	Architect	(803) 743-0990	SOUTHDIV c/203RJ Environmental Planning Division	Historical and Cultural Resource Review
Pano Kordonis	Environmental Engineer	(803) 743-0565 (803) 743-0465 (fax)	SOUTHDIV c/1825 Hazardous Waste Division	Hazardous Wastes
Sue Lawley	Public Affairs Officer (PAO)	(803) 743-0771	SOUTHDIV c/OPP Public Affairs Office	Public media assistance

TABLE 1-1 CURRENT BCT/PROJECT TEAM MEMBERS

CURRENT BRAC CLEANUP PROJECT TEAM MEMBERS

Name	Title	Phone	Organization	Role/Responsibility
Linda Martin	Environmental Engineer	(803) 743-0574 (803) 743-0465 (fax)	SOUTHDIV c/1802 Operations Division	Contracts
Will Sloger	Planner	(803) 743-0797	SOUTHDIV c/203 Environmental Planning Division	EIS Preparation
Shirley Washington	Realty Specialist	(803) 743-0489	SOUTHDIV c/241 Real Estate Division	Real Estate
LCDR Allen	Public Affairs Officer (PAO)	(803) 743-3940 (803) 743-2545 (fax)	NAVBASECHAS c/06 Base Closure Office	Public media and news releases, community feedback
CAPT J. Augustin	Base Closure Officer (BCO)	(803) 743-9948 (803) 743-9947 (fax)	NAVBASECHAS c/N4 Base Closure Office	Officer in charge of Base Closure
Rick Davis	Engineer	(803) 743-3604 (803) 743-9947 (fax)	NAVBASECHAS c/N41 Base Closure Office Facilities/Real Estate	Environmental Closure Planning Subcommittee
David Epps	Computerized Project Manager	(803) 743-8127	NAVBASECHAS c/N42 Base Closure Office	Base Closure Office Computer Services
CDR Jim Moore	Base Transition Coordinator (BTC)	(803) 743-9985 (803) 743-9947 (fax)	NAVBASECHAS c/N4BTC Base Closure Office	Community Liaison Federal Agency Liaison
David Sealander	Environmental Division Director	(803) 743-9629 (803) 743-2545 (fax)	NAVBASECHAS c/N34 Environmental Division	Environmental Closure Planning Subcommittee
CAPT Tzomes	Regional Environmental Coordinator (REC)	(803) 743-2670 (803) 743-2545 (fax)	NAVBASECHAS c/N3 Operations Department	TRC Chairman
LT Gil Wolfe		(803) 743-5557 (803) 743-2554 (fax)	NAVSTACHAS	Environmental Closure Planning Subcommittee
Jim Beltz	Public Affairs Officer (PAO)	(803) 743-6233	CNSY c/1160 Congressional and Public Affairs Office	CNSY Media and News Release Coordination
CDR S.V. Bisceglia	Operations Closure Officer	(803) 743-4216	CNSY c/300C CNSY Operations Closure Office	CNSY Closure Operations Coordination

TABLE 1-1 CURRENT BCT/PROJECT TEAM MEMBERS

CURRENT BRAC CLEANUP PROJECT TEAM MEMBERS

Name	Title	Phone	Organization	Role/Responsibility
Bill Brasel	Environmental Division Head	(803) 743-5519 (803) 743-6055 (803) 743-1475 (fax)	CNSY c/106.2 Environmental Division	Environmental Compliance Program at CNSY Environmental Closure Planning Subcommittee
Mike Simmons	Radiological Controls Engineering	(803) 743-3130	CNSY c/105.2	CNSY Nuclear Closure and Radiological Control POC
Ned Johnson	Deputy Director Radiological Control	(803) 743-6632	CNSY c/105.1 Radiological Control Office	CNSY Nuclear Closure and Radiological Control POC
Ralph Laney	Environmental Remediation Division Head	(803) 743-4186 (803) 743-4897	CNSY c/106C Environmental Remediation Division	Environmental Remediation Coordination
Mitch Mascoe	Environmental Engineer	(803) 743-5519 (803) 743-1475 (fax)	CNSY c/106.21 Environmental Controls Division	HW Permit
Michele McCoy	Legal Officer	(803) 743-3178	CNSY c/1130 CNSY Legal Office	CNSY Legal Council
Jim McNeil	Director Radiological Control	(803) 743-3552	CNSY c/105 Radiological Control Office	CNSY Nuclear Closure and Radiological Control POC
Wayne Neville	Environmental Engineer	(803) 743-3452 (803) 743-9581	CNSY c/106.25 Environmental Division	Hazardous Waste
Bill Strickland	Engineering Division Head	(803) 743-4981	CNSY c/440 Public Works Office	Utilities/Maps
Marvin Sturdivant	Environmental Protection Specialist	(803) 743-5519 (803) 743-1475 (fax)	CNSY c/106.2 Environmental Controls Division	SWMUs
David Walton	Environmental Engineer	(803) 734-4814 (803) 734-5199 (fax)	Division of Hazardous and Infectious Waste Management	Naval Base Charleston Project Manager
Butch Bonner	DRMO, Chief	(803) 743-3008 (803) 743-8040 (fax)	DRMO	Environmental Closure Planning Subcommittee
Bob Veronee	Safety Director	(803) 743-4086 (803) 743-6371 (fax)	FISC c/05	Environmental Closure Planning Subcommittee

TABLE 1-1 CURRENT BCT/PROJECT TEAM MEMBERS

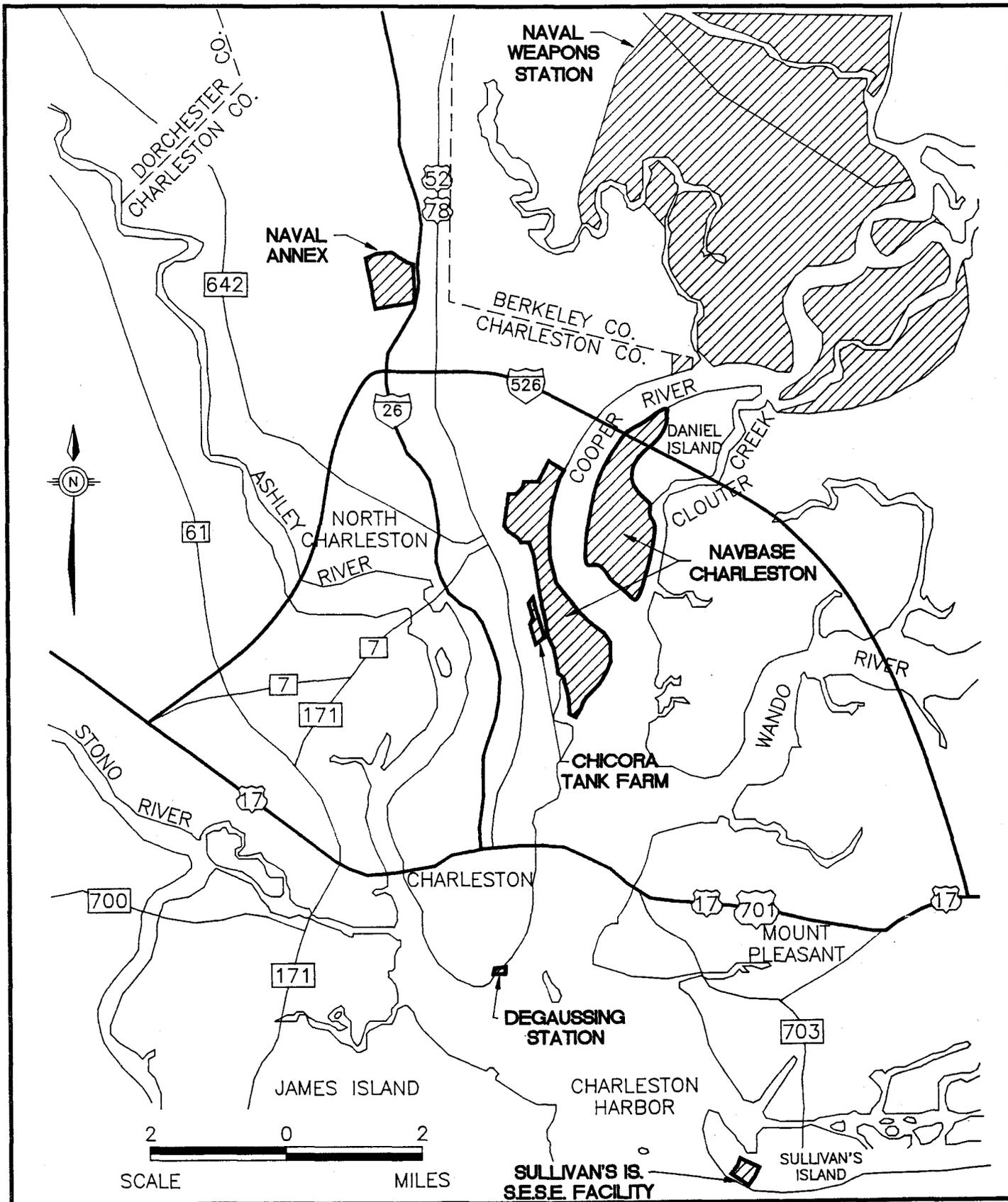
CURRENT BRAC CLEANUP PROJECT TEAM MEMBERS

Name	Title	Phone	Organization	Role/Responsibility
John Barnes	Industrial Hygienist	(803) 743-6100 (803) 743-0246 (fax)	NAVHOSPCHAS	Environmental Closure Planning Subcommittee
Barry Lewis	Environmental Engineer	(803) 764-4010 (803) 764-4177 (fax)	NAVWPNSTACHAS c/0442	Environmental Closure Planning Subcommittee
Dr. Elmer Aikens	Toxicologist	(404) 347-1586	U.S. EPA Region IV	Risk Assessment
Marion Hopkins	NEPA Specialist	(404) 347-3776	USEPA Region IV	NEPA
Diane Jackson	Chemist	(404) 639-6070	USEPA ATSDR DOD Division	Health Assessment
Pete Raack	Attorney	(404) 347-2641 ext. 2243	USEPA Region IV	Legal Affairs
Carl Terry	Public Affairs Specialist	(404) 347-3004	USEPA Region IV	Public Affairs
Joe Bowers	Hydrogeologist	Columbia: (803) 734-5484 (803) 734-5199 (fax)	SCDHEC Division of Hydrogeology	Hydrogeology
Wayne Fanning	Assistant Director of Trident District EQC	(803) 740-1590 (803) 740-1595 (fax)	SCDHEC Chasn Division Trident EQC	Contractors Technical Representative
Tim Metten	Hydrogeologist	(803) 734-5328	SCDHEC Division of Groundwater Protection	UST Specialist
Rick Richter	Environmental Quality Manager	(803) 740-1590 (803) 740-1595 (fax)	SCDHEC Chasn Division Trident EQC	Hazardous Waste Consultant
Bruce Campbell	Water Resources Director		US Geological Survey	
Diane Duncan		(803) 727-4707 (803) 727-4218 (fax)	US Fish and Wildlife Department of Interior	Natural Resource Trustee
Waynon Johnson	Coastal Resources Coordinator		National Oceanic and Atmospheric Administration (NOAA)	Natural Resource Trustee
Jim Lee	Regional Environmental Officer		US Department of Interior	Natural Resource Trustee

TABLE 1-1 CURRENT BCT/PROJECT TEAM MEMBERS

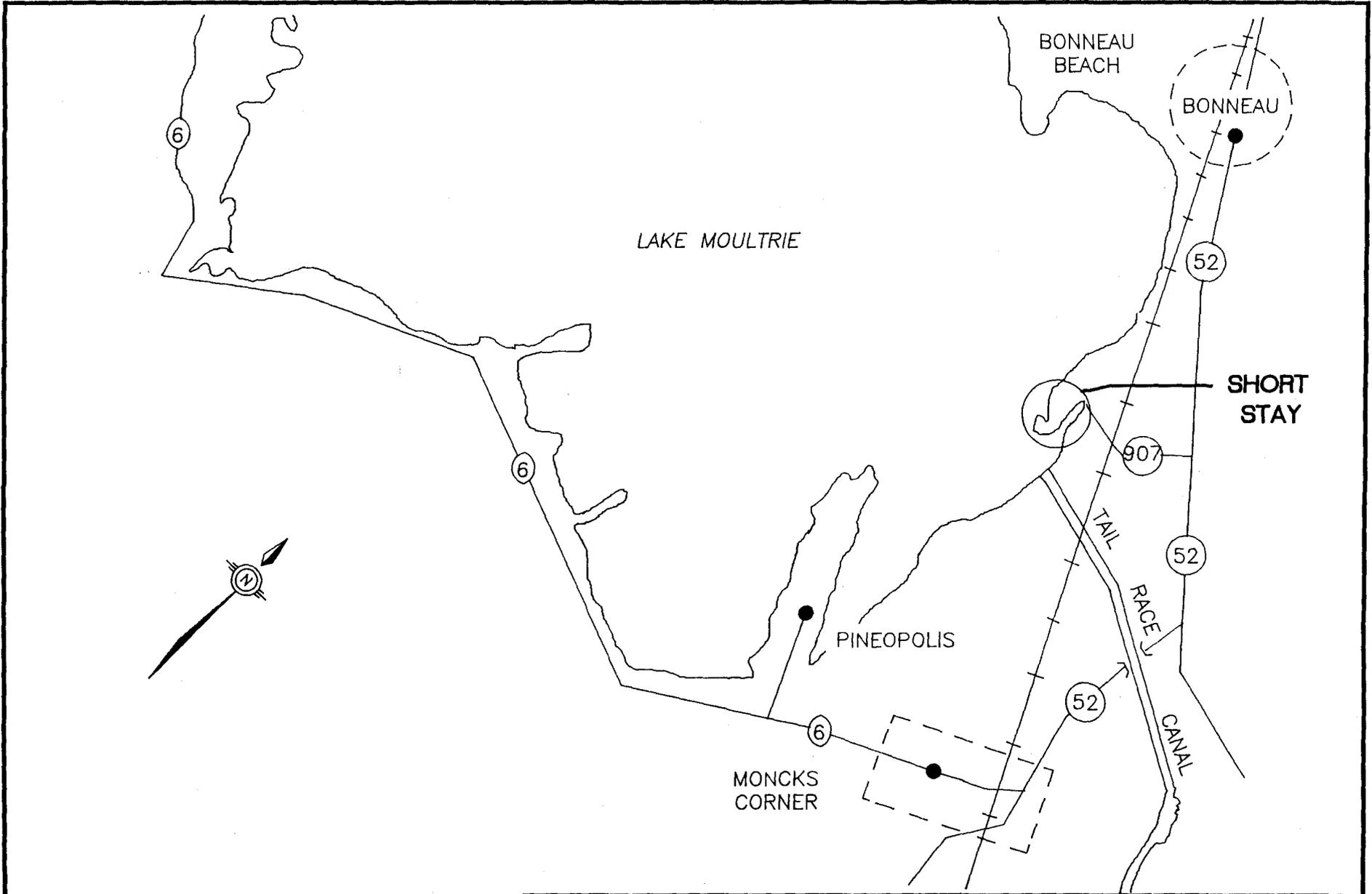
CURRENT BRAC CLEANUP PROJECT TEAM MEMBERS

Name	Title	Phone	Organization	Role/Responsibility
Rob Mikell		(803) 744-5847 (803) 744-5838 (fax)	South Carolina Coastal Council (SCCC)	Natural Resource Trustee
Dr. Bob Van Dolah		(803) 762-5048	SC Wildlife and Marine Resources	Sediment Samples
Jane Settle		(803) 762-5068 (803) 762-5007 (fax)	SC Wildlife and Marine Resources	Natural Resource Trustee
Madeline McGee	Co-Chairman	(803) 724-0670 (803) 724-0674 (fax)	BEST	BEST Policy Committee
Dave Backus	Clean Contractor Project Manager	Memphis: (901) 372-7962 (901) 372-6023 (fax) Local: (803) 744-4449	EnSafe/Allen & Hoshall	EBS and BCP Preparations



BRAC CLEAN UP PLAN
 NAVAL BASE
 CHARLESTON

FIGURE 1-2
 SITE LOCATION



NO SCALE



BRAC CLEAN
UP PLAN
NAVAL BASE
CHARLESTON

FIGURE 1-2A
SHORT STAY
LOCATION MAP

4)	Naval Regional Medical Center (NRMC)	23.79 acres
5)	Fleet and Mine Warfare Training Center (FMWTC)	10.40 acres
6)	Fleet Ballistic Missile Submarine Training Center (FBMSTC)	6.88 acres
7)	Navy Reserve Center (NRC)	<u>4.50 acres</u>
	TOTAL ACREAGE	3,299.01 acres

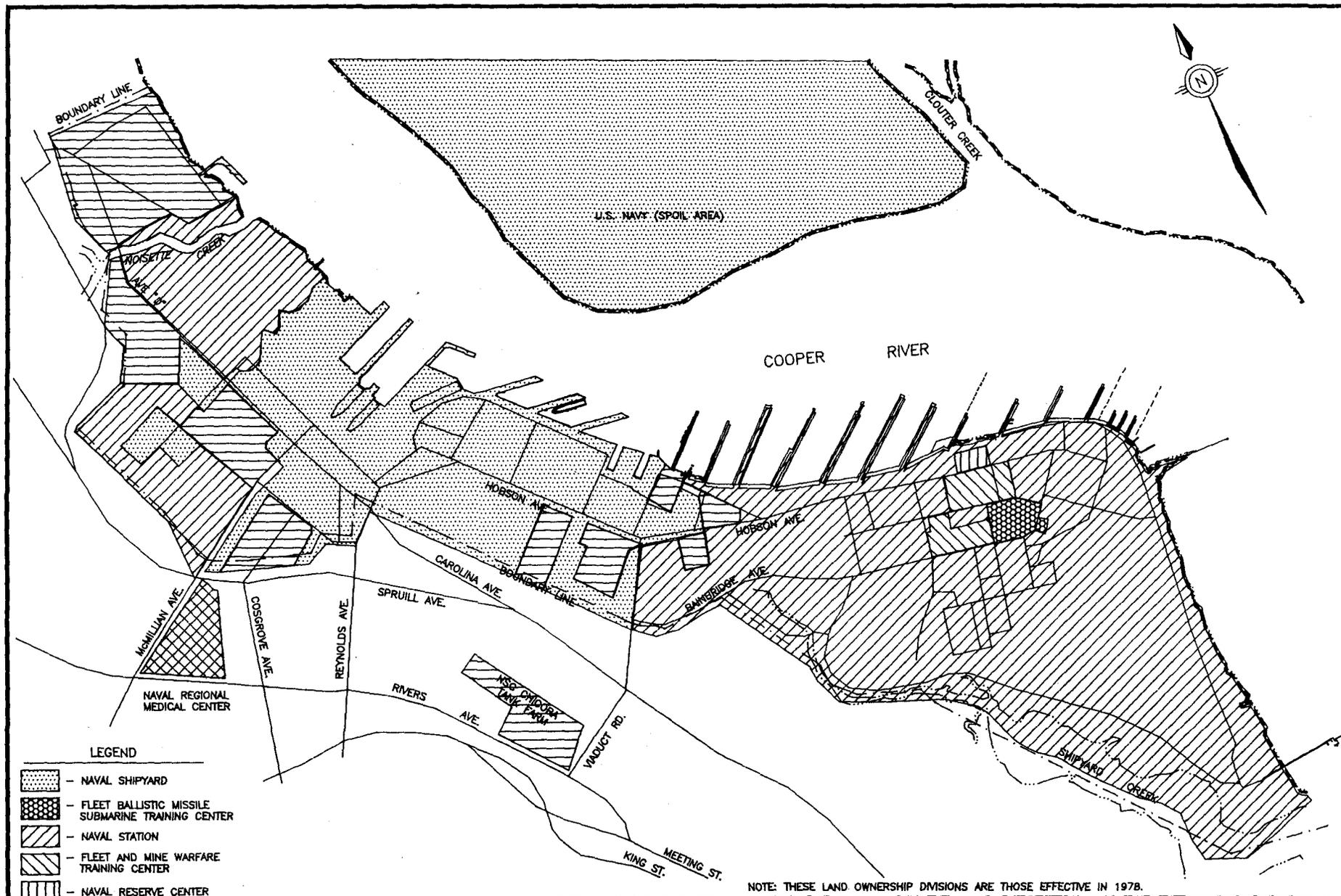
The locations of these land holdings are shown in Figure 1-3. CNSY controls the spoil area to the east of the Cooper River and the majority of the central one-third of the developed area on the west bank of the river. There are no current plans to excess the spoils area east of the Cooper River. The southern third of the main part of the base is controlled primarily by the Naval Station. FISC and the Naval Station are the major landholders on the northern third of the developed area. FISC also controls the Chicora Tank Farm adjacent to the western boundary of the installation.

On August 31, 1901, the U.S. Navy took possession of 2,250 acres of land, much of it composed of marsh areas, and established the Charleston Navy Yard. The original mission of the new Navy Yard was to make repairs to smaller vessels of the fleet and supply them with stores. This mission has been modified and expanded over the life of the installation in response to American military involvements as well as additional operational requirements. This has included a significant increase in land holdings and development, as well as a major increase in industrial operations and ship support activities. Table 1-2 provides a compilation of the history of installation operations to the present date.

During its development, many low lying areas of the base were filled with dredged spoils from the Cooper River. Filling operations began about 1918 near Noisette Creek on the northern end of the base and continued through the 1960s, after which time the spoil was deposited on the opposite side of the Cooper River. Figure 1-4 shows areas filled by dredged spoil and solid waste and the approximate dates of filling. Base-related activities, as well as activities both upriver and downriver, may have impacted these dredged spoil materials; however, this is unknown at this time. It is known that background contamination levels fluctuate widely across the base due to the lack of homogeneity in soil conditions. Current investigations under the RFA/RFI program will attempt to assess any impact resulting from dredged spoil usage.

1.4.1 Geology

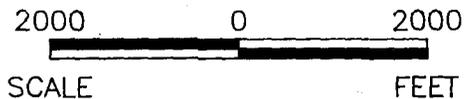
The geology of the Charleston area is typical of the southern part of the Atlantic Coastal Plain. A seaward-thickening wedge of Cretaceous and younger sediments is underlain by older igneous and metamorphic basement rock (see Figure 1-5). At Naval Base Charleston, Recent and/or Pleistocene sands, silts, and clays of high organic content are exposed at the surface. These



LEGEND

- NAVAL SHIPYARD
- FLEET BALLISTIC MISSILE SUBMARINE TRAINING CENTER
- NAVAL STATION
- FLEET AND MINE WARFARE TRAINING CENTER
- NAVAL RESERVE CENTER
- FLEET AND INDUSTRIAL SUPPLY CENTER
- NAVAL REGIONAL MEDICAL CENTER

SOURCES: SOUTHDM, n.d. ESE, 1981.



NOTE: THESE LAND OWNERSHIP DIVISIONS ARE THOSE EFFECTIVE IN 1978.



BRAC CLEAN UP PLAN
NAVAL BASE
CHARLESTON

FIGURE 1-3
LOCATIONS OF
LAND HOLDINGS

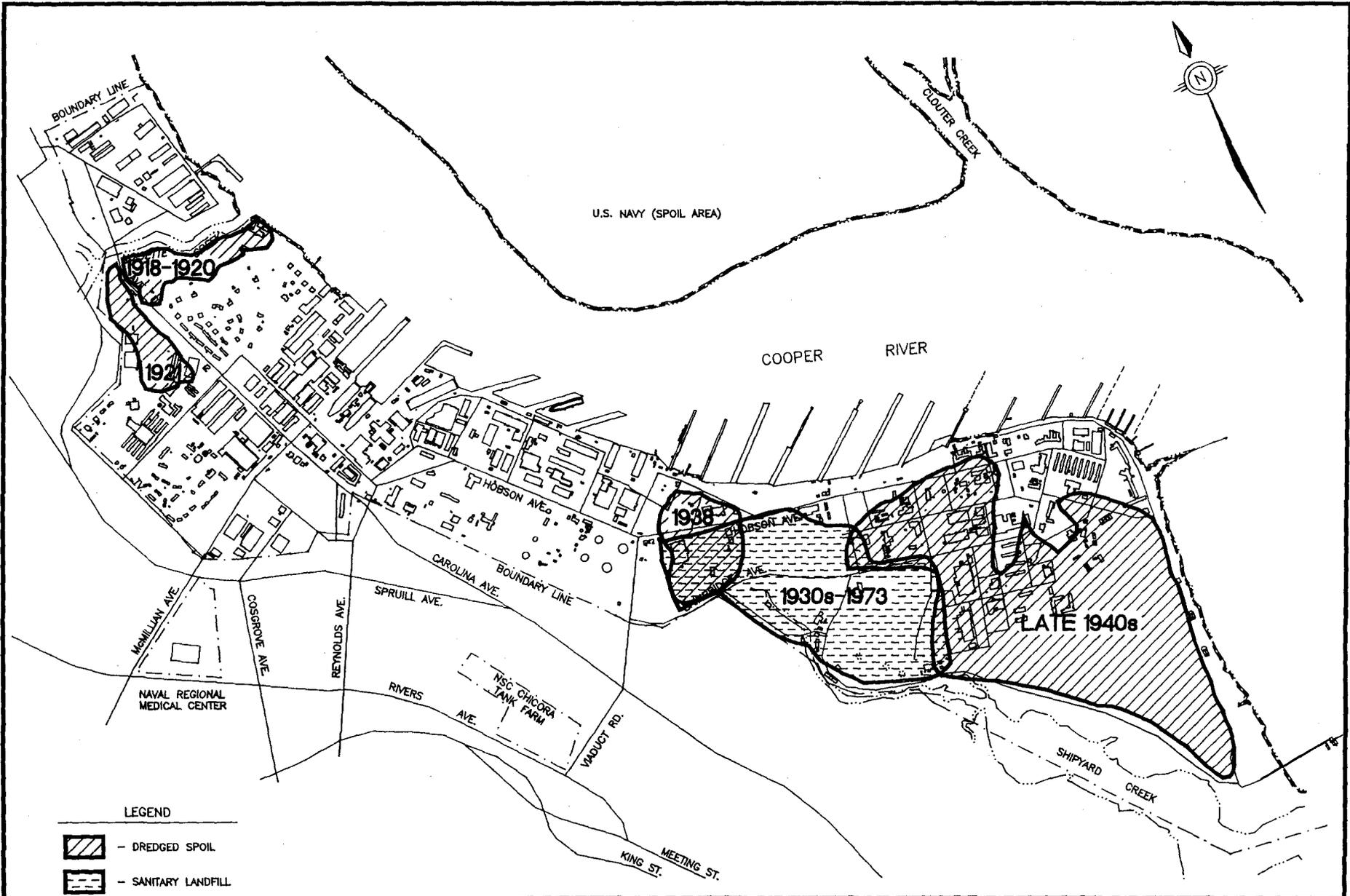
DWG DATE: 02/18/94 DWG NAME: 760LANDC

TABLE 1-2. HISTORY OF INSTALLATION OPERATIONS

Period	Type of Operation	Hazardous Substance Activities	Map Reference (See Figure 1-6)
Pre — 1901	Plantation agricultural activities, followed by establishment of City Park	None known	None
1901 — 1910	New Navy Yard construction activities	Construction/demolition	A
1911 — 1920	<p style="text-align: center;">World War I Period</p> Activities included major alterations and overhaul of Naval vessels, construction of smaller fleet vessels (destroyers), and manufacture of clothing and machine parts	Activities such as weapons storage, foundry and machine shop operations, paint waste disposal, plating operations, and POL handling	B
1920 — 1932	Major operational scaleback, with activities consisting primarily of routine maintenance of fleet vessels	Activities such as paint waste disposal, plating shops, and POL handling	C
1932-1941	Major increase in Navy Yard operations, with activities including PWA and WPA financial aid projects and increased vessel support/overhaul activities	Activities such as construction/demolition, weapons storage, foundry and machine shop operations, paint waste disposal, plating operations, POL handling, and waste oil and sludge disposal	D
1941 — 1945	<p style="text-align: center;">World War II Period</p> Activities included facilities improvements, logistical support to operating forces, new vessel construction, repair, overhaul, alteration, conversion, and homeport docking	Activities such as construction/demolition, weapons storage, foundry and machine shop operations, paint waste disposal, plating operations, POL handling, and waste oil and sludge disposal	E
1945 — 1952	Naval Station established in 1947, with Navy Yard converted to Naval Shipyard. Activities included vessel decommissioning and diminished operations related to repair, overhaul, alteration, conversion, and homeport docking	Activities such as weapons storage, foundry and machine shop operations, paint waste disposal, plating operations, POL handling, and waste oil and sludge disposal	F

TABLE 1-2. HISTORY OF INSTALLATION OPERATIONS

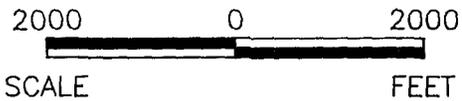
Period	Type of Operation	Hazardous Substance Activities	Map Reference (See Figure 1-6)
1952 — 1961	Activities included initiation of firefighting training, fleet and mine warfare training, and routine maintenance and overhaul of Naval fleet vessels, including submarines	Activities such as firefighter training, foundry and machine shop operations, paint waste disposal, plating operations, POL handling, and waste oil and sludge disposal	G
1961 — Present	Nuclear-powered vessel design, overhaul, and support; Establishment of Nuclear Engineering Department, NSC (one of the largest Naval Supply Centers), and NRMC	Activities such as firefighter training, foundry and machine shop operations, paint waste disposal, plating operations, POL handling, waste oil and sludge disposal, and radiological waste handling	H



LEGEND

-  - DREDGED SPOIL
-  - SANITARY LANDFILL

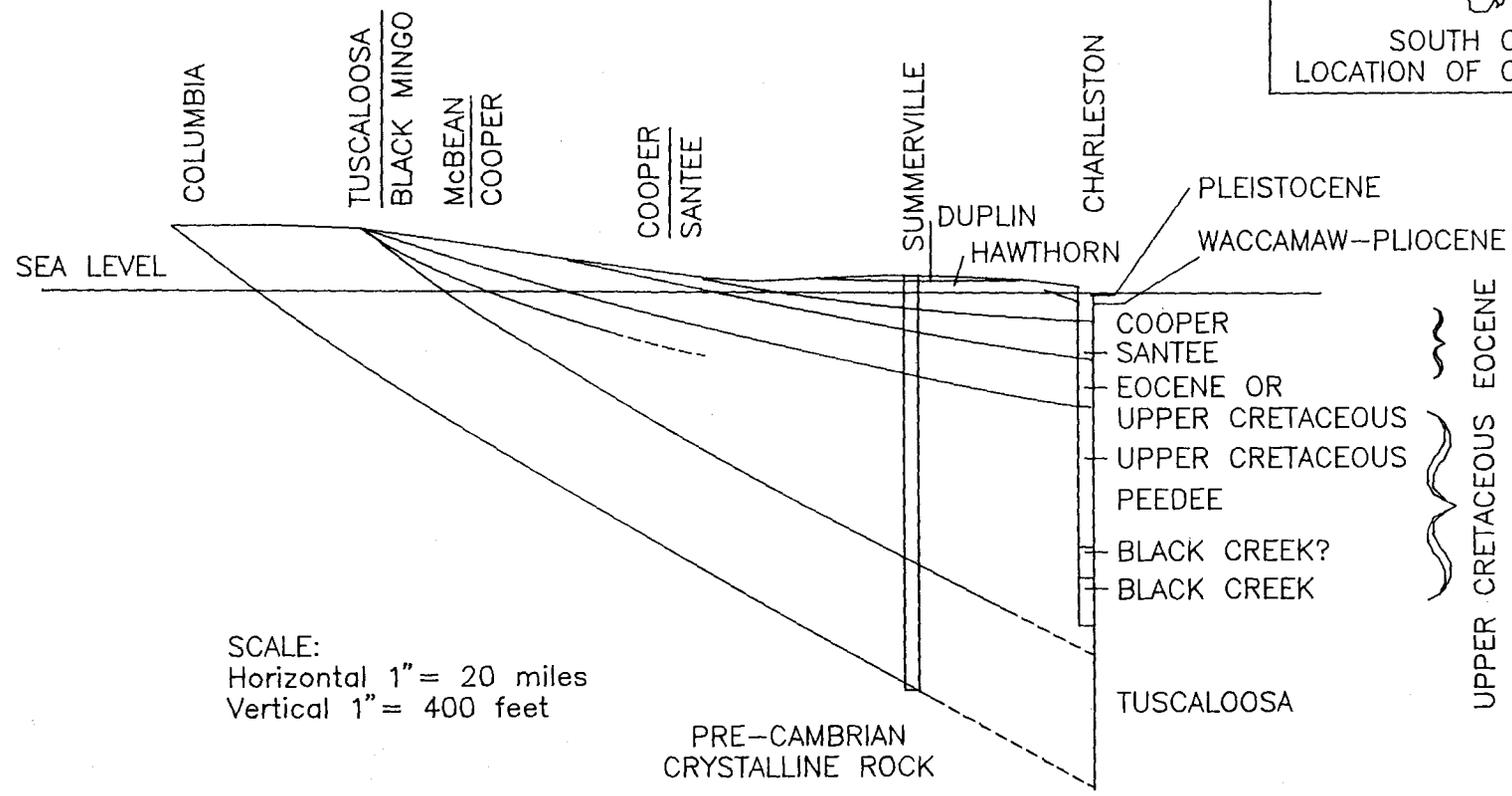
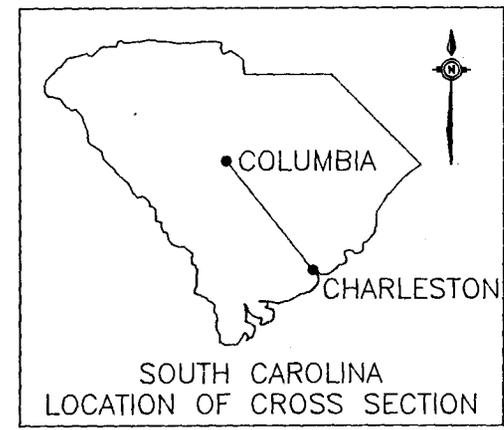
SOURCES: SOUTH DIV, n.d. ESE, 1981.



BRAC CLEAN UP PLAN
 NAVAL BASE
 CHARLESTON

FIGURE 1-4
 AREAS FILLED AND
 APPROXIMATE DATES
 OF FILLING OPERATIONS

DWG DATE: 02/18/94 DWG NAME: 760FILCH



SCALE:
Horizontal 1" = 20 miles
Vertical 1" = 400 feet



BRAC CLEAN UP PLAN
NAVAL BASE
CHARLESTON

FIGURE 1-5
GEOLOGIC CROSS SECTION

SOURCE: NAVFAC, 1976 & ESE, 1981.

DWG DATE: 02/18/94 | DWG NAME: 760EWCRS

materials are underlain by a plastic calcareous clay known as the Cooper Marl. The Cooper Marl is underlain by the Santee Limestone and older rocks.

The surface soils on Naval Base Charleston have been extensively disturbed and re-worked by a history of intensive use and improvement. The natural surface soils were probably fine-grained materials typical of tidal marsh environments. Most of the southern portion of the base has been covered with dredged spoil. This spoil is an unsorted mixture of sands, silts, and clays. Most areas of the base have been either filled or re-worked. No data are available concerning permeability rate or range for the soils at Naval Base Charleston; however, the permeability of the surface soils is rather low, as evidenced by the fine-grained nature of the soils and the amount of standing water following a significant rain event.

Most potable water on the Charleston peninsula is supplied by surface water sources (Edisto River). Although both the Cooper Marl and the Santee Limestone function as aquifers in other areas, neither is significantly developed in the Charleston area. In the vicinity of Naval Base Charleston, the quality of the water from the Santee is not suitable for potable supply.

In the Charleston area, the Cooper Marl is rather impermeable and acts as the confining bed for the Santee, which is not as permeable as in other areas and forms a confined aquifer. Groundwater in the Santee, which occurs at about 328 feet below mean sea level (MSL), flows generally to the southeast. Some wells in the vicinity of Naval Base Charleston are pumping from the Santee for industrial purposes. In July 1981, the water level of a well in the Santee under Naval Base Charleston measured 15 feet MSL, indicating that the hydraulic gradient across the confining bed (Cooper Marl) is artesian. That is, water from the Santee moves upward through the Cooper to discharge into the incised river valleys.

In the shallow aquifer on Naval Base Charleston, water flows toward the Cooper River or Shipyard Creek, due to the fine-grained texture of the sediments and the level topography on the naval base. The water table is within 3 to 7 feet of the ground surface. The shallow groundwater continually discharges to the Cooper River and Shipyard Creek.

1.4.2 Industrial Operations and Historical Waste Generation

Naval Base Charleston is an extensive industrial complex containing virtually all shipyard and dockside operations required to manufacture, repair, overhaul, and refuel naval vessels. As a result, a wide variety of types of hazardous wastes have been generated over the life of the facility. At the present time, all known hazardous waste generation sites are being evaluated under the RCRA RFA/RFI process. This program is described in Section 3.0 of this plan; a complete list of all Solid Waste Management Units (SWMUs) and Potential Areas of Concern (PAOCs) are included as Tables 3-1 and 3-2 of this plan. These sites are shown in Figure 1-6 located in the map pocket at the end of this plan.

1.5 Off-Base Property/Tenants

On-Base Properties

Table 1-3 provides a description of all Naval Base Charleston tenant commands, non-component tenants, and related activities. Table 1-4 provides property acquisition information for all tracts located on the Naval Base, which are shown on Figure 1-7. This also includes all easements acquired by the Navy for use in conjunction with the main base property.

Off-Base Properties

There are four off-base properties included in the property disposal actions planned. These are the Naval Station Annex, the Sullivan's Island facility, the offbase Degaussing Station, and the Naval Short Stay recreational facility. These are described in the following paragraphs:

The Naval Station Annex is comprised of 42 acres of land used for housing, small maintenance activities, and a variety of other activities. An unnumbered easement was granted to the Highway Dept for the construction of I-26. A Host-Tenant Real Estate Agreement is active with the U.S. Army for the construction and operation of an Army Reserve Center.

The Sullivan's Island facility is operated by the Navy under in-permit N62467-89-RP-00031 with the National Park Service (Fort Sumter National Monument) for operation of the Naval Shipboard Electronic Systems Evaluation Facility. The total area involved is 4.08 acres divided as follows: 0.73 acres in-easement, 0.88 acre in-permit (exclusive use), and 2.47 acres in-permit (joint use). The facility consists of an antenna and ground anchors.

The degaussing station is comprised of a building and degaussing pier located on 2.81 acres in downtown Charleston.

The Short Stay facility is a recreational facility located in Berkeley County, South Carolina for use by Naval Station components and dependents. The facility is comprised of 56.6 acres which is leased from the South Carolina Public Service Authority. There is also a 100 foot right-of-way easement for entrance to the facility. The facility has a number of cabins, playgrounds, camp-sites and associated areas used for recreation. There is also a municipal wastewater treatment plant which discharges to Lake Moultrie under an NPDES permit.

There are a number of easements and other real estate encumbrances associated with these facilities. The status of these is shown in Table 1-5. Figure 1-8 shows the Chicora Tank Farm, which, although it is not technically an offbase property, was not included in the overall base map shown in Figure 1-6. Figures 1-8(a) through (e) show all off base parcels as well as land usage for each. Figure 1-9 shows offbase land use for areas surrounding the base.

TABLE 1-3. ONBASE TENANT UNITS

Organization	Facility (Building Numbers)	
Major Claimant: CINCLANTFLT Host Activity: Naval Station		
Naval Station Tenants	Naval Station	NS46, 31, 53, 2, 200, 186, Various
	Construction Battalion Unit 412	1776, 1777, 1778, 1877-1886, 1892, 1894
	Transient Personnel Unit	NS31, 32
	Naval Station Security	M82, Various
	NAVSURFLTREAD Support Group	23, 681
	NAVSURF SEMMES PMT	NH 1137
	SIMA	NS21, 23, 26, 681, 684, 687, 680
	Submarine Group 6 MF-48 TCT COMP	646
	Submarine Group 6	646, 646A, 664
	Submarine Group 6 Operations Area	NS79, 646, 674, 169
	Submarine Group 6 INTACT SP	646, 646A, 664
	PSA Detachment	654
	Mobile Mine Assembly Group 11	NS ANNEX 2509-2556, VARIOUS
	COMOMAG	NS ANNEX 2536
	COMOMAG (SEA)	NS 7
	Craft OF OPP Mine Squad 22	27, J106
	COMNAVBASE	NH45, NH48
	COMNAVBASE PAO	NH48
	COMNAVBASE FAMILY SERV	NH61
	COMNAVBASE CAAC/NADSAP	
SMMS Performance Monitoring Team	674	
Submarine Squadron 4	X10, 641, 674	
CRUDES Group 2 SCAT	NS1	

TABLE 1-3. ONBASE TENANT UNITS

Organization	Facility (Building Numbers)	
Major Claimant: CINCLANTFLT Host Activity: Naval Station		
Naval Station Tenants	Cruiser Destroyer Group 2	NS1
	Destroyer Squadron 4	NS16
	Destroyer Squadron 36	678
	Destroyer Squadron 20	678
	Mobile Tech Unit 10	NS19, 20, 1791
	Combat Systems Training Group Detachment	672
	CSTG DET Administration	672
	Major Claimant: HRO	M17
	Afloat Training Group ETG Detachment (Major Claimant)	202
	CNET NETPMSA (Major Claimant)	FBM61
	NAVOCEAN CMD Detachment (Major Claimant)	RTC 1
	Navy Marine Relief Society	NH61
	MWR	180
	Bachelors Officers Quarters	28
	Bachelors Enlisted Quarters	
	Navy Exchange	656
	U.S. Postal Service	650
	American Red Cross	NH61
	CNSY Credit Union	
	Navy Federal Credit Union	651
McDonalds	642	
SATO Travel	1197	

TABLE 1-3. ONBASE TENANT UNITS

Organization		Facility (Building Numbers)
Major Claimant: CINCLANTFLT	Host Activity: Naval Station	
Major Claimant: SECNAV	Naval CRM Investment Service	NH53
Major Claimant: CNO	Naval Legal Service	NH55, 1813
Major Claimant: CNO	Navy Marine Trial Judge	NH45
Major Claimant: BUMED	Naval Dental Clinic	675, 1840, 1841
Major Claimant: BUMED	Naval Hospital Branch Clinic	NS79, 80, NH68
Major Claimant: NAVAIR	Naval Air Engineering Center	NS16, 2511
Major Claimant: BUPERS	Navy Band DC	NH46
Major Claimant: NAVSEA	NWS Housing	86 Units, NH62, M1-3A
Major Claimant: NAVFAC	ROICC NAVFAC	NH52,45
Major Claimant: CMC	Marine Corps Reserve Training	Annex 2517,2505, 2520, 2521, 2523, 2533
Major Claimant: CNET	Navy Campus Education Center	646
Major Claimant: CNET	NROTC Area 6	NH45
Major Claimant: NTCC	NTCC	661
Major Claimant: NSGA	NAV SECR Group CSS	NS84, NH 54, 47
Major Claimant: NSGA	NAV SECR Group East	NH49, 53, 4000
Major Claimant: NSGA	Naval Security Group ECCM	1755, NS648
Major Claimant: NAVRESFOR	Reserve Security Group Program Representative	NH46, 47, 49, 51
Major Claimant: NAVRESFOR	REDCOM 7	NH47
Major Claimant: NAVRESFOR	Reserve Construction Force Atlantic Representative	NH47
Major Claimant: NAVRESFOR	Reserve Recruiting Command Detachment	NH47
Major Claimant: NAVSEA	NAVSEA PERA Detachment	NS16

NON-CLF Naval Station Tenants

TABLE 1-3. ONBASE TENANT UNITS

Organization		Facility (Building Numbers)	
Major Claimant: CINCLANTFLT		Host Activity: Naval Station	
NON-CLF Naval Station Tenants	Navy Recruiting Detachment Youth Program		NH45
	NCTSI Detachment Two		673
	Major Claimant: DECA	Defense Commissary Agency	655
	Major Claimant: NAVFAC	SOUTHDIVNAVFACENG	NH45, 21
	Major Claimant: NAVSUP	FISC	NH62, 83
	Major Claimant: NAVSEA	CNSY MAINTENANCE	X10, X11, ANNEX
	Major Claimant: CLF	NAVSEACENLANT DET FSO	1792
Major Claimant: NAVSEA		Host Activity: Naval Shipyard	
NAVSEA Tenant	CNSY		3, 5, 9, 301, 302, 303, Various
	Major Claimant: CLF	NAVSEACENLANT Detachment FSO	1193, NS3
Non-Navy Tenants	Major Claimant: DOE	DOE NRRO Charleston	195
	Major Claimant: DFAS	DFAS-CL-XCH	7
Non-NAVSEA Navy Tenants	Major Claimant: Auditor General	Naval Audit Service Southeast	8A
	Major Claimant: BUMED	Naval Hospital Branch Clinic	58
	Major Claimant: CLF	Naval Station — Telephone	8A
	Major Claimant: NAVAIR	Naval Aviation Warfare Training	232
Non-NAVSEA Navy Tenants: Storage Only	Major Claimant: NAVSUP	FISC	Open Storage
	Major Claimant: NAVSECGRP	NAVSECGRP	400 — Sullivans Island
NAVSEA Non-Tenants (Host): Storage Only	SUPSHIP (CLF)		161, 161A-E
	NWS (CLF)		NS62
	CNSY (CLF)		X10, X11, Annex 2508, 2554
NAF/Private Parties	ESA & Food Service		3, 855, 231, 940, 53, 234, 8
	Bettis Resident Manager		195

TABLE 1-3. ONBASE TENANT UNITS

Organization		Facility (Building Numbers)
Major Claimant: NAVSUP Host Activity: FISC		
FISC	NRCC PHL Detachment	198
	Navy Food Management Team	224
	Ships Store Assistant — Fast Team	224
Non-Tenants (Host)	FISC (NAVSEA)	Warehouses
	FISC (CLF)	NH62
Non-Navy Tenants	Defense Printing Service — SE Area	1628
	Defense Printing Service Detachment Office — Charleston	1628, 198
Non-Navy Tenants	Army Vet Team	193, 1639, 655, 1138, 725
	DRMO	1605-1607, 1627, 1640, 1649
	DDCS	198
	Defense Accounting Office	M766
	DISC — IPC	198
Non-NAVSUP Navy Tenants	PMOLANT	198
	PMOLANT Neutral Duty	198
	COMNAVBASE HRO	M-17
	CNSY (MMF Storage)	191
Non-NAVSUP Navy Tenants	NAVSTA (Fire Storage)	1620
NAF/Private Parties	NEX Cafeteria	198

TABLE 1-3. ONBASE TENANT UNITS

Organization		Facility (Building Numbers)
Major Claimant: COMNAVRESFOR		
Host Activity: Naval Station		
COMNAVRESFOR Tenant	Reserve Readiness Center	RTC 1
	Reserve Cargo Handling Battalion Four	1656, RTC 4
Non-Tenants (Host)	REDCOM Seven (CLF)	NH47, 49, 51
	Reserve Construction Force Atlantic Rep (CLF)	NH47
	Reserve Recruiting Command Detachment (CLF)	NH51
	Reserve Security Group Program Rep (CLF)	NH51
Major Claimant: CNET		
Host Activity: Naval Station		
CNET	Submarine Training Facility	61, 686
	Submarine Training Facility GST	61, 686
	Fleet & Mine Warfare Training	202, 203, 208, 643, 645, 647, 649, 1282-1744
Host: Naval Station Non-Tenants	Navy Campus Education Center	646
	NJROTC Area 6	NH45
	NETPMSA	

TABLE 1-4. PROPERTY ACQUISITION SUMMARY TABLE

Tract Number	Previous Land Owner	Acreage		Acquisition Date
		Fee Land	Easement Land	
I	City of Charleston	171.03/Fee		12 August 1901
II	Cecilia Lawton	258.11/Fee		12 August 1901
III	City of Charleston	735.96/Fee		12 August 1901
IV	Maria D. Winthrop	937/Fee		21 March 1902
I Degaussing	State of South Carolina	1.00/Fee		14 June 1968 9 December 1968
II Degaussing	State of South Carolina	0.22/Fee		21 November 1968 16 January 1970
III Degaussing	State of South Carolina (NF(R)-9706)		0.60/In 50 year	29 October 1969 9 February 1970
V	City of Charleston	96.5/Fee		20 November 1902
VI	City of Charleston	28.9/Fee		11 October 1909
VII	Seaboard Air Line Railroad	2.45/Fee		19 March 1941
IX	West Virginia Pulp & Paper Company	3.19/Fee		5 May 1941
XIV	West Virginia Pulp & Paper Company	21.4/Fee		10 August 1942
XIV	E.P. Burton Lumber Company	60.3/Fee		5 August 1942
X	City of Charleston	44.90/Fee		15 September 1941
XV	Seaboard Air Line Railroad Company, Walter H. Solomon -Trustee, Caroline S. Alston, William Mappus Estate	38.2/Fee		12 January 1967
XV	City of Charleston Atlantic Coast Line Railroad	2.45/Fee		31 March 1941 8 May 1941
XVI	Charleston County Sanitary & Drainage Commission	4.44/Fee		2 April 1942
XVI	Acquisition through Declaration of Taking & Court Proceedings	13.84/Fee		14 June 1968
XVII	Southern Railway — Carolina Division	0.75/Fee		25 June 1943
XVII	Acquisition through Declaration of Taking & Court Proceedings	0.50/Fee		21 November 1968
XXI	South Carolina State Highway Commission	4.02/Fee		17 May 1945
XXXVIII Dredge Pier Clouter Island	South Carolina Budget & Control Board (N62467-82-RP-00200; superseded by N62467-86-RP-000020)		0.11/In plus additional 100'	30 September 1985 (Indefinite Duration)
XXXVI River Bed for Dredge Line	South Carolina Budget & Control Board (N62467-82-RP-00198)		5.13/In	13 April 1982 (Indefinite Duration)

TABLE 1-4. PROPERTY ACQUISITION SUMMARY TABLE

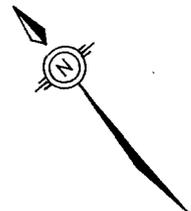
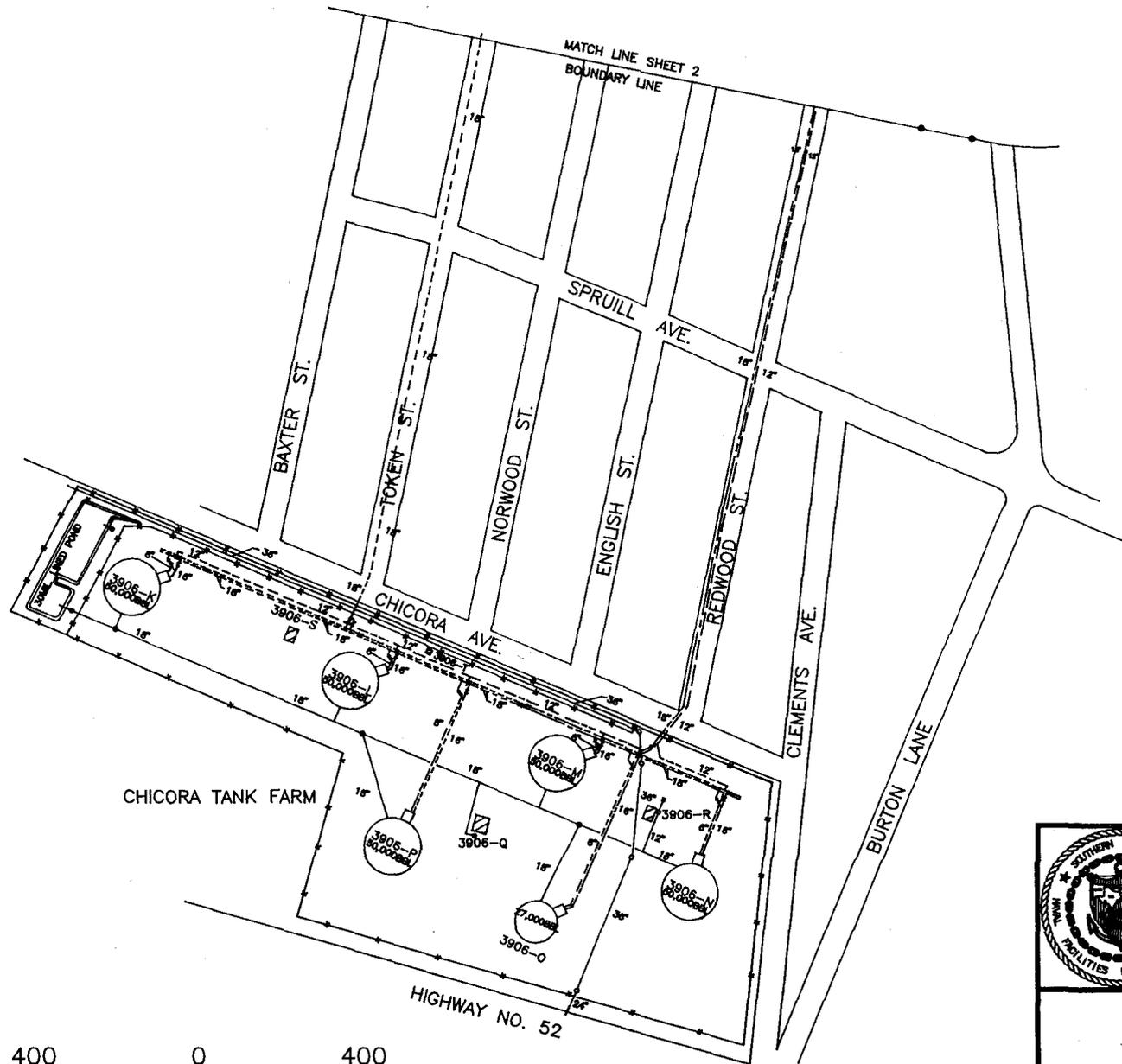
Tract Number	Previous Land Owner	Acreage		Acquisition Date
		Fee Land	Easement Land	
XXX	Heirs of Susan B. Hay, deceased Declaration of Taking	460.0/Fee		16 June 1963
XXXII	Charleston County	2.56/Fee		21 April 1964
XXXIII	Acquisition through Declaration of Taking & Court Proceedings	22.41/Fee		14 June 1968
XXXVII Dredge Pier	South Carolina Budget & Control Board (N62467-82-RP-00199)		0.04/ln	13 April 1982 (Indefinite Duration)
XXXIV	Acquisition through Declaration of Taking & Court Proceedings	0.20/Fee		21 November 1968
XXXVI North Gate Access	Hess Oil Corporation (NF(R)-6221)		0.01/ln	24 February 1969
XXXV	Charleston County (Abandoned any Claim to Parcel 3 of North Gate Improvement Project)		0.13/RoW	2 July 1968
XXXVII	North Charleston Public Service District (NF (R) 7258)		0.01/ln	26 May 1969 (Indefinite Duration)
XXXIX	Seaboard Coast Line Railroad Company	0.38/Fee		20 August 1976
Adjacent to Tract XVI Addition to Pier N	S.C. State Budget & Control Board (N62467-82-RP-00003)		0.27/ln	19 November 1981 (Indefinite Duration)
Adjacent to Tract III, Between Piers T & U	S.C. State Budget & Control Board (N62467-84-RP-00350)		0.04/ln	4 September 1984 (Indefinite Duration)
Adjacent to Tract VI Catch Basin, Sidewalk	S.C. State Highway Dept (NOy(R)- 61374, Encroachment permit #38569)		At Hospital Gate	3 January 1962 (Indefinite Duration)
Adjacent to Tracts III & XXXVIII New Pier M	S.C. State Budget & Control Board (N62467-78-RP-00004)		1.65/ln	15 February 1978
Tract I Potable Water Line Across Noisette Creek	S.C. State Budget & Control Board (N62467-81-RP-00088)		20' wide	12 February 1981 (Indefinite Duration)
Adjacent to Tract X Pass Office	City of North Charleston (N62467-89- RP-00234)	0.7/Lease		1 September 1989 to 31 August 1994

TABLE 1-4. PROPERTY ACQUISITION SUMMARY TABLE

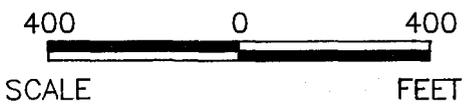
Tract Number	Previous Land Owner	Acreage		Acquisition Date
		Fee Land	Easement Land	
Tract III	State of South Carolina (NF(R)-13646)	0.28/In-Lease		1 January 1972 to 31 December 2021
Potable Water Main Outside Main CNSY Gate To Meeting Street	City of Charleston (NOd-177) Operated by City of Charleston		In License From Inner Third Street Gate to Rivers Avenue	17 January 1929 to 16 January 1928
Outside Property Line Adjacent to Building 1507	Seaboard Coast Line Railroad Company (NF(R)-20766)		In-License	19 June 1974 (Indefinite Duration)
Between Chicora Tank Farm & CNSY (Pipelines)	Charleston County (Encroachment Permit 3732)		Encroachment Permit No. 3732	3 February 1943 (Indefinite Duration)
Between Chicora Tank Farm & CNSY (Oil Lines)	Lekh R. Powell, Jr. & Henry W. Anderson (LD-85972 of 5 Dec 1942)		Pipeline Easement	25 April 1944
Between Chicora Tank Farm & CNSY (Oil Pipelines)	Sanitary and Drainage Commission for Charleston County		Pipeline easement	18 February 1943
Along Spruill Avenue South Between Reynolds & Cosgrove (Sewer Line)	Charleston County (Encroachment Permit No. 2831)		Encroachment Permit No. 2831	30 December 1940 (Indefinite Duration)
Between Hospital & Base (Sewer Line & Power Line)	Charleston County (NF(R)-7159)		Encroachment Permit #84059	29 July 1969 (Indefinite Duration)
Between Hospital & Base (Sewer Line)	Housing Authority of the City of Charleston (NF(R)-9713)		0.06 Drainage Easement	2 June 1969 (Indefinite Duration)

TABLE 1-5. TABLE OF OFF-BASE PROPERTIES

Description	Acreage	Date of Acquisition	Env. Status	Location	Remarks
Lease — Recreational Area	56.6	30 August 1976	Unevaluated	Short Stay	
Right-of-Way — Recreational Area		30 August 1976	Unevaluated	Short Stay	100' Right-of-Way for Access Road
Lease — Degaussing Station Tract XXVII	2.81	1 August 1960	No Suspected Contamination	Downtown East of Concord Street, South of South Adgers Wharf	1. Bureau of Yards & Docks, Drwg # 898327 2. Port Authority Maintains Easement for Sewer Line
Designated Restricted Area for Navigation		25 April 1968	Unevaluated	Cooper River Adjacent to Naval Base	As Delineated in Federal Register - Document 68-4979, under Title 33
Sullivan's Island Inter-Agency Agreement (In-Permit Total 4.08 Acres: 0.88 Acres Exclusive Use, 2.47 Acres Joint Use, 0.73 Acres In-Easement)	4.08	16 August 1988 to 15 August 2008	No Suspected Contamination	Sullivan's Island	Inter-Agency Agreement with Fort Sumter National Monument, National Park Service, Department of Interior; Used as Naval Shipboard Electronic Systems Evaluation Facility
Acquisition through Transfer — Fee Land of Naval Station Annex	42.00	21 April 1981	Unevaluated	Naval Station Annex, North Charleston	Transferred from USAF by DD1354
Acquisition through Transfer — Easement for Right-of-Way	0.54	21 April 1981	Unevaluated	Naval Station Annex, North Charleston	Transferred from USAF by DD1354
Acquisition through Declaration of Taking and Court Proceedings — Parcel #1	10.872	20 December 1943	Unevaluated	Chicora Tank Farm	Property Presently Held by Naval Supply Center (now FISC) Charleston
Acquisition through Declaration of Taking and Court Proceedings — Parcel #2	8.840	27 December 1941	Unevaluated	Chicora Tank Farm	Property Presently Held by Naval Supply Center (now FISC) Charleston
Acquisition through Declaration of Taking and Court Proceedings — Parcel #5	1.600	20 December 1943	Unevaluated	Chicora Tank Farm	Property Presently Held by Naval Supply Center (now FISC) Charleston
Acquisition through Declaration of Taking and Court Proceedings — Parcel #6	2.587	21 March 1944	Unevaluated	Chicora Tank Farm	1. Property Presently Held by Naval Supply Center (now FISC) Charleston 2. Subject to Perpetual Easement of Public Service Authority, Granted by City Council, 13 November 1941

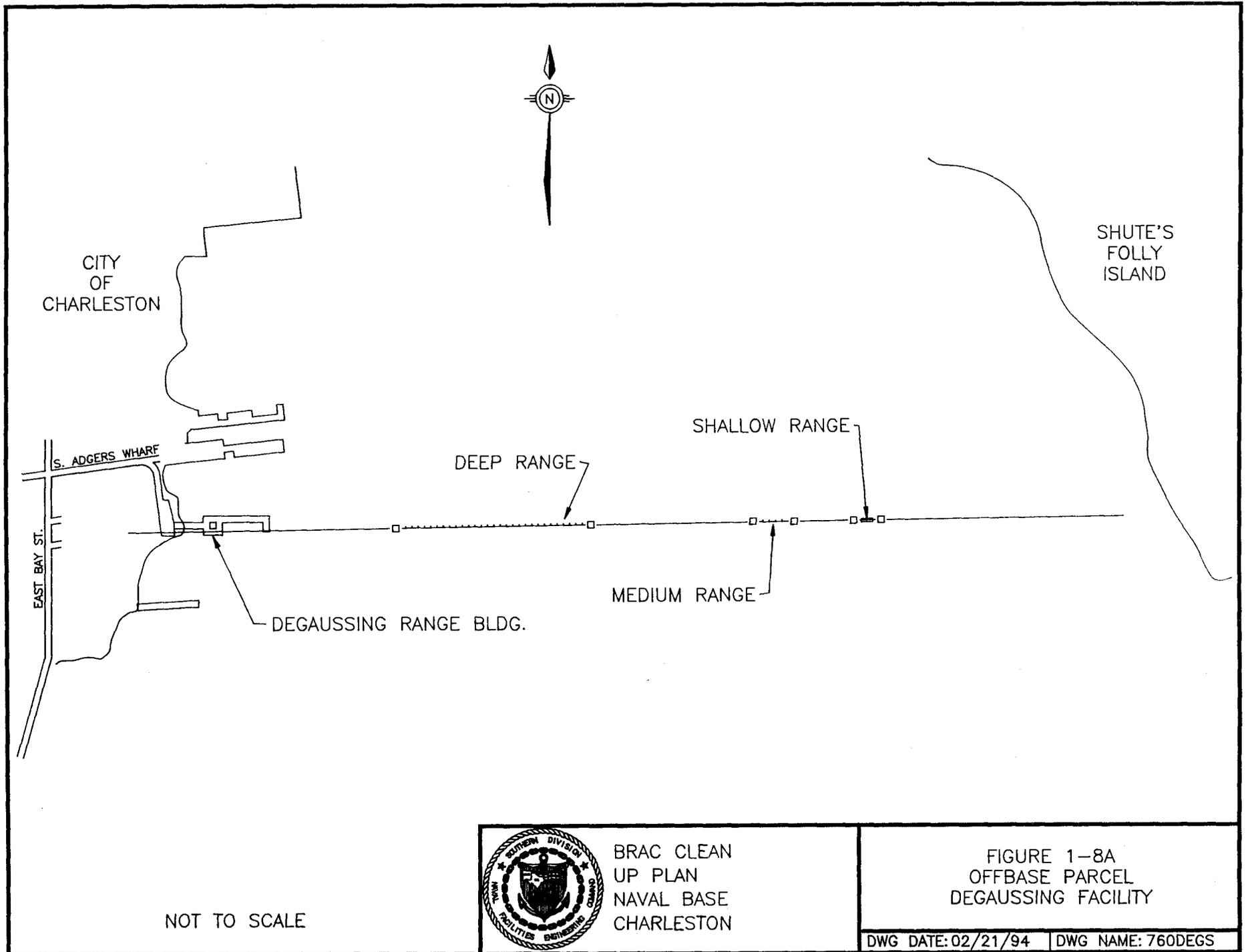


- LEGEND
- FUEL OIL LINES
 - SLUDGE LINES
 - DRAIN LINES
 - DIESEL LINES
 - CATCH BASIN
 - VALVE
 - MANHOLE



BRAC CLEAN
UP PLAN
NAVAL BASE
CHARLESTON

FIGURE 1-8
CHICORA TANK FARM



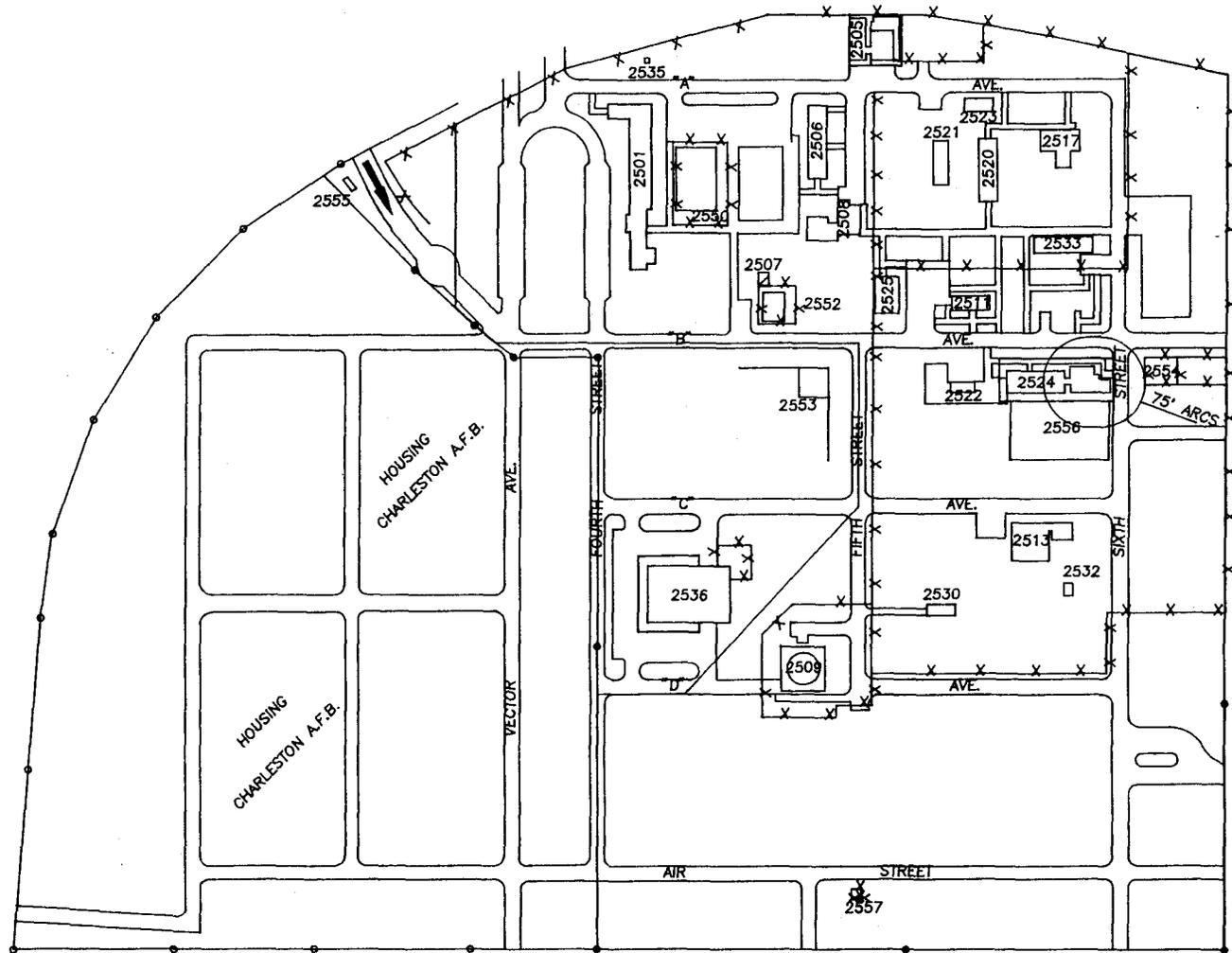
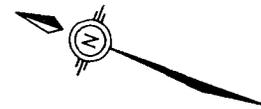
NOT TO SCALE



BRAC CLEAN
UP PLAN
NAVAL BASE
CHARLESTON

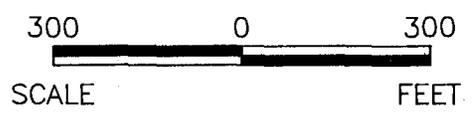
FIGURE 1-8A
OFFBASE PARCEL
DEGAUSSING FACILITY

DWG DATE: 02/21/94 | DWG NAME: 760DEGS



LEGEND:

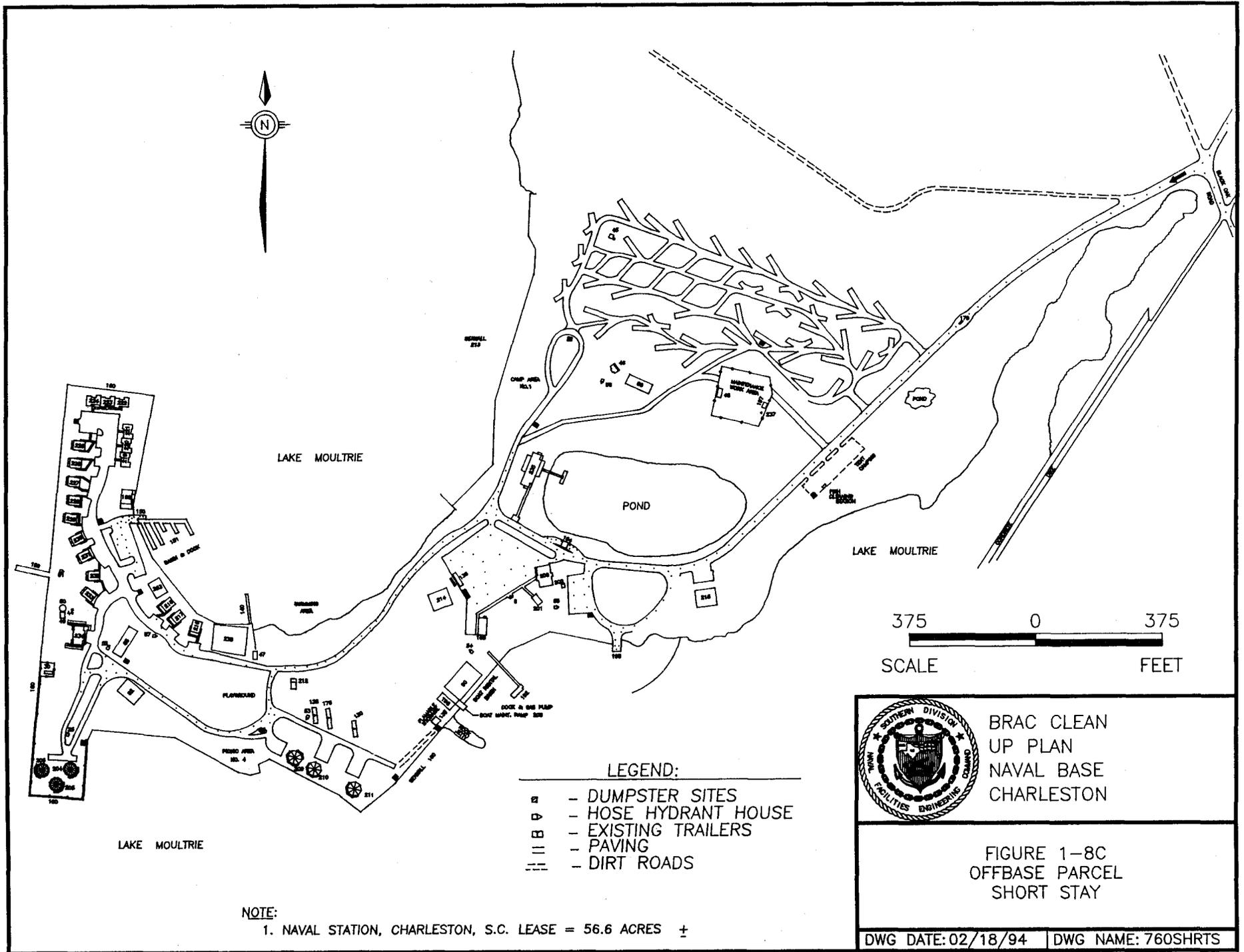
- BLDG OR STRUCTURE
- ROADS, WALKS OR PAVED AREAS
- PROPERTY BOUNDARY
- PROPERTY BOUNDARY (BY OTHERS)
- SECURITY FENCE

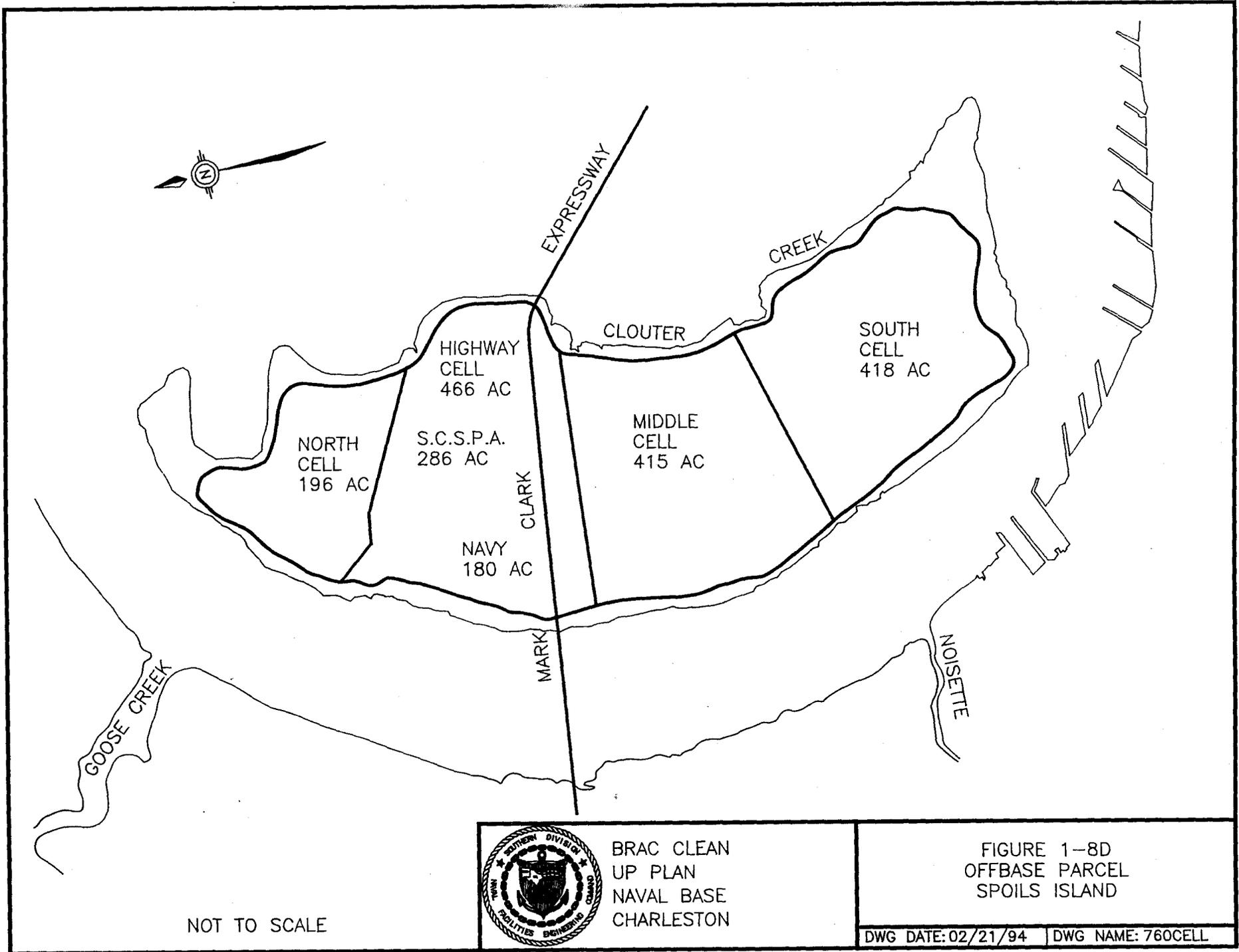


BRAC CLEAN
UP PLAN
NAVAL BASE
CHARLESTON

FIGURE 1-8B
OFFBASE PARCEL
NAVAL ANNEX

DWG DATE: 02/18/94 | DWG NAME: 760ANN





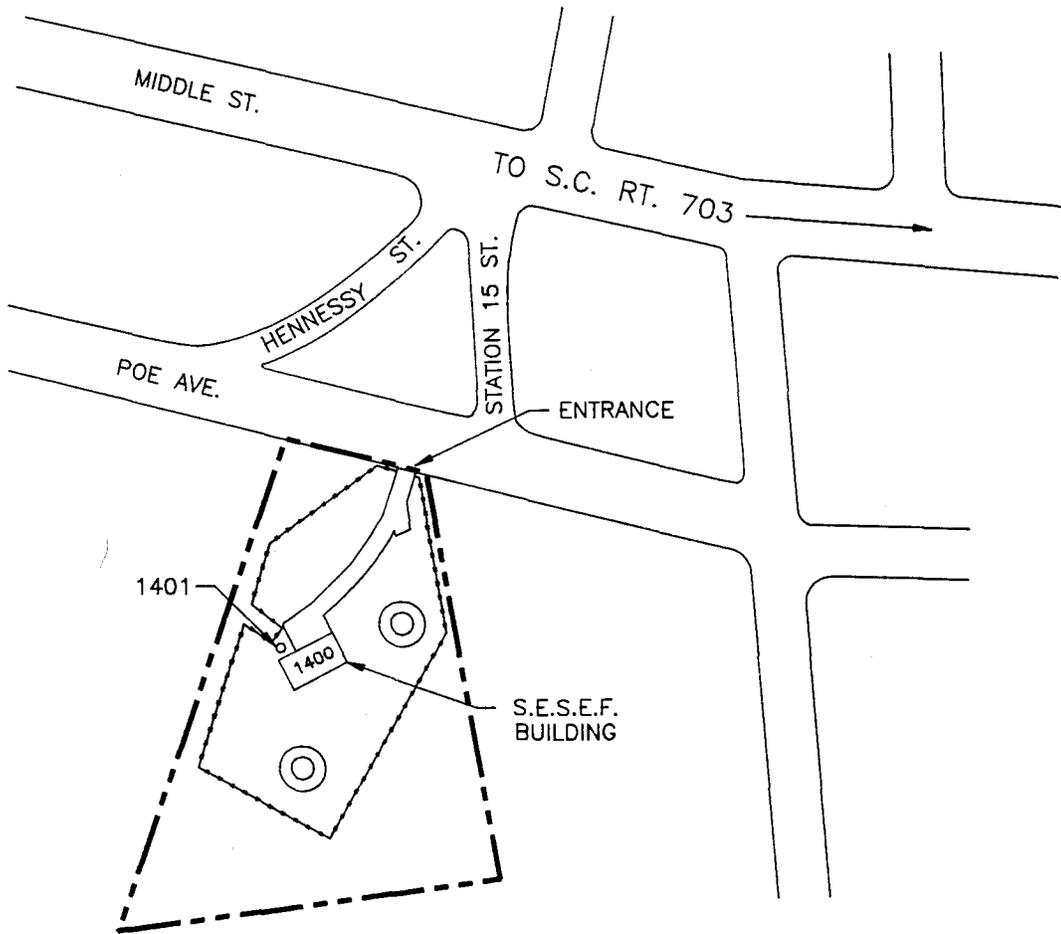
NOT TO SCALE



BRAC CLEAN
UP PLAN
NAVAL BASE
CHARLESTON

FIGURE 1-8D
OFFBASE PARCEL
SPOILS ISLAND

DWG DATE: 02/21/94 | DWG NAME: 760CELL



50 0 50
SCALE FEET



BRAC
CLEAN-UP PLAN
NAVAL BASE
CHARLESTON

FIGURE 1-8E
OFFBASE PARCEL
SULLIVAN'S ISLAND

DWG DATE: 02/18/94 | DWG NAME: 760SULIS



LEGEND

-  - INDUSTRIAL
-  - COMMERCIAL
-  - RESIDENTIAL
-  - UNDEVELOPED



NOT TO SCALE



BRAC CLEAN
UP PLAN
NAVAL BASE
CHARLESTON

FIGURE 1-9
OFFBASE LAND USE

2.0 PROPERTY DISPOSAL AND REUSE PLAN

2.1 Status of Disposal Planning Process

The disposal of Naval Base Charleston involves three interrelated activities: NEPA EIS process, development of a community reuse plan, and completion of the Environmental Baseline Survey. The Environmental Baseline Survey is in progress and is scheduled for completion by May 1994. The NEPA EIS will begin in February 1994 and will be coordinated with the community reuse plan.

2.2 Relationship to Environmental Programs

Disposal and reuse activities at Naval Base Charleston are intimately linked to environmental investigations, restoration, and compliance activities for two basic reasons:

- Federal property transfers to nonfederal parties are governed by CERCLA § 120(h)(3)(B)(i).
- Residual contamination may remain on certain properties after remedial actions have been completed or put into place, thereby restricting the future use of those properties.

CERCLA §120(h)(3)(B)(i) requires deeds for federal transfer of previously contaminated property to contain a covenant that all remedial actions necessary to protect human health and the environment have been taken. The 1992 Community Environmental Response Facilitation Act (CERFA) amendment to CERCLA provided clarification of the phrase "has been taken". This clarification states that all remedial action has been taken if the construction and installation of an approved remedial design has been completed, and the remedy has been demonstrated to the Administrator to be operating properly and successfully. It further states that the carrying out of long-term pumping and treating, or operation and maintenance, after the remedy has been demonstrated to the Administrator to be operating properly and successfully does not preclude the transfer of property. This deed requirement applies only to property on which a hazardous substance or petroleum product was stored for 1 year or more, or is known to have been disposed of or released. Thus, any required remedial and/or removal response actions must be selected and implemented for such contaminated properties before transfers to private parties can occur.

The requirements for complying with CERCLA 120(h) and the possibility of residual contamination are factored into the property disposal and reuse process at Naval Base Charleston. Table 2-1 takes these two factors into consideration, presents summary information on parcels, and provides an approximate timetable for transfer by deed of each parcel at Naval Base Charleston.

The Naval Base Charleston strategy and schedule herein is designed to streamline and expedite the necessary response actions associated with parcels in order to facilitate the earliest possible disposal and reuse activities. Because of the need to delineate between areas suitable for transfer and those which are not, the Naval Base Charleston BCT has developed an environmental-condition-of-property map for Naval Base Charleston (see text and figures in Chapter 3.4) using, in part, data from a base-wide Environmental Baseline Survey (EBS). This environmental-condition-of-property map allows the visualization of both contaminated areas and areas of no suspected contamination, and the relationship of these areas to disposal and reuse parcels.

2.3 Property Transfer Methods

2.3.1 Federal Transfer of Property

The Secretary of State has requested the transfer of approximately 10 acres, composed of Parcel A which consists of Buildings 646, 646A, 647, 643, 645, and 649 for support of diplomatic and consular operations. The Component has transferred a total of approximately 10 acres to the Secretary of State. As of 1 March 1994, there are no plans for additional transfer actions between federal agencies.

2.3.2 No-Cost Public Benefit Conveyance

As of 1 March 1994, there are no plans for any No-Cost Public Benefit Conveyance Transfers.

2.3.3 Negotiated Sale

As of 1 March 1994, there are no plans for any Negotiated Sale Transfers.

2.3.4 Widening of Public Highways

As of 1 March 1994, there are no plans for any Widening of Public Highways.

2.3.5 Donated Property

As of 1 March 1994, there are no plans for any Properties to be Donated.

2.3.6 Interim Leases

As of 1 March 1994, the Component has entered into 17 legal agreements allowing interim uses of certain base lands and facilities. Leases, easements, and permits have been issued to a variety of parties. Table 2-2 identifies the grantee, property/facility, effective date, and termination date of each interim agreement.

TABLE 2-2 EXISTING LEGAL AGREEMENTS/INTERIM LEASES

Title of Interim Lease / Legal Agreement	Building Number / Areas	Dates of Agreement	Reuse Parcel
Out-Easement to South Carolina Highway Department	Naval Station Annex 3.73 Acres for I-26 Construction	15 December 1960 (Indefinite Duration)	
Out-Lease to Southern Bell Telephone & Telegraph Company	Naval Station Annex Support Communication Service to US Government. No Land Involved	28 August 1961 to 27 August 2011	
Host-Tenant Real Estate Agreement with U.S. Army (N62467-85-RP-00179)	Naval Station Annex 10 Acres for Operation of U.S. Army Reserve Center	1 June 1985 (Indefinite Duration)	
Out-Easement to North Charleston Consolidated Public Service Authority	Chicora Tank Farm, 2.587 Acres, Parcel #6	13 November 1941 (Indefinite Duration)	
Out-Easement Right-of-Way to South Carolina Highway Department (NOy(R)-95659)	Access road off St. John's Approximately 1.00 acre	22 April 1966 to 22 April 2016	
Out-Easement to North Charleston Consolidated Public Service Authority (NF(R)-7214)	Sewer Line (Chicora Tank Farm) 0.78 acres Along Carner Avenue Adjoining Clement Street	22 May 1969 (Indefinite Duration)	
Out-Easement to North Charleston Consolidated Public Service Authority (NF(R)-7215)	Sewer Line 0.78 acres at Corner of Viaduct Road and Seaboard Coast Line RR, Tract II	29 May 1969 to 28 May 2019	
Out-Easement to South Carolina Highway Department (NF(R)-20568)	Drainage System 0.28 Acres at Chicora Tank Farm	26 March 1974 to 26 March 1999	
Out-Easement to South Carolina Highway Department (NF(R)-36022)	Road Section 0.0116 Acres at Corner by Hospital	Unknown to 3 April 2027	
Out-Easement to South Carolina Electric & Gas Company (NF(R)-7253)	Guy Wires and Anchors (Not Measured in Acres) in Tract X	16 September 1969 to 16 September 2019	
Out-Easement to South Carolina Department of Highway & Public Transportation (N62467-84-RP-00371)	Mark Clark Highway (I-526 Through Spoils Area East of Cooper River) 21.07 Acres Tract IV - 9.27 acres Tract XXX - 11.80 acres	25 June 1985 (Indefinite Duration)	
Out-Easement to North Charleston Consolidated Public Service Authority (NF(R)-7250)	North Gate Entrance 0.05 Acres for Sewer Line Adjacent to Tract XXXII	9 September 1969 (Indefinite Duration)	
Out-Easement to South Carolina Electric & Gas Company (NF(R)-25315)	Hospital Gate 50 Square Feet for Guy Wires & Anchors at Pole 172970	2 January 1975 to 27 January 2025	
Out-Lease to Charleston Naval Shipyard Federal Credit Union (NF(R)-35720)	Tract III 0.58 Acres for Credit Union Building Adjacent to Building 656	1 July 1976 to 30 June 2001	

TABLE 2-2 EXISTING LEGAL AGREEMENTS/INTERIM LEASES

Title of Interim Lease / Legal Agreement	Building Number / Areas	Dates of Agreement	Reuse Parcel
Out-Lease to Charleston Naval Shipyard Federal Credit Union (N62467-84-RP-00242)	Tract VI 0.91 Acres for Credit Union Branch (Built on Site of Demolished Building X4C (Naval Station))	9 March 1984 to 8 March 2009	
Out-License to Department of the Army, Army COE (NOy(R)-52854)	Tract III and Adjacent For Constriction Dike	4 June 1956 (Indefinite Duration)	
Joint-Use Agreement with Department of the Army, Army COE (NOy(R)-63486)	Tract XXX For Use as Dredge Disposal Area	26 November 1962 (Indefinite Duration)	

3.0 INSTALLATION-WIDE ENVIRONMENTAL PROGRAM STATUS

This section provides a summary of the current status of environmental restoration projects and ongoing compliance activities at Naval Base Charleston. It also summarizes the status of community involvement to date and describes the environmental condition and suitability for transfer of the base property.

Table 3-1 lists 39 Solid Waste Management Units (SWMUs) as well as their current status. A RCRA Facility Investigation (RFI) has been commenced on the first 36 of these SWMUs. Eight SWMUs have been interim classified as no further action required; however, this determination is not yet official. Also, RCRA Facility Assessment (RFA) studies are currently being performed on the final three of the SWMU sites.

Table 3-2 lists 330 Potential Areas of Concern (PAOCs) which require further study. RFAs are currently being performed on 118 of the PAOCs. The remainder of the sites were recently identified during the Environmental Baseline Survey process; the appropriate investigative approach for these sites is presently being formulated.

A total of 153 former and/or current USTs have also been identified by the base. Storage tanks are not listed on Tables 3-1 or 3-2, but are discussed in Section 3.2. The sites which are currently undergoing or awaiting investigations (including USTs) are included in Figure 3-1 in the map pocket accompanying this plan. The following sections include a brief history of the IRP and RCRA activities as they pertain to the base, the current status of restoration projects, and the installation-wide source discovery and assessment process.

3.1 Environmental Program Status

Per the Navy Assessment and Control of Installation Pollutants (NACIP) program, the Naval Base Charleston Initial Assessment Study (IAS) was submitted in May 1983 and the Confirmation Study (CS) was submitted in October 1982. The NACIP program was developed by the Department of the Navy to identify, assess, and control environmental contamination from past use and disposal of chemicals and other materials. The NACIP program is part of the Department of Defense (DoD) Installation Restoration Program (IRP) which satisfies requirements for DoD units under the Superfund program, authorized by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980. The IAS/CS identified eight potentially contaminated sites on the installation. As a result of these investigations, six sites were identified as requiring remedial action, consisting mainly of superficial cleanup and decontamination.

Following the NACIP activities, a RCRA Facility Assessment (RFA) was completed in August 1987 to meet the requirements of the 1984 Hazardous Solid Waste Amendment (HSWA) to the Resource Conservation and Recovery Act (RCRA) of 1976. The RFA is designed to evaluate

TABLE 3-1. SOLID WASTE MANAGEMENT UNITS (SWMUs)

Study Zone	Site No. SWMU	Site Class	Description	Material Disposed of	Date of Operation	Status	Risk To Human Health & the Environment	Regulatory Mechanism	NFA
A	1		DRMO Staging Area	Hazardous Waste, Lead	About 1974-1987	RCRA Closure Completed 1/14/94; RFI in Progress		RCRA	
A	2		Lead Contaminated Area (DRMO)	Lead	Middle to Late 1960s to 1984	RFI in Progress		RCRA	
G	3		Pesticide Mixing Area	Pesticides	Prior to 1971	RFI in Progress		RCRA	
F	4		Pesticide Storage Building	Pesticides	About 1980-1985	RFI in Progress		RCRA	
E	5		Battery Electrolyte Treatment Area	Acids	About 1984-1986	RFI in Progress		RCRA	
G	6		Public Works Storage Yard (Old Corral)	Hazardous Waste, Lead	Unknown-1987	RCRA Closure Completed 1/14/94; RFI in Progress		RCRA	
G	7		PCB Transformer Storage Yard	PCBs	About 1970-1976	RFI in Progress		RCRA	
G	8		Oil Sludge Pit	Oil Sludges	1944-1974	RFI in Progress		RCRA	
H	9		Closed Landfill	Miscellaneous	About 1930-1973	RFI in Progress		RCRA	
G	10		Hazardous Waste Storage Facility, Building 246	Miscellaneous	1985-Present	RCRA Closure Required; RFI in Progress		RCRA	
G	11		Caustic Pond	Calcium Hydroxide	Early 1940s-Early 1970s	RFI in Progress		RCRA	
I	12		Old Fire Fighting Training Area	Petroleum	1966-1971	RFI in Progress		RCRA	
H	13		Current Fire Fighting Training Area	Petroleum	1973-Present	RFI in Progress		RCRA	
H	14		Chemical Disposal Area	Miscellaneous	Prior to 1972-1977	RFI in Progress		RCRA	
H	15		Incinerator	Miscellaneous Paper	Unknown-Present	RFI in Progress		RCRA	
I	16		Paint Storage Bunker	Paint	At Least June 1987-Present	RFI in Progress		RCRA	

TABLE 3-1. SOLID WASTE MANAGEMENT UNITS (SWMUs)

Study Zone	Site No. SWMU	Site Class	Description	Material Disposed of	Date of Operation	Status	Risk To Human Health & the Environment	Regulatory Mechanism	NFA
H	17		Oil Spill Area	Oil	June 1987-Present	RFI in Progress		RCRA	
E	18		PCB Spill Area	PCBs	June 1987-Present	RFI in Progress		RCRA	
G	19		Solid Waste Transfer Station	Miscellaneous	1982-Present	RFI in Progress		RCRA	
H	20		Waste Disposal Area	Miscellaneous	1985-Present	RFI in Progress		RCRA	
E	21		Old Paint Storage Center (Waste Paint Storage Pad)	Paint	1980-Present	RCRA Closure Completed 1987; RFI in Progress		RCRA	
E	22		Old Plating Shop Waste Treatment System	Cadmium Chromium	Unknown-1982	RFI in Progress		RCRA	
E	23		New Plating Shop Wastewater Treatment System	Miscellaneous	About 1982-Present	RFI in Progress		RCRA	
G	24		Waste Oil Reclamation Facility	Oil	1979-Present	RFI in Progress		RCRA	
E	25		Building 44, Old Plating Operation	Miscellaneous Cyanide Metals	Unknown-1983	RCRA Closure of Process Tanks Completed in 1994; RFI in Progress		RCRA	
E	26		Waste Storage Area, Bldg 64-40, Pier C	Miscellaneous	April 1989-November 1990	RFI in Progress		RCRA	
E	27		Waste Storage Area, East End Pier C	Paint	September 1989-August 1990	RFI in Progress		RCRA	
E	28		Waste Storage Area, West End Pier C	Paint	April 1989-August 1990	RFI in Progress		RCRA	
G	29		Building X-10	Miscellaneous	April 1989-August 1990	RFI in Progress		RCRA	
E	30		Satellite Accumulation Area, Building 13	Miscellaneous	April 1989-Present	RFI in Progress		RCRA	

TABLE 3-1. SOLID WASTE MANAGEMENT UNITS (SWMUs)

Study Zone	Site No. SWMU	Site Class	Description	Material Disposed of	Date of Operation	Status	Risk To Human Health & the Environment	Regulatory Mechanism	NFA
E	31		Waste Paint Storage Area, Dry Dock #5	Paint	October 1989-Present	RFI in Progress		RCRA	
E	32		Waste Paint Storage Area, Building 195	Paint	October 1989-August 1990	RFI in Progress		RCRA	
E	33		Waste Paint Storage Area, West End, Dry Dock #2	Paint	June 1990-September 1990	RFI in Progress		RCRA	
G	34		MWR, Southwest of Buiding X-10	Miscellaneous	April 1989-August 1990	RFI in Progress		RCRA	
G	35		Building X-12	Miscellaneous	April 1989-August 1990	RFI in Progress		RCRA	
F	36		Building 68, Battery Shop	Sulfuric Acid	Early 1940s-Present	RFI in Progress		RCRA	
Various	37		Dredge Material On Base	Miscellaneous	Early 1940S-Late 1950s	RFA in Progress		RCRA	
C	38		Coal Storage, South Side of Noisette Creek	Coal, Coal Byproducts	1940s-Present	RFA in Progress		RCRA	
E	39		Building 9	PCBs	1906-Present	RFA in Progress		RCRA	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
E	1		Abrasive Blast Area at SWMU #21	Blast Residue	RFA in Progress	Building 1275 Area		RCRA	
E	2		Blast Area Drydock #3	Blast Residue	RFA in Progress	Drydock #3		RCRA	
I	3		Blast Booth Building 681	Blast Residue	RFA in Progress	Building 681		RCRA	
H	4		Building 636 Paint Booth	Paint	RFA in Progress	Building 636		RCRA	
I	5		Building 681 Spray Booth	Miscellaneous	RFA in Progress	Building 681		RCRA	
E	6		Building 2A Coating & Spray Systems	Aluminum Miscellaneous	RFA in Progress	Building 2A		RCRA	
E	7		Building 3 Surface Coating	Epoxy Miscellaneous	RFA in Progress	Building 3		RCRA	
F	8		Building 25 Paint Booth	Paint	RFA in Progress	Building 25		RCRA	
E	9		Building 177 Paint Booths	Paint	RFA in Progress	Building 177		RCRA	
F	10		Building 187 Paint Booth	Paint	RFA in Progress	Building 187		RCRA	
E	11		Building 212 Paint Area	Paint	RFA in Progress	Building 212		RCRA	
E	12		Building 218 Paint Booth	Paint	RFA in Progress	Building 218		RCRA	
E	13		Building 223 Paint Shop	Paint	RFA in Progress	Building 223		RCRA	
F	14		Building 241 Paint Booth	Paint	RFA in Progress	Building 241		RCRA	
F	15		Building 242 Paint Booth	Paint	RFA in Progress	Building 242		RCRA	
Various	16		Sanitary Sewer System	Miscellaneous	RFA in Progress	Basewide		To Be Determined	
E	17		Dry Dock Discharges	Miscellaneous	RFA in Progress	Dry Docks		RCRA	
E	18		Building 221 Pickling Plant	Lead Miscellaneous	RFA in Progress	Building 221		RCRA	
E	19		Building 221 Lead Storage	Lead	RFA in Progress	Building 221		RCRA	
F	20		Building 1189 Dry Cleaning	Miscellaneous	RFA in Progress	Building 1189		RCRA	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
E	21		Building 9 Lead Storage	Lead	RFA in Progress	Building 9		RCRA	
F	22		Building 1346 Gas Station	Ethylene Glycol Petroleum Products	RFA in Progress	Building 1346		To Be Determined	
I	23		Building NS-2 Grounds	Petroleum Products	RFA in Progress	Area of Building NS-2		To Be Determined	
J	24		Pier J Pump House	Diesel Fuel	RFA in Progress	Pier J Pump House		To Be Determined	
G	25		NSC Fuel Farm	Petroleum	RFA in Progress	Fuel Farm Area		To Be Determined	
G	26		Pier M Laydown	Paint Lead	RFA in Progress	Pier M		RCRA	
F	27		Blast Hoppers	Blast Media	RFA in Progress	Structures 1364, 1365, 1393		RCRA	
E	28		Building 6 Forge Shop	Lead	RFA in Progress	Building 6		RCRA	
C	29		Building 233 Wash Area	Acid Petroleum Products	RFA in Progress	Building 233		RCRA	
H	30		Building 1508 MWR Hobby Shop	Petroleum Products Paint Miscellaneous	RFA in Progress	Building 1508		RCRA	
E	31		Building 9 Fuel Tank	Petroleum	RFA in Progress	Building 9		To Be Determined	
H	32		CBU-412 Vehicle Area	Petroleum Products	RFA in Progress	CBU-412		To Be Determined	
E	33		Building 177 Motor Area	Petroleum Products Miscellaneous	RFA in Progress	Building 177		To Be Determined	
A	34		Building 1640 DRMO	Hazardous Wastes	RFA in Progress	Building 1640		RCRA	
A	35		POL Drum Storage	Petroleum Products	RFA in Progress	North of Building 1604		To Be Determined	
H	36		Building NS-54 Former Gas Station	Petroleum Products	RFA in Progress	Building NS-54		To Be Determined	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
J	37		Unexploded Ordnance Sites	Explosives	RFA in Progress	Various		RCRA	
E	38		Building 43 Satellite Accumulation Area	Petroleum Products Used Coolants Solvents	RFA in Progress	Building 43		RCRA	
E	39		Building 35 Satellite Accumulation Area	Petroleum Miscellaneous	RFA in Progress	Building 35		RCRA	
E	40		Building 9 (Boiler Shop) Satellite Accumulation Area	Paint Debris Petroleum Products Miscellaneous	RFA in Progress	Building 9		RCRA	
E	41		Building 2 <90 Day Accumulation Area	Petroleum Products Solvents Paint Miscellaneous	RFA in Progress	Building 2		RCRA	
E	42		Building 59 (former Boiler Shop) Satellite Accumulation Area	Paint Glue Miscellaneous	RFA in Progress	Building 59		RCRA	
H	43		Building 61 Satellite Accumulation Area	Mercuric Nitrate	RFA in Progress	Building 61		RCRA	
E	44		Building 56 Satellite Accumulation Area	Paint Miscellaneous	RFA in Progress	Building 56		RCRA	
E	45		Building 226 Satellite Accumulation Area	Plating Solution Metal Hydroxide Solution Misc. Plating Supplies/Debris	RFA in Progress	Building 226		RCRA	
H	46		Building 61 Satellite Accumulation Area	Borate Cupric Sulfate Solution Petroleum Products	RFA in Progress	Building 61		RCRA	
E	47		Building 13 Satellite Accumulation Area	Acids/Metals Laboratory Samples Freon 113	RFA in Progress	Building 13		RCRA	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
E	48		Building 80 <90 Day Accumulation Area	Paint Petroleum Products Mercury Chelating Agents Miscellaneous	RFA in Progress	Building 80		RCRA	
E	49		Building 13 Satellite Accumulation Area	Petroleum Products	RFA in Progress	Building 13		RCRA	
E	50		Building 13 Satellite Accumulation Area	Petroleum Products	RFA in Progress	Building 13		RCRA	
E	51		Building 236 <90 Day Accumulation Area	Petroleum Products Paint Miscellaneous	RFA in Progress	Building 236		RCRA	
E	52		Building 13 Satellite Accumulation Area	Acids/Metals (ICP Waste)	RFA in Progress	Building 13		RCRA	
H	53		Building 202 Satellite Accumulation Area	Mercuric Nitrate Waste	RFA in Progress	Building 202		RCRA	
H	54		Building 202 Satellite Accumulation Area	Mercuric Nitrate Waste	RFA in Progress	Building 202		RCRA	
H	55		Building 202 Satellite Accumulation Area	Mercuric Nitrate Waste	RFA in Progress	Building 202		RCRA	
H	56		Building NS-53 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building 53		RCRA	
E	57		Building 236 <90 Day Accumulation Area	Petroleum Products Solvents Miscellaneous	RFA in Progress	Building 236		RCRA	
E	58		Building 5 Satellite Accumulation Area	Adhesives Paints Miscellaneous	RFA in Progress	Building 5		RCRA	
E	59		Building 228 <90 Day Accumulation Area	Adhesives Miscellaneous	RFA in Progress	Building 228		RCRA	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
E	60		Building 1245 <90 Day Accumulation Area	Paint Trichloroethane	RFA in Progress	Building 1245		RCRA	
E	61		Building 5 Satellite Accumulation Area	Paint Adhesives	RFA in Progress	Building 5		RCRA	
E	62		Building 2A Satellite Accumulation Area	Adhesives Miscellaneous	RFA in Progress	Building 2A		RCRA	
E	63		Building 218 Satellite Accumulation Area	Petroleum Products Paint Sandblasting Grit Miscellaneous	RFA in Progress	Building 218		RCRA	
F	64		Building 187 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building 187		RCRA	
E	65		Pier G Satellite Accumulation Area	Paint Miscellaneous	RFA in Progress	Pier G		RCRA	
E	66		Building 212 Satellite Accumulation Area	Paint Miscellaneous	RFA in Progress	Building 212		RCRA	
E	67		Pier C Satellite Accumulation Area	Miscellaneous	RFA in Progress	Pier C		RCRA	
E	68		Dry Dock #2 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Dry Dock #2		RCRA	
E	69		ARDM 3 Satellite Accumulation Area	Miscellaneous	RFA in Progress	ARDM 3		RCRA	
E	70		Building 1518 Satellite Accumulation Area	Petroleum Products Paint Miscellaneous	RFA in Progress	Building 1518		RCRA	
E	71		Building 57 Satellite Accumulation Area	Tetrachloroethylene Miscellaneous	RFA in Progress	Building 57		RCRA	
H	72		Building 675 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building 675		RCRA	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
E	73		Building 9 <90 Day Accumulation Area	Paint Petroleum Products Miscellaneous	RFA in Progress	Building 9		RCRA	
F	74		Building 241 Satellite Accumulation Area	Paint Miscellaneous	RFA in Progress	Building 241		RCRA	
F	75		Building 241 Satellite Accumulation Area	Paint Miscellaneous	RFA in Progress	Building 241		RCRA	
E	76		Building 13 <90 Day Accumulation Area	Paint Petroleum Products Miscellaneous	RFA in Progress	Building 13		RCRA	
H	77		Building 202 Satellite Accumulation Area	Mercuric Nitrate Solution	RFA in Progress	Building 202		RCRA	
H	78		Building 202 Satellite Accumulation Area	Spent OBA Cannisters	RFA in Progress	Building 202		RCRA	
H	79		Building 202 Satellite Accumulation Area	Petroleum Products	RFA in Progress	Building 202		RCRA	
E	80		Building 13 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building 13		RCRA	
F	81		Building 242 Satellite Accumulation Area	Petroleum Products	RFA in Progress	Building 242		RCRA	
E	82		Building 13 Satellite Accumulation Area	Acids Acids/Metals Alcohol	RFA in Progress	Building 13		RCRA	
E	83		Building 13 Satellite Accumulation Area	Liquid Scintillation Cocktail Mercuric Nitrate Solution Used Analytical Reagents	RFA in Progress	Building 13		RCRA	
F	84		Building 241 Satellite Accumulation Area	Paint Petroleum Products Miscellaneous	RFA in Progress	Building 241		RCRA	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
F	85		Building 241 Satellite Accumulation Area	Petroleum Products	RFA in Progress	Building 241		RCRA	
E	86		Building 35 Satellite Accumulation Area	Acids Acids/Metals Alcohol	RFA in Progress	Building 35		RCRA	
I	87		Building 681 Satellite Accumulation Area	Paint Miscellaneous	RFA in Progress	Building 681		RCRA	
H	88		Building 1776 Satellite Accumulation Area	Petroleum Products Anti-Freeze	RFA in Progress	Building 1776		RCRA	
G	89		Building 249 Satellite Accumulation Area	Paint	RFA in Progress	Building 249		RCRA	
E	90		Building 250 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building 250		RCRA	
C	91		Building NH51 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building NH51		RCRA	
C	92		Building 234 Satellite Accumulation Area	Photographic Chemicals Ammonia EDTA Containers	RFA in Progress	Building 234		RCRA	
E	93		Building 35 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building 35		RCRA	
F	94		Building 1346 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building 1346		RCRA	
H	95		Building 636 Satellite Accumulation Area	Paint Grease Miscellaneous	RFA in Progress	Building 636		RCRA	
H	96		Building 636 Satellite Accumulation Area	Paint Grease Miscellaneous	RFA in Progress	Building 636		RCRA	
H	97		Building 1508 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building 1508		RCRA	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
E	98		Drydock 2 Satellite Accumulation Area	Paint Miscellaneous	RFA in Progress	Drydock 2		RCRA	
F	99		Building 1173 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building 1173		RCRA	
K	100		Building NH-1 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building NH-1		RCRA	
K	101		Building NH-1 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building NH-1		RCRA	
F	102		Building 1175 Satellite Accumulation Area	Petroleum Products	RFA in Progress	Building 1175		RCRA	
H	103		Building NS67 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building NS67		RCRA	
K	104		Building NH-1 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building NH-1		RCRA	
H	105		Building 61 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building 61		RCRA	
E	106		Building 177 Satellite Accumulation Area	Solvents Xylene Petroleum Products Adhesives Preservatives Acetone, MEK, Toluene	RFA in Progress	Building 177		RCRA	
E	107		Building 44 Satellite Accumulation Area	Petroleum Products Metal Shavings	RFA in Progress	Building 44		RCRA	
H	108		Building 61 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building 61		RCRA	
F	109		Building 25 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building 25		RCRA	
F	110		Building 32 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building 32		RCRA	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
E	111		Pier G Satellite Accumulation Area	Miscellaneous	RFA in Progress	Pier G		RCRA	
E	112		SGI Barge, Pier H Satellite Accumulation Area	Miscellaneous	RFA in Progress	Pier H		RCRA	
H	113		Building 810 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building 810		RCRA	
E	114		Pier H Satellite Accumulation Area	Miscellaneous	RFA in Progress	Pier H		RCRA	
E	115		Drydock #1 Satellite Accumulation Area	Miscellaneous	RFA in Progress	Drydock #1		RCRA	
I	116		Pier O Temporary Satellite Accumulation Area	Paint Miscellaneous	RFA in Progress	Pier O		RCRA	
C	117		NH-21 Temporary Satellite Accumulation Area	Miscellaneous	RFA in Progress	Building NH-21		RCRA	
F	118		Chapel CBU-412 Temporary Satellite Accumulation Area	Miscellaneous	RFA in Progress	Chapel CBU-412		RCRA	
Various	119		Dredge Material on Base	Miscellaneous	Being Investigated Under SWMU 37	Various		RCRA	
J	120		Waterfront	Petroleum Products	To Be Determined	Waterfront		To Be DeterminedA	
H	121		Area Across from McDonalds	Miscellaneous	Being Investigated Under SWMU 9	Landfill Area Across from McDonalds		RCRA	
G	122		Buildings 3902 & 193 (West Area)	PCBs Petroleum Products Miscellaneous	To Be Determined	Buildings 3902 & 193		RCRA	
H	123		Between Buildings 602 & 71	Petroleum Products	To Be Determined	Between Buildings 602 & 71		RCRA	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
I	124		C-9 Spoil Area Pit	Petroleum Pit	To Be Determined	Grid Coordinates C-9		RCRA	
H	125		Building 600	PCBs Petroleum Products	To Be Determined	Building 600		RCRA	
I	126		Building NS26 NE Side	Asbestos	To Be Determined	Building NS26		To Be Determined	
I	127		Southern Tip of Base	Dioxins	To Be Determined	Southern Tip of Base		To Be Determined	
A	128		Buildings 1605, 1606, & 1613 Area	Lead	To Be Determined	Buildings 1605, 1606, & 1613 Area		RCRA	
A	129		Buildings 1629, 1648, 1620, 1601B Area	Miscellaneous	To Be Determined	Buildings 1629, 1648, 1620, 1601B Area		RCRA	
E	130		Building 6	Zygo	To Be Determined	Building 6		RCRA	
E	131		Pad 1275	Miscellaneous	Being Investigated Under SWMU 21	Concrete Pad 1275		RCRA	
E	132		Building 2 Copper Tank	Copper	To Be Determined	Building 2		RCRA	
E	133		Building 5 Fiberglass Shop	Miscellaneous	To Be Determined	Building 5		RCRA	
E	134		Building 59 Steam Cleaning Shop	Miscellaneous	To Be Determined	Building 59		RCRA	
E	135		Building 194	Paint	To Be Determined	Building 194		RCRA	
E	136		Building 9 PCB Fire	PCBs	Being Investigated Under SWMU 39	Building 9		To Be Determined	
E	137		Building 177 Anodizing	Miscellaneous	To Be Determined	Building 177		To Be Determined	
E	138		Building 236 Northeast Corner	Freon Petroleum Products	To Be Determined	Building 236		To Be Determined	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
E	139		Alley Between Buildings 79 & 1760	Acetone Petroleum Products	To Be Determined	Alley Between Buildings 79 & 1760		To Be Determined	
G	140		Between Buildings 1794 & 3915	Petroleum Products	To Be Determined	Between Buildings 1794 & 3915		To Be Determined	
F	141		Building 69 Galvanizing	Miscellaneous	To Be Determined	Building 69		To Be Determined	
F	142		Building 68 Battery Shop	Acid	Being Investigated Under SWMU 36	Building 68		RCRA	
G	143		Building 3926	Petroleum Products	To Be Determined	Building 3926		To Be Determined	
E	144		Building 1278 Southwest Area	Miscellaneous	To Be Determined	Building 1278		To Be Determined	
G	145		Building 68 Southeast Area	Paint Blast Residue	To Be Determined	Building 68		To Be Determined	
Various	146		Disposal of Liquid Wastes in Sumps & Drains	Miscellaneous	Will be Investigated by PAOC 16	Basewide		To Be Determined	
F	147		Parking Lot North/ Northeast of Building 240	Epoxies and Resins	To Be Determined	Parking Lot North/ Northeast of Building 240		To Be Determined	
F	148		Between Buildings 241, 242, 255 (Old Locomotive Shop)	Petroleum Products	To Be Determined	Between Buildings 241, 242, 255		To Be Determined	
F	149		Building 68 Battery Cracking Area	Lead Acids	Being Investigated Under SWMU 36	Building 68		To Be Determined	
E	150		Barge in Dry Dock 4	None	No Action Required	Dry Dock 4		To Be Determined	
E	151		Building 3 Gauge Room	Mercury	To Be Determined	Building 3		To Be Determined	
E	152		Building 79 Floor	Mercury	To Be Determined	Building 79		To Be Determined	
E	153		Sonar Dome Area	Miscellaneous	To Be Determined	End of Pier J		To Be Determined	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
E	154		Building 5 Elevator	Hydraulic Oil	To Be Determined	Building 5		To Be Determined	
C	155		Parking Lot/Old Morgue	Miscellaneous	To Be Determined	Southeast of Building 45		To Be Determined	
H	156		Building 1888 Range	Lead	To Be Determined	Building 1888		To Be Determined	
I	157		Old Building 1888 Outdoor Range	Lead	To Be Determined	Old Building 1888		To Be Determined	
H	158		Field South of Building 1897	Miscellaneous	Being Investigated Under SWMU 14	Field South of Building 1897		RCRA	
C	159		Building M-192 Range	Miscellaneous	To Be Determined	Building M-192		To Be Determined	
I	160		Spoils Area Road	Chemical Wastes Miscellaneous	To Be Determined	South End of Base		To Be Determined	
E	161		Building 5 Dip Tank Area	Miscellaneous	To Be Determined	Building 5		To Be Determined	
J	162		Free Oil from Areas Along Cooper River	Petroleum Products	Being Investigated Under PAOC 120	Waterfront		To Be Determined	
Various	163		Dredge Spoils	Miscellaneous	Being Investigated Under SWMU 37	Various Locations		To Be Determined	
G	164		Pier Z Temporary Satellite Accumulation Area	Miscellaneous	To Be Determined	Pier Z		RCRA	
I	165		Pier P Temporary Satellite Accumulation Area	Miscellaneous	To Be Determined	Pier P		RCRA	
I	166		Pier P Temporary Satellite Accumulation Area	Miscellaneous	To Be Determined	Pier P		RCRA	
E	167		Drydock #5 Satellite Accumulation Area	Miscellaneous	To Be Determined	Drydock #5		RCRA	
E	168		Building 194 Satellite Accumulation Area	Miscellaneous	To Be Determined	Building 194		RCRA	
E	169		Pier C at Roe Avenue Satellite Accumulation Area	Miscellaneous	To Be Determined	Pier C at Roe Avenue		RCRA	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
J	170		UXO Site Between Piers S and T	2 Mark 47 TORPEX Loaded Depth Bombs	To Be Determined	Between Piers S and T		To Be Determined	
J	171		UXO Site in Cooper River East of Buildings X54 and X55	2 Mark 47 TORPEX Loaded Depth Bombs	To Be Determined	Cooper River East of Buildings X54 and X55		To Be Determined	
H	172		UXO Site South of Building 665	2 Mark 17 Depth Bombs	To Be Determined	South of Building 665		To Be Determined	
J	173		Dredge Line East of Pier D	Miscellaneous	To Be Determined	East of Pier D		To Be Determined	
J	174		Abandoned Dredge Line Northeast of Thirteenth Street	Miscellaneous	To Be Determined	Northeast of Thirteenth Street		To Be Determined	
J	175		Dredge Line Northeast of Thirteenth Street	Miscellaneous	To Be Determined	Northeast of Thirteenth Street		To Be Determined	
H	176		Oil Spill Area Behind Base Exchange	Petroleum Products	To Be Determined	Behind Base Exchange		To Be Determined	
G	177		Oil Spill Area at Hobson and Viaduct Road	Petroleum Products	To Be Determined	Hobson and Viaduct Road		To Be Determined	
K	178		Former Naval Ammunition Depot	Explosives Heavy Metals	To Be Determined	Clouter Creek Dredge Area		To Be Determined	
F	179		Coal Storage Area	Coal Products and Byproducts	To Be Determined	Building 1199 Area		To Be Determined	
B	180		Oil Storehouse (1010)	Petroleum Products	To Be Determined	Golf Course Area (Facility 1410)		To Be Determined	
C	181		Oil House (16)	Petroleum Products	To Be Determined	Building 762 Area		To Be Determined	
C	182		Burning Dump	Unknown	To Be Determined	Building NSC 64, 66, 67 Area		To Be Determined	
E	183		Paint and Oil Storage Facility (35)	Paints Possible Solvents Petroleum Products	To Be Determined	Building 35 (Original Building Still Exists)		To Be Determined	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
E	184		Building 22 Acetylene Plant (1922-1930s) Paint Shop (1930s-1950s)	Acetylene Paints Possible Solvents	To Be Determined	Building 226 Area		To Be Determined	
E	185		Oil Storage for Shops (38)	Petroleum Products	To Be Determined	Building 226 Area		To Be Determined	
E	186		Torpedo Storage (101) Machine Shop Galvanizing Plant	Explosives Propellants Solvents/Degreasers Miscellaneous	To Be Determined	Building 101 Area		To Be Determined	
C	187		Oil Storehouse (1052)	Petroleum Products	To Be Determined	Building M-1262 Area		To Be Determined	
E	188		Burning Dump	Unknown	To Be Determined	Dry Dock 3 Area		To Be Determined	
C	189		Coal Bins	Coal and Coal Byproducts	To Be Determined	Building M-1257 Area		To Be Determined	
E	190		Scrap Yard (1054)	Metals Miscellaneous	To Be Determined	Building 5 Area		To Be Determined	
E	191		Battery Charging Station (73)	Lead Acids	To Be Determined	Building 226 Area		To Be Determined	
C	192		Building 51 Incinerator (1920s-1930s), Paint Shop (1930s-1940s)	Paints Solvents Unknown	To Be Determined	Area West of Building 233		To Be Determined	
G	193		Alcohol Storage	Alcohol	To Be Determined	Building 132 Area		To Be Determined	
G	194		Torpedo Work Shop (132)	Explosives Propellants	To Be Determined	Building 132		To Be Determined	
G	195		Torpedo Magazines (160, 161, 162)	Explosives Propellants	To Be Determined	Building 161 Area (Buildings 160 and 162 were demolished in the 1970s)		To Be Determined	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
G	196		Dump Area	Unknown	To Be Determined	Building 161 Area		To Be Determined	
A	197		Asphalt Plant and Tanks Boiler Plant	Asphalt Products Solvents/Degreasers	To Be Determined	Northwest of Building 1803		To Be Determined	
F	198		Oil Storage Yard	Petroleum Products	To Be Determined	Area of Buildings 1824, 1836, 316, 381		To Be Determined	
E	199		Asbestos Shredding Shelter (1225)	Asbestos	To Be Determined	South of Building 1760		To Be Determined	
G	200		Pistol Range	Lead Explosives	To Be Determined	Parking Lot of Buildings X10, X12, 1431		To Be Determined	
I	201		Firefighting School (2-V)	Petroleum Products	To Be Determined	Building NS-1 Area		To Be Determined	
I	202		Wash Rack	Unknown	To Be Determined	Building NS-1 Area		To Be Determined	
H	203		Pyrotechnic Storage (159)	Pyrotechnics Explosives	To Be Determined	Building 1889 Area		To Be Determined	
I	204		Smoke Drum (157)	Unknown	To Be Determined	Partridge Avenue and Juneau Avenue Area		To Be Determined	
I	205		Transformer Vault	PCB Oils	To Be Determined	Building 678 Area		To Be Determined	
I	206		Transformer Vault	PCB Oils	To Be Determined	West of Building 682		To Be Determined	
I	207		High Explosive Storage (54)	Explosives	To Be Determined	Building X-54		To Be Determined	
I	208		High Explosive Storage (55)	Explosives	To Be Determined	Building X-55 (Associated with SWMU for Paint Storage)		To Be Determined	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
I	209		High Explosive Storage (56)	Explosives	To Be Determined	Building X-56		To Be Determined	
H	210		Explosives Storage	Explosives	To Be Determined	Area South of Building 601		To Be Determined	
I	211		Paint and Oil Storehouse (169) Flammable Storehouse	Paints Petroleum Products Solvents/Degreasers	To Be Determined	Building 169		To Be Determined	
G	212		Paint and Oil Storehouse (3902)	Paints Petroleum Products Solvents/Degreasers	To Be Determined	Building 3902		To Be Determined	
H	213		Mosquito Control (31)	Pesticides	To Be Determined	Building NS-6 Area		To Be Determined	
A	214		Miscellaneous Storage	Miscellaneous	To Be Determined	North of Building 1605		To Be Determined	
H	215		Braswell Shipyards, Inc. Storage Area	Unknown	To Be Determined	East of Building 672		To Be Determined	
H	216		Metal Trades, Inc. Storage Area	Unknown	To Be Determined	East of Building 672		To Be Determined	
I	217		Incinerator	Unknown	To Be Determined	Area of Building NS-2		To Be Determined	
A	218		Creosote Cross-Tie/Ballast Storage Area	Creosote Unknown	To Be Determined	Area of Building 1803		To Be Determined	
Various	219		Railroad System	Petroleum Products Batteries (Lead, Acids) Coal Additional Unknowns	To Be Determined	Basewide		To Be Determined	
E	220		Foundry and Blacksmith Shop (6)	Lead	To Be Determined	Northwest of Building 3		To Be Determined	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
E	221		Pattern and Electric Shop (10)	Lead Zinc Solvents and Degreasers	To Be Determined	South of Building 10		To Be Determined	
H	222		Diesel Storage (14)	Petroleum Products	To Be Determined	South of Hobson Avenue		To Be Determined	
C	223		Oil House (16)	Petroleum Products	To Be Determined	East of Avenue "H"		To Be Determined	
B	224		Incinerator (19)	Petroleum Products Metals	To Be Determined	North of Avenue "D"		To Be Determined	
E	225		Waterfront Substation and Radio Lab (20)	PCBs	To Be Determined	Building 236 Area		To Be Determined	
E	226		Aviation Gas Storage (21)	Petroleum Products Lead	To Be Determined	East of Building 11		To Be Determined	
E	227		Transformer House (24)	PCBs Petroleum Products	To Be Determined	Building 2 Area		To Be Determined	
F	228		Transportation Shop and Garage (25)	Petroleum Products Lead Solvents and Degreasers	To Be Determined	Southwest of Building 177		To Be Determined	
E	229		Latrine, Pier 317 (26)	Organic Wastes Heavy Metals	To Be Determined	Beside Building 75		To Be Determined	
E	230		Latrine (27)	Organic Wastes Heavy Metals	To Be Determined	East of Building 2		To Be Determined	
E	231		Latrine (28)	Organic Wastes Heavy Metals	To Be Determined	East of Building 2		To Be Determined	
E	232		Latrine and Substation, Pier 314 (29)	Organic Wastes Heavy Metals PCBs	To Be Determined	Southeast side of Building 1119		To Be Determined	
F	233		Sewage Treatment Plant (30)	Organic Wastes Heavy Metals	To Be Determined	West of Building 177		To Be Determined	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
F	234		Central Power Station (32)	Petroleum Products Combustion Products PCBs	To Be Determined	West of Hobson Avenue		To Be Determined	
F	235		Disinfector (34)	Unknown	To Be Determined	South of Building 32		To Be Determined	
E	236		Latrine for Enlisted Men (36)	Organic Wastes Heavy Metals	To Be Determined	End of 5th Street and near end of Pier 317-D		To Be Determined	
E	237		Locomotive House (37)	Solvents and Degreasers	To Be Determined	Building 177 Area		To Be Determined	
F	238		Oil and Gasoline Service Station (40)	Solvents and Degreasers Petroleum Products	To Be Determined	Attached to Southwest corner of Building 30		To Be Determined	
C	239		Incinerator Building (67)	Petroleum Products Metals Combustion Products	To Be Determined	Southwest of Storage Area		To Be Determined	
E	240		Plating Plant — Formerly Building 226/1975 (73)	Heavy Metals Nitric Acid	To Be Determined	Northeast corner of Building 3		To Be Determined	
E	241		Substation (75)	PCBs Petroleum Products	To Be Determined	East of Building 195		To Be Determined	
E	242		Substation (77)	PCBs Petroleum Products	To Be Determined	South of Dry Dock #1		To Be Determined	
E	243		Substation (84)	PCBs Petroleum Products	To Be Determined	South of Dry Dock #2		To Be Determined	
E	244		Substation (85)	PCBs Petroleum Products	To Be Determined	By River Road		To Be Determined	
E	245		Substation (91)	PCBs Petroleum Products	To Be Determined	North of 317F		To Be Determined	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
E	246		Substation (94)	PCBs Petroleum Products	To Be Determined	Southeast on Building 1172		To Be Determined	
E	247		Substation (95)	PCBs Petroleum Products	To Be Determined	Southwest of Dry Dock #3		To Be Determined	
E	248		Substation (96)	PCBs Petroleum Products	To Be Determined	Southwest of Dry Dock #4		To Be Determined	
G	249		Fuel Oil Booster Pumphouse (98)	Petroleum Products	To Be Determined	West of Hobson Avenue		To Be Determined	
K	250		Fuse and Primer House (117)	Petroleum Products Combustion Products	To Be Determined	Along submerged dredge line		To Be Determined	
K	251		Electric Locomotive Shed (119)	Solvents and Degreasers	To Be Determined	Southwest of Building 117		To Be Determined	
G	252		Substation (124)	PCBs Petroleum Products	To Be Determined	South of Building 325		To Be Determined	
G	253		Substation (125)	PCBs Petroleum Products	To Be Determined	Base of 327		To Be Determined	
I	254		Substation (126)	PCBs Petroleum Products	To Be Determined	North of Hobson Avenue		To Be Determined	
F	255		Service Station (136)	Petroleum Products Solvents and Degreasers	To Be Determined	South of Building 1295		To Be Determined	
E	256		Switching Substation — Formerly Building 460/1965 (138)	PCBs Petroleum Products	To Be Determined	Southeast corner of Building 2		To Be Determined	
G	257		Stripper Concrete Tank (148)	Acetone Methylene Chloride	To Be Determined	Southwest of Building 98		To Be Determined	
E	258		Radcon Training & Offices (190)	Unknown	To Be Determined	South of 317-E		To Be Determined	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
K	259		Sewage Lift Station Naval Short Stay (194)	Organic Wastes Heavy Metals	To Be Determined	SHORT STAY		To Be Determined	
K	260		Paint Storage (197)	Heavy Metals Acetone Xylene Toluene	To Be Determined	SHORT STAY		To Be Determined	
H	261		Gas Storage (203)	Petroleum Products	To Be Determined	East of Building 1303		To Be Determined	
K	262		Flammable Storage (207)	Unknown	To Be Determined	SHORT STAY		To Be Determined	
C	263		Battery Charging Station (219)	Lead Sulfuric Acid	To Be Determined	South of Building 198		To Be Determined	
E	264		Oil Pier (319)	Petroleum Products	To Be Determined	End of 317-F		To Be Determined	
G	265		Fueling Pier K (325)	Petroleum Products	To Be Determined	At end of 13th Street		To Be Determined	
E	266		Substation (342)	PCBs Petroleum Products	To Be Determined	Attached to Building 228		To Be Determined	
E	267		Substation (454)	PCBs Petroleum Products	To Be Determined	Attached to Building 80		To Be Determined	
E	268		Substation (455)	PCBs Petroleum Products	To Be Determined	North of Building 236		To Be Determined	
E	269		Switching Substation (459)	PCBs Petroleum Products	To Be Determined	West of Building 35		To Be Determined	
E	270		Switching Substation (460)	PCBs Petroleum Products	To Be Determined	North of Building 74		To Be Determined	
F	271		Switching Substation (466)	PCBs Petroleum Products	To Be Determined	Northwest of Building 68		To Be Determined	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
H	272		Engine Overhaul Facility (645)	Solvents and Degreasers Petroleum Products Chlorofluorocarbons	To Be Determined	Attached to Building 1647		To Be Determined	
H	273		Gas/Diesel Pumping Station (851)	Petroleum Products	To Be Determined	East of Building 1817		To Be Determined	
E	274		Paint Shop/Locomotive Shed (1003)	Heavy Metals Acetone Xylenes Toluene	To Be Determined	North of Building 1021		To Be Determined	
E	275		Temporary Coal Bin (1006)	Coke Vanadium	To Be Determined	End of Dry Dock #5		To Be Determined	
E	276		Oil and Paint Storehouse/Print Office (1012)	Heavy Metals Paints Solvents	To Be Determined	Building 80 Area		To Be Determined	
E	277		Temporary Powerhouse (1014)	PCBs	To Be Determined	Southeast of Building 11		To Be Determined	
E	278		Ordnance Wrecking Magazine/Oil & Paint Storehouse (1018)	Petroleum Products Paints Heavy Metals	To Be Determined	Southwest of Building 101		To Be Determined	
E	279		Latrine (1020)	Organic Wastes Heavy Metals	To Be Determined	South of Dry Dock #1		To Be Determined	
E	280		Galvanizing Shop (1025)	Zinc Inorganic Acids	To Be Determined	In between South end of Buildings 56 and 74		To Be Determined	
E	281		Galvanizing Shop (1030)	Zinc Inorganic Acids	To Be Determined	Northeast corner of Dry Dock #1		To Be Determined	
E	282		Paint Shop (1035)	Paints Heavy Metals	To Be Determined	East of Building 1178		To Be Determined	
C	283		Garbagehouse (1051)	Unknown	To Be Determined	North of Building M-17		To Be Determined	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
C	284		Hazardous Flammable Storage (1079)	Unknown	To Be Determined	Along west property border		To Be Determined	
C	285		Boilerhouse (not in use) (1081)	Petroleum Products	To Be Determined	South of Turnbull Avenue		To Be Determined	
E	286		Boilerhouse for Marine Corps (1111)	Petroleum Products	To Be Determined	North of Pier 314 and East of 1041A		To Be Determined	
E	287		Boilerhouse, Pier 314 (1119)	Petroleum Products	To Be Determined	Southeast of Building 3		To Be Determined	
F	288		Paint Shop (1201)	Paints Heavy Metals	To Be Determined	Southwest of Dry Dock #3		To Be Determined	
F	289		Paint Storage (1263)	Paints Heavy Metals	To Be Determined	Southwest of Building 1346		To Be Determined	
F	290		Grease Rack and Hobby Shop (1264)	Petroleum Products Solvents and Degreasers Methylene Chloride	To Be Determined	Football field Area		To Be Determined	
G	291		Garbage Handling (1271)	Unknown	To Be Determined	End of 336		To Be Determined	
E	292		Contaminated Waste Storage (1426)	Unknown	To Be Determined	East of Building 101		To Be Determined	
A	293		Battery Charging Facility (1624)	Lead Sulfuric Acid	To Be Determined	North of 1602C		To Be Determined	
A	294		Publications and Printing Plant (1628)	Chromium Lead	To Be Determined	North of 2nd Street North		To Be Determined	
A	295		Flammable Storage Shelter (1629)	Unknown	To Be Determined	North of Building 1603		To Be Determined	
E	296		Incinerator (1711)	Organic Wastes Heavy Metals	To Be Determined	Building 79 Area		To Be Determined	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
H	297		Septic Tank and Drain Field (1718) (abandoned)	Organic Wastes Heavy Metals	To Be Determined	Building 661 Area		To Be Determined	
E	298		Contaminated Storage (1760)	Unknown	To Be Determined	Southwest of Building 79		To Be Determined	
G	299		Substation (1793)	PCBs Petroleum Products	To Be Determined	North of 327		To Be Determined	
C	300		Flammable Storage (1813)	Unknown	To Be Determined	South of NH55		To Be Determined	
G	301		Flammable Storage Shelter (1814)	Unknown	To Be Determined	Southwest of Building 224		To Be Determined	
H	302		Hazardous Material Storage (1899)	Unknown	To Be Determined	Southwest of Building 1776		To Be Determined	
K	303		Vehicle Maintenance Shop (2505)	Petroleum Products Solvents and Degreasers Chlorofluorocarbons	To Be Determined	ANNEX RADAR SITE		To Be Determined	
G	304		Tank Truck/Car Loading/Unloading Facility (3913)	Unknown	To Be Determined	South of Dry Dock #4		To Be Determined	
G	305		POL Sampling/Test Building (3914)	Petroleum Products	To Be Determined	South of Dry Dock #4		To Be Determined	
G	306		Ballast Water Treatment Facility (3926)	Organic Wastes Heavy Metals	To Be Determined	North of oil tanks		To Be Determined	
E	307		Coaling Pier/Oil Pier (318-L)	Petroleum and Coal Products	To Be Determined	317-F Area		To Be Determined	
G	308		Stripper Pumphouse (39-K)	Acetone Methylene Chloride	To Be Determined	Base of 336		To Be Determined	
G	309		Sludge Pumphouse (3901B)	Organic Wastes Heavy Metals	To Be Determined	Northwest of Oil Tanks		To Be Determined	
I	310		Meter House (Gasoline) (3905G)	Petroleum Products	To Be Determined	North of Hobson		To Be Determined	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
K	311		Operational Storage (3906Q)	Unknown	To Be Determined	CHICORA TANK FARM		To Be Determined	
K	312		Transformer Vault (3906R)	PCBs Petroleum Products	To Be Determined	CHICORA TANK FARM		To Be Determined	
K	313		Transformer Vault (3906S)	PCBs Petroleum Products	To Be Determined	CHICORA TANK FARM		To Be Determined	
G	314		Diesel Pumphouse (39M)	Petroleum Products	To Be Determined	3900F Area		To Be Determined	
D	315		Substation (451A)	PCBs Petroleum Products	To Be Determined	Along Carolina Avenue		To Be Determined	
F	316		Substation (451B)	PCBs Petroleum Products	To Be Determined	Along Carolina Avenue		To Be Determined	
G	317		Substation (451C)	PCBs Petroleum Products	To Be Determined	West of Building 224		To Be Determined	
E	318		Substation (451H)	PCBs Petroleum Products	To Be Determined	Southeast of Dry Dock #5		To Be Determined	
C	319		Garbage House (M-1051)	Unknown	To Be Determined	North of 2nd Street		To Be Determined	
C	320		Gas Station Storage (M-1234)	Petroleum Products	To Be Determined	South of Building 198		To Be Determined	
C	321		Grease and Wash Building (M-1252)	Petroleum Products	To Be Determined	Southwest of Building 198		To Be Determined	
G	322		Fuel Oil Pier (322)	Petroleum Products	To Be Determined	South of 337		To Be Determined	
C	323		General Purpose Laboratory (NH-21)	Methyl Ethyl Ketone Acetone Methylene Chloride Solvents	To Be Determined	Along Thompson Avenue		To Be Determined	
I	324		Fuel Oil Storage (NS-4)	Petroleum Products	To Be Determined	Along Thompson Avenue		To Be Determined	
H	325		Fuel Storage (NS-45)	Petroleum Products	To Be Determined	By Osprey Street		To Be Determined	

TABLE 3-2. POTENTIAL AREAS OF CONCERN (PAOCs)

Study Zone	Site Number PAOCs	Site Class	Description	Material Disposed of	Status	Location	Risk To Human Health & Environment	Regulatory Mechanism	NFA
E	326		Plating Plant Formerly Building 226 (NSC1026)	Zinc Inorganic Acids	To Be Determined	Building 3 Area		To Be Determined	
E	327		Diesel Oil Pumphouse (NSC39) (abandoned)	Petroleum Products	To Be Determined	South of 317-F		To Be Determined	
I	328		Paint Storage (RTC4)	Paints Heavy Metals Solvents	To Be Determined	South of Building 330		To Be Determined	
H	329		Transformer Vault (X33A)	PCBs Petroleum Products	To Be Determined	Building NS53 area		To Be Determined	
E	330		Building 44 <90 Day Accumulation Area	Plating Chemical Wastes	To Be Determined	Building 44		To Be Determined	

waste management, asbestos, radon, polychlorinated biphenyls (PCBs), water discharges, air emissions, lead paint and remedial investigations of contaminated sites.

The list of environmental compliance projects is shown in Table 3-3 and Table 3-4. Actions taken in conjunction with the remediation of previously identified environmental problems are described in Section 3.1.

3.2.1 Storage Tanks

The EPA has delegated the management of the UST program to the State of South Carolina, Department of Health & Environmental Control (SCDHEC). SCDHEC has primary enforcement responsibility and EPA's approval effectively suspends the applicability of certain federal regulations in favor of the state program, thereby eliminating duplicative requirements. Therefore, UST closure and investigation activities throughout the Naval Base Charleston properties are conducted under the South Carolina UST program. South Carolina has no Aboveground Storage Tank regulations. Therefore, federal SPCC regulations (40 CFR 110 and 40 CFR 112) are applicable for aboveground storage tanks.

Known existing and former underground and aboveground storage tanks are shown in Tables 3-5 and 3-6. Due to the age of the facility and the lack of records, it is anticipated that Table 3-5 will be revised in the future to incorporate newly discovered USTs. Also, much of the information shown in Table 3-5 was obtained by compiling several existing UST lists. As a result, the information in the table concerning some tanks is incomplete, and in many cases no locations are shown. Further investigation will be required to determine the current status and/or location of these suspect tanks.

Existing UST remediation projects are identified in Table 3-7.

3.2.2 Hazardous Materials/Waste Management

Hazardous waste compliance programs at Naval Base Charleston are conducted under COMNAVBASE Charleston Instruction 5090.3A, the federal and state requirements found in 40 CFR 260 through 269, 40 CFR 117, 49 CFR 171 et seq., Department of Transportation regulations, and South Carolina Rules R.61-79.260 to R.61-79.270. COMNAVBASE Charleston Instruction 5090.3A assigns hazardous waste management responsibility for the Naval Base to CNSY. Naval Base Charleston finalized its Hazardous Waste Management Plan in 1991.

CNSY currently operates two hazardous waste storage facilities, Buildings 246 and 1640, under a final Part B permit which became effective on June 4, 1990. The permit is scheduled to expire on June 4, 1995. Building 1640, which is operated by CNSY for the Naval Base as a whole,

releases of hazardous waste or hazardous constituents to the environment and to implement corrective actions, as necessary, under the broad authorities of the 1984 Hazardous and Solid Waste Amendments (HSWA) of 1984. The RFA identifies information on Solid Waste Management Units (SWMUs) at RCRA facilities, evaluates the potential for release to the environment, and determines the need for further investigation.

The initial RFA addressed 24 potential SWMUs (PSWMUs), including the eight sites previously identified in the NACIP studies; from 1990 through 1994, RFAs were performed for an additional 15 PSWMUs. A list of the 39 SWMUs is shown in Table 3-1. Based on the findings of these studies, an RFI is in progress on the first 36 SWMUs. Eight SWMUs have been tentatively classified as no further action required; however, this determination is not yet official. A RCRA closure has been performed on the process tanks of SWMU 25. RFA studies are currently being performed on the final three SWMU sites. Table 3-1 provides a brief description of each SWMU as well as their regulatory status.

Table 3-2 lists 330 Potential Areas of Concern (PAOCs) which require further study. RFAs are currently being performed on 118 of the PAOCs. The remainder of the sites were recently identified during the Environmental Baseline Survey process; the appropriate investigative approach for these sites is presently being formulated.

3.1.1 Restoration Sites

All existing restoration sites are being addressed under the RFA/RFI program, as previously discussed in Section 3.1.

3.1.2 Installation-Wide Source Discovery and Assessment Status

The RCRA RFA/RFI studies, which were discussed in Section 3.1, are the primary means of source discovery and assessment presently utilized at Naval Base Charleston. In addition, an Environmental Baseline Survey (EBS) is currently being performed to evaluate on base facilities on a building by building basis. The results of this study is presented in Section 3.4.

3.2 Compliance Program Status

Compliance programs for Naval Base Charleston are coordinated in a variety of ways. The CNSY Occupational Safety, Health, and Environment office has management oversight for all CNSY programs and for a number of programs which apply basewide. Other parties involved in the overall system include the Fleet Industrial Supply Center (FISC) Occupational Safety & Health Department, the FISC Fuel Department, CNSY Public Works Department (Utilities, Transportation), Naval Weapons Station Housing, Naval Base Environmental, and Navy Hospital Industrial Hygiene. Compliance activities address USTs, hazardous materials management, solid

TABLE 3-3. MISSION/OPERATIONAL-RELATED COMPLIANCE PROJECTS

Project	Status	Regulatory Program
A1211 — VOC Emission Inventories, Phase I/II	Complete Information Submitted to SCDHEC for Review	Clean Air Act
W305T — Modification of Waste Oil Donuts	Not Funded for 1992 Canceled	Clean Water Act
W305N — NS-680 Oil/Water Separator Installation	Not Funded for 1993 Current Status Unknown	Waste Minimization
W305O — NS-681 Oil/Water Separator Installation	Not Funded for 1993 Current Status Unknown	Waste Minimization
PW# 1-0208 - H410A Sleeving or Preclude Tidal Flow into Sanitary Sewer Manhole	Waiting for Funds, 2/94 CNSY	Clean Water Act
PW# 1-0271 - H410A Repairs to Sanitary Sewer, Storm Drain Infiltration	Waiting for Funds, 2/94 CNSY	Clean Water Act
PW# 1-0336 - H410A Provide M & R Project to Correct Deficiencies in the Sanitary Sewer	In PW Engineering, 2/94 CNSY	Clean Water Act
PW# 2-0133 - H410A Repairs to Sanitary Sewer at Piers E and F	Contract Advertised/Awarded	Clean Water Act
PW# 2-3443 - CT1 Construct Berm Around Gas Tank at Boating Area, Short Stay	Waiting for Funds, 2/94 NAVSTA	Clean Water Act
PW#-2-7015 - H436A Replace Asbestos Pipe Insulation in Drydock #1 Tunnels	Unknown	Clean Air Act
PW# 9J0906 H410A Repair Sewage System under Piers N, P & Q	PWD P&E for Scope, 2/94	Clean Water Act
PW# CNSY3-0039 - H410A Drydock #1, Repair 8" Sanitary Sewer Line in Concrete Floor of Drydock	In Shop for Completion, 2/94	Clean Water Act
PW# 2-3045 - Buildings 214, 215 & 1448, Pools, Replace 3 Chlorinators	Cancelled	Clean Water Act

TABLE 3-4. CLOSURE-RELATED COMPLIANCE PROJECTS

Project	Status	Regulatory Program
C017F/Continuation of Support for Base Responsibilities for Upcoming Environmental Tasks & Technical Review Committee	Funded for 1993 (\$83,000) Funded for 1995 (\$78,000)	RCRA, TSCA, CWA, CAA
S003F/RCRA Corrective Action Study for PW Storage Yard and DRMO Staging Area	Funded Through 91 (\$780,000) RCRA Risk-Based Closure Completed 1994 Groundwater and Soil (PCB) to be Investigated Under HSWA Program	RCRA
S003R/Removal of Ten Underground Storage Tanks	Funded for 1992 (\$17,000) Partially Funded for 1993 (\$38,000/\$245,000)	UST
S478D/RCRA Corrective Action for Building 44	Funded for 1993 (\$575,000) \$126,000 Spent on RCRA Closure of Process Tanks in 1994	RCRA
Corrective Measures Design for SWMUs Requiring Remedial Action	Submitted Not Funded for 1995 (\$565,000)	RCRA
Corrective Measures Study to Determine Corrective Measures for SWMUs	Submitted Not Funded for 1994 (\$164,000)	RCRA
PCB Testing of All Hydraulic and Heat Transfer Material Systems	Submitted Not Funded for 1993 (\$233,000)	TSCA
UST Removal for Building 1346	Submitted Not Funded for 1994 (\$41,000)	UST
S068C/UST Removal for Eight Tanks	Underway Funded for 1991/1992 (\$16,000/\$211,000)	UST
S068D/UST Remedial Action for Leaking Tanks at Naval Station	Unfunded for 1993 (\$350,000)	UST
C017D/Remedial Investigation/ Feasibility Study for COMNAVBASE	Funded for 1992 (\$1,500,000) Unfunded for 1993 (\$750,000)	RCRA
C017E/Remedial Design/Remedial Action for COMNAVBASE	Unfunded for 1994-98 (\$24,500,000)	RCRA
S358A/RCRA Facility Investigation for 36 SWMUs Already Identified	Funded for 1993 (\$80,000)	RCRA

TABLE 3-4. CLOSURE-RELATED COMPLIANCE PROJECTS

Project	Status	Regulatory Program
S084B/UST Remedial Investigation for Chicora Tank Farm	Funded Through 1993 (\$550,000)	UST
S084C/UST Remedial Action for Chicora Tank Farm	Funded for 1992 & 1994 (\$141,000/500,000)	UST
S282C Follow-on/Remove UST 643B	Not Yet Submitted	UST
S282D/UST Remedial Action for Tank at Building 647	Funded for 1992 (\$15,000) Unfunded for 1993 (\$100,000)	UST
S282E/UST Remedial Action for Soil Around Closed Tank at Building 647	Funded for 1991 (\$34,000)	UST
S324E/UST Remedial Action for Soil Around Tank RTC 2	Funded for 1992 (\$15,000) Unfunded for 1993 (\$100,000)	UST
S324F/UST Remedial Investigation for Soil Around Tank RTC 2	Funded for 1991 (\$35,000)	UST
PW# 0-0828/H410A Replace Sections of Deteriorated 4" Sewer Lines	Contract Advertised/Awarded, 2/94	CWA
PW# 0-0360/Building 28 Cost Estimate for Removal of Asbestos Insulation	Waiting for Funds, 2/94 NAVSTA	CAA
PW# 0-3631/Building NS32 Estimate of Removal of all Asbestos Insulation	Waiting for Funds, 2,94 NAVSTA	CAA
PW# 0-3635 & 0-3642/Building NS53 Cost Estimate for Removal of Asbestos Insulation	Waiting for Funds, 2/94 NAVSTA	CAA
PW# 0-3636/Building 401 Cost Estimate for Removal of Asbestos Insulation	Waiting for Funds, 2/94 NAVSTA	CAA
PW# 0-3645/Building NS59 Cost Estimate for Removal of all Asbestos Insulation	Waiting for Funds, 2/94 NAVSTA	CAA
PW# 1-0319/Building 4000, Remove 500 Gallon Diesel UST	Completed, 2/94	UST
PW# 2-0121/H410A, Replace Sewer Flow Monitors at Viaduct Road	Received Additional Funds, 2/94	CWA

TABLE 3-4. CLOSURE-RELATED COMPLIANCE PROJECTS

Project	Status	Regulatory Program
PW# 2-0532/Building 13, Connect A/C Cooling Tower Drains to Sanitary Sewer	Unfunded, 2/94 CNSY	CWA
PW# 2-0533/Building 76, Connect A/C Cooling Tower to Sanitary Sewer	PW Engineering, 2/94	CWA
PW# 2-0534/Building 7, Contract Estimate for Drain from A/C Cooling Tower	Unfunded, 2/94 CNSY	CWA
PW# 2-0535/Building 63, Connect A/C Cooling Tower Drains to Sanitary Sewer	PW Engineering, 2/94	CWA
PW# 2-0536/Building 177, Connect A/C Cooling Tower Drains to Sanitary Sewer	PW Engineering, 2/94	CWA
PW# 2-0537/Building 187, Connect A/C Cooling Tower Drains to Sanitary Sewer	Unfunded, 2/94 CNSY	CWA
PW# 2-7022/H410A, Repair Leak on 21" Sewer Line, Manholes 54 & 55, Avenue D & 2nd Street	Waiting for Funds, 2/94 CNSY	CWA
PW# 2-7036/H410A, Repair Sanitary Sewer Lines, Manholes 4 & 5	Waiting for Funds, 2/94 CNSY	CWA
PW# 8D0304/Building 32, Remove all Asbestos Insulation from Interior of Power House	Under Contract, 2/94	CAA
PW# CNSY3-0072/Building 226, Repair Broken Concrete Floor at Waste Treatment Building	Unfunded, 2/94	CWA
PW# CNSY3-0140/Building 30, Replace Lead Contaminated Water Cooler/Piping in Public Works Buildings	Unfunded, 2/94	SDWA
PW# CNSY3-0197/H413B-6C, Repair Fresh Water Risers, Insulate Backflow Preventers	Unfunded, 2/94	SDWA
PW# CNSY3-0199/H410A-6C, Miscellaneous Repairs to Sanitary Sewer Risers, Area 6C	Unfunded, 2/94	CWA

TABLE 3-4. CLOSURE-RELATED COMPLIANCE PROJECTS

Project	Status	Regulatory Program
PW# CNSY3-0207/302B, Replace all Piping Drainage, Sewage, Etc. in Pumpwell #2	Unfunded, 2/94	CWA
PW# CNSY3-0320/Building 222, Repair Moisture Seepage on Basement & Tank Farm Walls	Waiting for Funds, 2/94	CWA
PW# CNSY3-5039/H410A, A&E Services to Repair Deteriorated 24" Sewer Line	Unknown	CWA
PW# CNSY3-7181/H436A, Remove Asbestos from 15' Pipe at Head of Pier F	Contract Advertised/Awarded, 2/94	CAA
PW# CNSY3-7185/H436A, Asbestos Contaminated Soil	Contract Advertised/Awarded, 2/94	RCRA
PW# CNSY3-7525/Building 4, Remove Exposed Asbestos — 2 locations	Contract Advertised/Awarded, 2/94	CAA
PW# CNSY3-7530/Building 80, Divert Steam Condensate from Storm Drain to Sanitary Sewer	Unfunded, 2/94	CWA
PW# CNSY3-7532/Building CT9, Remove and Dispose of all Asbestos from A/C Cooling Tower — PC Corral	PWD P&E for Scoping Estimate	CAA
PW# CNSY3-96913/Building 239, Change Asbestos HEPA & Pre-Filters in Roof Ventilator Systems	Work in Shop/Possibly Completed, 2/94	CAA
PW# CNSY4-0012/H410A, Make Environmental Repairs to Sewer System	Waiting on Funds, 2/94	CWA
PW# CNSY4-0031/H436A, Replace Steam & Condensate Piping	Work in Shop/Possibly Completed, 2/94	CWA
PW# NSTA4-3038/Building X54, Removal and Disposal of AST	PWD P&E for Scoping Estimate	AST

TABLE 3-5. UNDERGROUND STORAGE TANK INVENTORY

Tank Number	Zone	Activity	Location	Year Installed	Capacity (Gallons) Tank Material	Substance Stored	Status	Comments	Future Actions
NH 72 #	C	CNSY	Building NH72	1967	8.3K/ Steel	Fuel Oil	In-use, Non-Regulated	May Also be on Lists as NS 72 (from TIMS)	
NS 2A	I	CNSY	Building NS2	1967	25K/ Steel	Fuel Oil	In-use, Non-Regulated		
NS 2B	I	CNSY	Building NS2	11-15 Years Old as of 10/91	495/ Steel	Waste Oil	In-use, Non-Regulated	Oil/Water Separator	Not in TIMS
NS 44A	H	CNSY	Building NS44	1967	25K/ Steel	Fuel Oil (#2)	In-use, Non-Regulated		
NS 44B	H	CNSY	Building NS44	Unknown	Unknown	Unknown	Unknown	Under Investigation as of 10/91	
MS1	Unknown	CNSY	Unknown	1982	550 gal/ FRP	Unknown	In-use	From TIMS	
5C	E	CNSY	Building 5	0-5 Years Old as of 9/92	550/ FRP	Calibration Fluid			
6B	E	CNSY	Building 6	1967	2.5K/ Steel	Fuel Oil (#2)	In-use	Heating Oil Tank WR/PCR-S003R	10/25/91 Note To Deregister
6A	E	CNSY	Building 6	1967	2.5K/ Steel	Fuel Oil (#2)	In-use	Heating Oil Tank WR/PCR-S003R	10/25/91 Note To Deregister
13A	E	CNSY	Building 13	1982	560/ Steel	Unknown	Empty	Monitoring Wells Installed 1989	
13B	E	CNSY	Building 13	1982	560/ Steel	Unknown	Empty	Monitoring Wells Installed 1989	
42	G	CNSY	Building 42	Unknown	500/ Steel	Unknown	Empty, Non-Regulated	10/25/91 Noted that Further Investigation was Required	Not in TIMS
54	C	CNSY	Buildng 54	1967	560/ Steel	Diesel	In-use	Emergency Generator, WR/PCR-S003R	

TABLE 3-5. UNDERGROUND STORAGE TANK INVENTORY

Tank Number	Zone	Activity	Location	Year Installed	Capacity (Gallons) Tank Material	Substance Stored	Status	Comments	Future Actions
56A	E	CNSY	Building 56	1967	4K/ Steel	Fuel Oil (#2)	In-use	Heating Oil tank WR/PCR-S003R	10/25/91 Note To Deregister; TIMS Notes as Single Tank in Building 56
56B	E	CNSY	Building 56	1967	4K/ Steel	Fuel Oil (#2)	In-use	Heating Oil tank WR/PCR-S003R	10/25/91 Note To Deregister; TIMS Notes as Single Tank in Building 56
240	E	CNSY	Building 240	1982	5K/ Steel	Waste Oil	In-use	Groundwater Monitoring Wells in Place	TIMS Mentions Only One Tank at This Facility
241	E	CNSY	Building 241	6 to 10 Years Old as of 9/92	5K/ Steel	Fuel Oil	In-use	Noted in 9/92 SPCC Plan	TIMS Mentions Only One Tank at This Facility
242	E	CNSY	Building 242	1989	6K/ Fiberglass	Waste Oil	In-use	Interstitial Monitoring in Place	
590A	E	CNSY	Building 590	1967	2K/ Steel	Fuel Oil	In-use, Non- Regulated	Cathodic Protection Installed on Pipe in 1990	
1141B	F	CNSY	Building 1141	> 20 Years Old	3K/ Steel	Unknown	AbandonedC oncrete-Filled	Properly Abandoned; Ser 462.1/146 of 11 Apr 89	Not in TIMS
1141A	F	CNSY	Building 1141	> 20 Years Old	10K/ Steel	Unknown	AbandonedC oncrete-Filled	Properly Abandoned; Ser 462.1/146 of 11 Apr 89	Not in TIMS
1169	Unknown	CNSY	Unknown	> 20 Years Old	550/ Steel	Unknown	Empty, Non- Regulated	PCR Submitted 5/89, To Be Removed 1991	Not in TIMS
1174	E	CNSY	Building 1174	> 20 Years Old	1K/ Steel	Unknown	Empty, Non- Regulated	PCR Submitted 5/89, To Be Removed 1991	Not in TIMS

TABLE 3-5. UNDERGROUND STORAGE TANK INVENTORY

Tank Number	Zone	Activity	Location	Year Installed	Capacity (Gallons) Tank Material	Substance Stored	Status	Comments	Future Actions
1175A 1	E	CNSY	Building 1175	1989	10K/ Fiberglass	Gasoline	In-use	Auto Tank Gauging & Interstitial Monitoring in Place	Possibly Renamed from NH52A
1175C ,	E	CNSY	Building 1175	1989	10K/ Fiberglass	Diesel	In-use	Auto Tank Gauging & Interstitial Monitoring in Place	Possibly Renamed from NH52C
1175B A	E	CNSY	Building 1175	1989	10K/ Fiberglass	Gasoline	In-use	Auto Tank Gauging & Interstitial Monitoring in Place	Possibly Renamed from NH52B
1279A #15368	E	CNSY	Building 1279	1967	2.5K/ Steel	Gasoline	Temporarily Closed, Empty	WR/PCR-S003R	
1279C "	E	CNSY	Building 1279	1982	3.5K/ Steel	Gasoline	Temporarily Closed, Empty	WR/PCR-S003R	
1279B 11	E	CNSY	Building 1279	1967	3.0K/ Steel	Gasoline	Temporarily Closed, Empty	WR/PCR-S003R	
191 NE	A	FISC	Building 191	1967	1.5K/ Steel	Fuel Oil (#2)	In-use, Non-Regulated		
191 NW	A	FISC	Building 191	1967	1.5K/ Steel	Unknown	Empty	10/25/91 Noted as Abandoned	
224 (S)	G	FISC	Building 224	1972	5K/ Steel	Fuel Oil	In-use, Non-Regulated		
1136 (SW)	C	FISC	Building 1136	1977	375/ Steel	Fuel Oil	In-use, Non-Regulated	FISC List Shows Only 1136NE (500 Gallon, #2 Fuel Oil); No 1136SW Noted	
39060	G	FISC	Chicora	1943	1.15M/ Concrete	Waste Oil	In Use for Storage	Chicora	Closure & Demolition Project #'s S084B & S084C Apply

TABLE 3-5. UNDERGROUND STORAGE TANK INVENTORY

Tank Number	Zone	Activity	Location	Year Installed	Capacity (Gallons) Tank Material	Substance Stored	Status	Comments	Future Actions
3906P	G	FISC	Chicora	1943	2.13M/ Concrete	Diesel	Not-in-use	Chicora Tank Farm Taken Out of Service in XXX XX	Closure & Demolition Project #'s S084B & S084C Apply
3906N	G	FISC	Chicora	1943	2.13M/ Concrete	Empty	Not-in-use	Chicora Tank Farm Taken Out of Service in XXX XX	Closure & Demolition Project #'s S084B & S084C Apply
3906K	G	FISC	Chicora	1943	2.13M/ Concrete	Diesel	Not-in-use	Chicora Tank Farm Taken Out of Service in XXX XX	Closure & Demolition Project #'s S084B & S084C Apply
3906M	G	FISC	Chicora	1943	2.13M/ Concrete	Waste Oil	Not-in-use	Chicora Tank Farm Taken Out of Service in XXX XX	Closure & Demolition Project #'s S084B & S084C Apply
3906L	G	FISC	Chicora	1943	2.13M/ Concrete	Diesel	Not-in-use	Chicora Tank Farm Taken Out of Service in XXX XX	Closure & Demolition Project #'s S084B & S084C Apply
202 13337	H	FMWTC	Building 202	1967	5K/ Steel	Fuel Oil (#2)	In-use, Non- Regulated		
643B u	H	FMWTC	Building 643	1982	1K/ Fiberglass	Diesel	In-use	Possibly WR/PCR	
643A u	H	FMWTC	Building 643	1967	6K/ Steel	Fuel Oil (#2)	In-use, Non- Regulated	SPCC states 643A is 1K Gallon, FRP, Gasoline, 0-5 Years Old	
643C u	H	FMWTC	Building 643	16-20 Years Old as of 10/91	550/ Steel	Diesel	Removed 1990	No Contamination Found	Not in TIMS

TABLE 3-5. UNDERGROUND STORAGE TANK INVENTORY

Tank Number	Zone	Activity	Location	Year Installed	Capacity (Gallons) Tank Material	Substance Stored	Status	Comments	Future Actions
647A \\	H	FWMTC	Building 647	1967	4K/ Steel	Fuel Oil (#2)	Filled with Concrete; Non- Regulated	Contamination Found in SOUTHDIV Assessment; 3 Groundwater Monitoring Wells in Place	Not in TIMS
NS 53	H	NAVSTA	Building NS53	1967	2K/ Steel (SPCC/TIMS States 3K)	Fuel Oil (#2)	In-use, Non- Regulated		
NS 28A	I	NAVSTA	Building 28	1967	10K/ Steel	Fuel Oil (#2)	In-use, Non- Regulated		
NS 28B	I	NAVSTA	Building 28	1982	4K/ Steel	Fuel Oil (#2)	In-use, Non- Regulated		
NS 656	H	NAVSTA	Building 656	1972	5.8K/ Steel	Fuel Oil (#2)	In-use, Non- Regulated		
NS 657	H	NAVSTA	Building 657	1967	5K/ Steel	Fuel Oil (#2)	In-use, Non- Regulated	SPCC states 2 tanks exist, each 5K gallons (657A & B), contain #2 Fuel Oil, 11-15 Years Old as of 9/92	
NS 650	H	NAVSTA	Building 650	1967	1K/ Steel	Fuel Oil (#2)	In-use, Non- Regulated		
NS 653A	H	NAVSTA	Building 653	1982	6K/ Steel	Fuel Oil (#2)	In-use, Non- Regulated	10/25/91 Noted to Be Removed (WR #O-3280	
NS 654	H	NAVSTA	Building 654	1967	7K/ Steel	Fuel Oil (#2)	In-use, Non- Regulated	SPCC States One Tank Exists: 1K Gallons, Steel, Fuel Oil	EBS & TIMS Each State One Tank Exists: 2K Gallons; 2 Vents Exist by Building
NS 79	H	NAVSTA	Building 79	1967	Unknown/ Steel	Fuel Oil (#2)	In-use, Non- Regulated		

TABLE 3-5. UNDERGROUND STORAGE TANK INVENTORY

Tank Number	Zone	Activity	Location	Year Installed	Capacity (Gallons) Tank Material	Substance Stored	Status	Comments	Future Actions
NS 200	I	NAVSTA	Building 200	1967	1K/ Steel SPCC States 560 Gallon Capacity; TIMS States 1K Gallons	Fuel Oil (#2)	In-use, Non- Regulated		
46C	H	NAVSTA	Building 46	> 20 Years Old	2.5K/ Steel	Fuel	AbandonedN on-Regulated		Not in TIMS
46A	H	NAVSTA	Building 46	> 20 Years Old	2.5K/ Steel	Fuel	AbandonedN on-Regulated		Not in TIMS
46D	H	NAVSTA	Building 46	> 20 Years Old	2.5K/ Steel	Fuel	AbandonedN on-Regulated		Not in TIMS
46B	H	NAVSTA	Building 46	> 20 Years Old	2.5K/ Steel	Fuel	AbandonedN on-Regulated		Not in TIMS
NH-52C	C	NAVSTA	Building NH52	1988	10K/ FRP	Gasoline (Unleaded)	Unknown	Double Wall Construction	From TIMS This May be 1175C
NH-52B	C	NAVSTA	Building NH52	1988	10K/ FRP	Gasoline (Leaded)	Unknown	Double Wall Construction	From TIMS This May be 1175B
NH-52A	C	NAVSTA	Building NH52	1988	10K/ FRP	Diesel	Unknown	Double Wall Construction	From TIMS This May be 1175A
53	H	NAVSTA	Building 53	> 20 Years Old	800/ Steel	Possibly Fuel	AbandonedN on-Regulated		Not in TIMS
640	H	NAVSTA	Building 640	1967	3K/ Steel	Fuel Oil (#2)	In-use, Non- Regulated		
641	G	NAVSTA	Building 641	1977	500/ Steel SPCC States 560 Gallons	Fuel Oil (#2)	In-use, Non- Regulated		
644	H	NAVSTA	Building 644	1977	5K/ Steel	Fuel Oil (#2)	In-use, Non- Regulated		

TABLE 3-5. UNDERGROUND STORAGE TANK INVENTORY

Tank Number	Zone	Activity	Location	Year Installed	Capacity (Gallons) Tank Material	Substance Stored	Status	Comments	Future Actions
NS646	H	NAVSTA	Building 646	1967	2K/ Steel	Diesel	Removed per EBS	Emergency Generator WR/PCR-S068C	TIMS Shows 2 tanks at this Facility
NS646A			Building 646	1991	2.5K/ FRP	Diesel	In-use	Permit # C-10-GF- 01775	
NS661	H	NAVSTA	Building 661	1982	5K/ Possibly FRP or Steel?	Diesel	In-use	Manual Tank Gauging, Annual Tightness Test Completed	10/25/91 Note Scheduled for Replacement in 12/91
				1992	5K/FRP				Replacement Not in TIMS
681B	I	NAVSTA	Building 681	Unknown	100 Gallon/ Steel	Waste Oil	In-use, Non- Regulated		From TIMS
681 SIMA	I	NAVSTA	Building 681	6-10 Years Old as of 10/91	20K/ Steel	Fuel Oil (#2)	In-use, Non- Regulated	Master List Says 2 Tanks Exist, 20K Gallon Capacity Empty, No Residue	Not in TIMS
851B	H	NAVSTA	Building 851	1977	500/ Steel	Diesel	Not in Use, Removal Unknown	WR/PCR-S068C	EBS States 2 Tanks (2K & 3K Gallon) by Building 850; No Visible Evidence of Existing Tanks; Not in TIMS
851A	H	NAVSTA	Building 851	1977	500/ Steel	Gasoline	Not in Use, Removal Unknown	WR/PCR-S068C	EBS States 2 Tanks (2K & 3K Gallon) by Building 850; No Visible Evidence of Existing Tanks; Not in TIMS
1346J	F	NAVSTA	Building 1346	1991	10K/ Fiberglass	Gasoline	In-use	Tightness Tested Annually, Automatic Tank Gauging, Vapor Monitoring & Interstitial Monitoring in Place	

TABLE 3-5. UNDERGROUND STORAGE TANK INVENTORY

Tank Number	Zone	Activity	Location	Year Installed	Capacity (Gallons) Tank Material	Substance Stored	Status	Comments	Future Actions
1346C	F	NAVSTA	Building 1346	1977	10K/ Steel	Gasoline	Temporarily Closed, Empty	WR/PCR-S068C	
1346B	F	NAVSTA	Building 1346	1977	10K/ Steel	Gasoline	Temporarily Closed, Empty	WR/PCR-S068C	
1346K	F	NAVSTA	Building 1346	1991	10K/ Fiberglass	Gasoline	In-use	Tightness Tested Annually, Automatic Tank Gauging, Vapor Monitoring & Interstitial Monitoring in Place	
1346F	F	NAVSTA	Building 1346	> 20 Years Old	4K/ Steel	Unknown	Empty	10/25/91 Noted as 1346D-H Properly Abandoned per Blueprint H1346-33, 1978	DHEC Notified by Letter, Ser 462.3/373 of 31 May 90 Not in TIMS
1346G	F	NAVSTA	Building 1346	> 20 Years Old	4K/ Steel	Unknown	Empty	10/25/91 Noted as 1346D-H Properly Abandoned per Blueprint H1346-33, 1978	DHEC Notified by Letter, Ser 462.3/373 of 31 May 90 Not in TIMS
1346H	F	NAVSTA	Building 1346	> 20 Years Old	10K/ Steel	Unknown	Empty	10/25/91 Noted as 1346D-H Properly Abandoned per Blueprint H1346-33, 1978	DHEC Notified by Letter, Ser 462.3/373 of 31 May 90 Not in TIMS
1346A	F	NAVSTA	Building 1346	1972	10K/ Steel	Gasoline	Temporarily Closed, Empty	WR/PCR-S068C	

TABLE 3-5. UNDERGROUND STORAGE TANK INVENTORY

Tank Number	Zone	Activity	Location	Year Installed	Capacity (Gallons) Tank Material	Substance Stored	Status	Comments	Future Actions
1346I	F	NAVSTA	Building 1346	1991	10K/ Fiberglass	Gasoline	In-use	Tightness Tested Annually, Automatic Tank Gauging, Vapor Monitoring & Interstitial Monitoring in Place	
1346	F	NAVSTA	Building 1346	1967	500/ Steel	Waste Oil	In-use	Manual Tank Gauging, Annual Tightness Test Completed	
1346D	F	NAVSTA	Building 1346	> 20 Years Old	4K/ Steel	Unknown	Empty	10/25/91 Noted as 1346D-H Properly Abandoned per Blueprint H1346-33, 1978	DHEC Notified by Letter, Ser 462.3/373 of 31 May 90 Not in TIMS
1346E	F	NAVSTA	Building 1346	> 20 Years Old	4K/ Steel	Unknown	Empty	10/25/91 Noted as 1346D-H Properly Abandoned per Blueprint H1346-33, 1978	DHEC Notified by Letter, Ser 462.3/373 of 31 May 90 Not in TIMS
2509S	K	NAVSTA	Naval Annex	> 20 Years Old	5K/ Steel	Fuel Oil (#2)	Abandoned Non-Regulated		Possibly Listed in TIMS to 2 4K Gallon Tanks (#1 & #2) From 1958 & 1963
2517 W	K	NAVSTA	Naval Annex	1967	2K/ Steel	Fuel Oil	In-use, Non-Regulated		
2517S	K	NAVSTA	Naval Annex	> 20 Years Old	4K/ Steel	Fuel Oil (#2)	Abandoned Non-Regulated		Possibly Listed in TIMS to 2 4K Gallon Tanks (#1 & #2) From 1958 & 1963
2524	K	NAVSTA	Naval Annex	> 20 Years Old	Unknown/ Steel	Fuel Oil (#2)	Abandoned Non-Regulated		Not in TIMS

TABLE 3-5. UNDERGROUND STORAGE TANK INVENTORY

Tank Number	Zone	Activity	Location	Year Installed	Capacity (Gallons) Tank Material	Substance Stored	Status	Comments	Future Actions
3905 (C,D,G)	I	NAVSTA	Building 3905	Shown on 1955 Map	Unknown/ Possibly Steel	Possibly Gasoline or Avgas	Unknown		
3905 (A,B,E, F)	I	NAVSTA	Building 3905	Shown on 1955 Map	Unknown/ Possibly Steel	Gas/Avgas	Unknown		
A	B	NWS	Quarters A 100 Navy Way	Unknown	550/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		
B	B	NWS	Quarters B 200 Navy Way	Unknown	550/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		
C	B	NWS	Quarters C 300 Navy Way	Unknown	550/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		
D	B	NWS	Quarters D 1575 Hobson Avenue	Unknown	550/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		
G	B	NWS	Quarters G 1600 Hobson Avenue	Unknown	550/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		
H,I	B	NWS	Quarters H, I 96 & 98 Hobson Way	Unknown	1K/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		
J	B	NWS	Quarters J 311 Navy Way	Unknown	550/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		
K	B	NWS	Quarters K 152 Turnbull Avenue	Unknown	550/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		
L	B	NWS	Quarters L 150 Turnbull Avenue	Unknown	550/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		

TABLE 3-5. UNDERGROUND STORAGE TANK INVENTORY

Tank Number	Zone	Activity	Location	Year Installed	Capacity (Gallons) Tank Material	Substance Stored	Status	Comments	Future Actions
M	B	NWS	Quarters M 160 Everglades Avenue	Unknown	550/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		
N	B	NWS	Quarters N 161 Everglades Avenue	Unknown	550/	Fuel Oil (#2)	In-use, Non- Regulated		
O	B	NWS	Quarters O 1599 Hobson Avenue	Unknown	550/	Fuel Oil (#2)	In-use, Non- Regulated		
P	B	NWS	Quarters P 1565 Hobson Avenue	Unknown	550/	Fuel Oil (#2)	In-use, Non- Regulated		
Q	B	NWS	Quarters Q 1505 Hobson Avenue	Unknown	550/	Fuel Oil (#2)	In-use, Non- Regulated		
R	B	NWS	Quarters R 1485 Hobson Avenue	Unknown	550/	Fuel Oil (#2)	In-use, Non- Regulated		
S	B	NWS	Quarters S 1545 Hobson Avenue	Unknown	550/	Fuel Oil (#2)	In-use, Non- Regulated		
T	B	NWS	Quarters T 1531 Hobson Avenue	Unknown	550/	Fuel Oil (#2)	In-use, Non- Regulated		

TABLE 3-5. UNDERGROUND STORAGE TANK INVENTORY

Tank Number	Zone	Activity	Location	Year Installed	Capacity (Gallons) Tank Material	Substance Stored	Status	Comments	Future Actions
W,X	B	NWS	Quarters W, X 1445 & 1455 Hobson Avenue	Unknown	1K/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		
Y,Z	B	NWS	Quarters Y, Z 1510 & 1516 Hobson	Unknown	1K/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		
AA,LL	C	NWS	Quarters AA & LL 1345 & 1351 Avenue G	Unknown	1K/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		
BB,CC	C	NWS	Quarters BB & CC 1305 & 1311 Avenue G	Unknown	1K/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		
DD,EE	C	NWS	Quarters DD & EE 1285 & 1293 Avenue G	Unknown	1K/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		
FF,GG	C	NWS	Quarters FF & GG 1288 & 1294 Avenue H	Unknown	1K/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		
HH,II	C	NWS	Quarters HH & II 1304 & 1310 Avenue H	Unknown	1K/ Unknown	Fuel Oil (#2)	In-use, Non- Regulated		

TABLE 3-5. UNDERGROUND STORAGE TANK INVENTORY

Tank Number	Zone	Activity	Location	Year Installed	Capacity (Gallons) Tank Material	Substance Stored	Status	Comments	Future Actions
JJ, KK	C	NWS	Quarters JJ & KK 1350 & 1356 Avenue H	Unknown	1K/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
NH-A	C	NWS	Quarters NH-A 795 Avenue F	Unknown	550/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
NH-B	C	NWS	Quarters NH-B 801 Avenue F	Unknown	550/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
NH-C	C	NWS	Quarters NH-C 895 Avenue F	Unknown	550/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
NH-D	C	NWS	Quarters NH-D 849 Avenue F	Unknown	550/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
NH-H	C	NWS	Quarters NH-H 1451 Avenue H	Unknown	1K/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
NH-I	C	NWS	Quarters NH-I 1463 Avenue H	Unknown	1K/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
M-5	C	NWS	Quarters M-5 804 Marine Avenue	Unknown	550/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		

TABLE 3-5. UNDERGROUND STORAGE TANK INVENTORY

Tank Number	Zone	Activity	Location	Year Installed	Capacity (Gallons) Tank Material	Substance Stored	Status	Comments	Future Actions
M-6/7	C	NWS	Quarters M-6/7 761 & 775 Commissary	Unknown	1K/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
M-8/9	C	NWS	Quarters M-8/9 801 & 809 Commissary	Unknown	1K/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
701	B	NWS	Quarters 701 399 Turnbull Avenue	Unknown	280/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
705	B	NWS	Quarters 705 97 Navy Way	Unknown	280/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
708	B	NWS	Quarters 708 1468 Hobson Way	Unknown	280/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
717	B	NWS	Quarters 717 190 Turnbull Avenue	Unknown	280/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
718	B	NWS	Quarters 718 181 Turnbull Avenue	Unknown	280/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
719	B	NWS	Quarters 719 170 Turnbull Avenue	Unknown	280/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
765A,B	B	NWS	Quarters 765 A, B 774 & 778 Marine Avenue	Unknown	280/ Unknown	Fuel Oil (#2)	In-use, Non-Regulated		
RTC 1	I	RTC	Building RTC-1	Unknown	1K/ Steel	Fuel Oil (#2)	Removed, Non-Regulated	No Contamination Found	Not in TIMS

TABLE 3-5. UNDERGROUND STORAGE TANK INVENTORY

Tank Number	Zone	Activity	Location	Year Installed	Capacity (Gallons) Tank Material	Substance Stored	Status	Comments	Future Actions
RTC 2	I	RTC	Building RTC-2	Unknown	1K/ Steel	Fuel Oil (#2)	Removed, Non-Regulated	Contamination Found in SOUTHDIV Assessment; Further Action Unknown	Not in TIMS
61 (EG)	H	SUBTRAFAC	Building 61	Unknown	300/ Steel	Fuel Oil (#2)	Unknown	Electric Generator	Not in TIMS
686	H	SUBTRAFAC	Building 686	1982	4K/ Steel	Fuel Oil (#2)	In-use, Non-Regulated		
Unknown	Unknown	Unknown	Unknown	1967	550/ Possibly Fiberglass	Calibration Fluid		10/25/91 Note To Be Deregistered	Existence in Question
136 S. Station	Unknown	Unknown	Unknown	Prior to 1967	2K/ Steel	Gasoline	In-use	Manual Tank Gauging, Annual Tightness Test Completed WR/PCR-S068C	Not in TIMS

TABLE 3-6. ABOVE GROUND STORAGE TANK INVENTORY			
Location	Activity	Capacity (Gallons)/Contents	Status
202B	Fleet & Mine Warfare Training Center	5,000/Fuel Oil	Unknown
643	Fleet & Mine Warfare Training Center	5,000/Fuel Oil	Unknown
647	Fleet & Mine Warfare Training Center	4,000/Diesel Fuel	In-Use (Replaced 647A)
Tank 14	Fleet Industrial Supply Center	216,000/Unknown	Cleaned/Sealed
39L	Fleet Industrial Supply Center	6,500/Truck Flush (JP5, Lube Oils, Diesel)	In-Use
39D	Fleet Industrial Supply Center	740,000/Wastewater & Waste Oil	In-Use
39A	Fleet Industrial Supply Center	740,000/Wastewater & Waste Oil	In-Use
191NE	Fleet Industrial Supply Center	1,5,000/Fuel Oil	Unknown
198	Fleet Industrial Supply Center	2,000/Diesel Fuel	In-Use (Emergency Generator)
233	Fleet Industrial Supply Center	250/Propane	In-Use
1449	Fleet Industrial Supply Center	150/Propane	In-Use
1605	Fleet Industrial Supply Center	Unknown/Propane	Unused
1621	Fleet Industrial Supply Center	1,000/Propane	In-Use
1647	Fleet Industrial Supply Center	70/Diesel Fuel	In-Use
3900F	Fleet Industrial Supply Center	2.3 million/Navy Distillate	Out of Service (Gas-Free)
3900E	Fleet Industrial Supply Center	2.3 million/Navy Distillate	In-Use
3901A	Fleet Industrial Supply Center	103,000/Contaminated Fuel Oil	In-Use
3906-UNK (Chicora)	Fleet Industrial Supply Center	500/Waste Oil	In-Use
3909	Fleet Industrial Supply Center	212,000/Residual Fuel Oil	In-Use
3911	Fleet Industrial Supply Center	50,000/Lube Oil Storage	In-Use
3912	Fleet Industrial Supply Center	50,000/Lube Oil Storage	In-Use
3915 (Replaced 39J)	Fleet Industrial Supply Center	1 million/Reclaimed Fuel Oil	In-Use
3916 (Replaced 3900G)	Fleet Industrial Supply Center	4.2 million/Navy Distillate	In-Use
3917 (Replaced 3900H)	Fleet Industrial Supply Center	4.2 million/Navy Distillate	Out of Service (Gas-Free)
NH68	Naval Regional Medical Center	1,000/Fuel Oil	In-Use
2	Naval Shipyard	130/Kerosene	In-Use
9	Naval Shipyard	250/Waste Oil	In-Use
9	Naval Shipyard	550/Diesel Fuel	In-Use

TABLE 3-6. ABOVE GROUND STORAGE TANK INVENTORY

Location	Activity	Capacity (Gallons)/Contents	Status
9	Naval Shipyard	3,700/Diesel Fuel	In-Use
32D	Naval Shipyard	5,000/Fuel Oil #2	In-Use
32E	Naval Shipyard	5,000/Fuel Oil #2	In-Use
43	Naval Shipyard	55-65/Various	In-Use
80	Naval Shipyard	55/Various	In-Use
84	Naval Shipyard	1,000/Fuel Oil	Not-in-Use
177	Naval Shipyard	250/Diesel Fuel	In-Use
226	Naval Shipyard	700/Fuel Oil	In-Use
241	Naval Shipyard	250/Diesel Fuel	In-Use
242	Naval Shipyard	5,000/Waste Oil	In-Use
501 (Adjacent to Building 32)	Naval Shipyard	114,000/Fuel Oil #2	In-Use
NH62	Naval Station	1,000/Fuel Oil	Unknown
M82	Naval Station	200/Diesel Fuel	In-Use (Emergency Generator)
86	Naval Station	5,000/Fuel Oil	Unknown
220	Naval Station	270/Fuel Oil	In-Use
601	Naval Station	12,000/Diesel Fuel	Unknown (Supports the Boiler Plant in Building 69)
640	Naval Station	1,000/Fuel Oil	Unknown
648	Naval Station	1,000/Fuel Oil	Unknown
655	Naval Station	2,500/Diesel Fuel	In-Use
655	Naval Station	200/Diesel Fuel	In-Use (Emergency Generator)
M1123	Naval Station	270/Fuel Oil	Unknown
1137	Naval Station	1,000/Fuel Oil	Unknown
1177	Naval Station	560/Fuel Oil	Unknown
1646	Naval Station	Unknown/Diesel Fuel	Unknown (Possibly Removed)
1795	Naval Station	Unknown/Propane	In-Use
Building 61	Submarine Training Facility	300/Diesel Fuel	In-Use (Supports Emergency Generator in Building 61)
600	Submarine Training Facility	20,300/Residual Fuel Oil	In-Use

TABLE 3-7. UST REMEDIATION PROJECTS	
Project	Status
S003R/Removal of Ten Underground Storage Tanks (PW Project)	Funded for 1992 (\$17,000) Partially Funded for 1993 (\$38,000/\$245,000) 3 Tanks Currently Removed (1279A, B, C) 7 Tanks Remain in Place #15368
UST Removal for Building 1346 (PW Project) #14023	Completed
S068C/UST Removal for Eight Tanks (PW Project)	Currently Underway All But 2 USTs (851 A & B) Have Been Removed Funded for 1991/1992
S068D/UST Remedial Action for Leaking Tanks at Naval Station (PW Project)	Unfunded for 1993
S084B/UST Remedial Investigation for Chicora Tank Farm #13370	Complete
S084C/UST Remedial Action for Chicora Tank Farm #13370	Funded for 1992 & 1994
S282C Follow-on/Remove UST 643B/UST Retrofit	Not Yet Submitted Not Required if Removed by 1998
S282D/UST Remedial Action for Tank at Building 647	Monitoring Only Funded for 1992 Should Award Third Quarter 1994
S282E/UST Remedial Action for Soil Around Closed Tank at Building 647 (UST RI)	Completed
S324E/UST Remedial Action for Soil Around Tank RTC 2	Funded for 1992 Unfunded for 1993
S324F/UST Remedial Investigation for Soil Around Tank RTC 2	Completed
PW# 1-0319/Building 4000, Remove 500 Gallon Diesel UST	Completed 2/94
PW# NSTA4-3038/Building X54, Removal and Disposal of AST	PWD P&E for Scoping Estimate

is the storage facility which handles the majority of hazardous waste generated onbase. Building 246 is used exclusively to store mixed waste (hazardous waste which is also radioactive).

Hazardous wastes generated at Naval Base Charleston include primarily paint wastes, waste solvents, boiler cleaning solutions, acids, and sludge from the plating shop pretreatment facility. A complete list of hazardous wastes and generation rates is shown in Table 3-8. There are currently 71 hazardous waste satellite accumulation points and 10 <90 day storage areas located at Naval Base Charleston. Satellite accumulation areas (SAAs) at the base consist of 55-gallon drums used to store various associated hazardous wastes. These drums are removed from the SAAs/ <90 storage areas prior to being filled to capacity; they are transported to the Building 1640 permitted Treatment, Storage, or Disposal (TSD) facility. Storage at the <90 day storage areas is temporary and cannot exceed 90 days from the time the waste begins to accumulate. Table 3-9 provides a list of all hazardous waste satellite accumulation areas and <90-day storage areas.

Naval Base Charleston has also instituted a hazardous waste minimization program per CNSY Instruction 5090.3, effective 22 June 1990. This instruction meets the requirements of OPNAVNOTE 5090, which establishes a Navy-wide policy for a 5-year 50 percent reduction of hazardous waste volume by weight. The primary means of hazardous waste reduction include avoidance of HW generation, HW recycling, and HW treatment through neutralization, detoxification, solidification, etc. No HW treatment is currently conducted at Naval Base Charleston. The primary waste streams identified for minimization are shown in Table 3-10.

3.2.3 Solid Waste Management

Approximately 50,000 cubic yards of nonhazardous solid waste is generated at Naval Base Charleston each year. The majority of solid waste generated by Naval Base Charleston is currently transported offbase for disposal at the local county landfill. Onbase recycling programs are in place for collection of paper, aluminum, and metals.

In the past, solid wastes were disposed of via an onbase landfill. This landfill is currently closed and is being investigated under the RFA/RFI process for potential environmental impacts.

3.2.4 Polychlorinated Biphenyls (PCBs)

Control of PCBs and PCB contaminated materials is legislated by the Toxic Substances Control Act (TSCA), 15 U.S.C. 2601 et seq, originally enacted as Public Law 94-469 in 1978. Implementing regulations are found in 40 CFR 761. The U.S. Navy initiated a program to inventory and replace PCB containing equipment in 1978. This effort originally focused on PCB-containing electrical transformers and capacitors, but has grown to include the disposal of PCB-containing electrical transformers and capacitors, but has grown to include the disposal of PCB containing electric light ballasts and shipboard materials such as power cables and felt septum. A PCB audit/assessment for the Naval Base was completed in January 1985. Since

TABLE 3-8. INVENTORY OF HAZARDOUS WASTES

Waste	Waste Number	Waste Code	Estimated Annual Quantity (lbs)
Ammonium persulfate	D001	I	858,407
Catalyst (manganese dioxide, cupric oxide, lithium hydroxide - oxidizers)	D001	I	
Calcium hypochlorite	D001	I	
Cleaning compound, petroleum distillates	D001	I	
Cleaning compound, naphtha	D001	I	
Cleaning compound, petroleum naphtha	D001	I	
Cyclohexylamine	D001	I	
Ethyl alcohol	D001	I	
Ethylene glycol diethyl ether	D001	I	
Ethylene glycol monoethyl ether	D001	I	
Ethylene glycol monoethyl ether acetate	D001	I	
Isopropanol	D001	I	
Kerosene	D001	I	
Medicines	D001	I	
Mineral spirits (cleaning compound)	D001	I	
Morpholine	D001	I	
Petroleum naphtha	D001	I	
Petroleum oil	D001	I	
Petroleum tar	D001	I	
Potassium nitrate	D001	I	
Propane	D001	I	
tert-Butyl Peroxy-Benzoate	D001	I	
Turpentine	D001	I	
Barium chloride	D005	T	
Mercuric nitrate	D001/D009	I, T	5
Aluminum phosphide	D003/P006	R, T	5
Hydrogen peroxide	D001/D003	I, R	3,829
Sodium nitrite	D001/D003	I, R	
Mercuric bromide	D009	T	33,063
Mercuric nitrate liquid	D009	T	

TABLE 3-8. INVENTORY OF HAZARDOUS WASTES			
Waste	Waste Number	Waste Code*	Estimated Annual Quantity (lbs)
Acetic acid	D002	C	1,240,817
Ammonium bisulfate (scale remover)	D002	C	
Ammonium hydrogen fluoride	D002	C	
Ammonium hydroxide	D002	C	
Anhydrous ammonia	D002	C	
Bromine	D002	C	
Cleaning compound (amine)	D002	C	
Diethylenetriamine	D002	C	
Ferric chloride	D002	C	
Hydrazine (aqueous solution)	D002	C	
Hydrochloric acid	D002	C	
Hydrofluoric acid	D002	C	
Lithium bromide	D002	C	
Lithium hydroxide	D002	C	
Monoethanolamine	D002	C	
Morpholine (aqueous solution)	D002	C	
Nickel chloride/Hydrochloric acid mixture	D002	C	
Nickel sulfamate	D002	C	
Nitric acid	D002	C	
Phosphoric acid	D002	C	
Potassium Hydroxide	D002	C	
Sodium bifluoride	D002	C	
Sodium hydroxide	D002	C	
Sulfamic acid	D002	C	
Sulfuric acid	D002	C	
Battery, lithium-sulfur dioxide	D003	R	28,215
Chlorine	D003	R	
Oxygen breathing apparatus cannisters (OBAs)	D003	R	
Lead compounds (lead oxide, red-lead, lead tetroxide)	D008	T	120,150
Lead-dross	D008	T	
Lead fluoroborate	D008	T	

TABLE 3-8. INVENTORY OF HAZARDOUS WASTES			
Waste	Waste Number	Waste Code*	Estimated Annual Quantity (lbs)
Cadmium fluorobate	D006	T	403
Potassium chromate, liquid	D007	T	
Potassium dichromate, liquid	D007	T	
Sodium dichromate, liquid	D007	T	
Pyrogallol	D011	T	582
Silver nitrate	D011	T	
Sodium chlorate	D011	T	
Paint waste	D001/F009/ F005/D007/ D008	I, T	557,829
Chromic acid	D002/D007	C, T	107,915
Sulfuric acid (4%)/sodium dichromate (2%) solution, spent	D002/D007	C, T	
Battery, silver and zinc with KOH electrolyte	D002/D011	C, T	50
Battery, electrolyte	D002/9999	C	154,878
Potassium chromate, solid	D001/D007	I, T	2,815
Potassium dichromate	D001/D007	I, T	
Trichlorofluoromethane	F002	T	106,160
Trichlorotrifluoroethane	F002	T	
Xylene	F003	I	796
Electroplating sludge (chromium hydroxide)	F006	T	360,000
Acetone	F003/U002	I	1,500
Aminopyridine	P008	T	1,735
Beryllium dust	P015	T	3,525
Copper cyanide	P029	T	16
Silver cyanide	P104	T	25
Sodium cyanide	P106	T	170
Chloroform	U044	T	500
Cresol	U052	T	14,900
Cresylic acid	U052	T	
Dichlorodifluoromethane	U075	T	500
Ethylendichloride	U077	I, T	100

TABLE 3-8. INVENTORY OF HAZARDOUS WASTES			
Waste	Waste Number	Waste Code*	Estimated Annual Quantity (lbs)
Methylene chloride	U080	T	130
Ethylene oxide	U115	T	1,010
Diethyl ether	U117	I, T	100
Formaldehyde	U122	T	675
Hydrazine	U133	R, T	10
Hydrogen sulfide	U135	T	10
Methyl ethyl ketone	U139	I, T	862
Mercury (metal)	U151	T	6,214
Methyl alcohol	U154	I	4,031
Methyl ethyl ketone peroxide	U160	R, T	2,400
Methyl isobutyl ketone	U161	I	650
Pyridine	U196	T	25
Selenious acid	U204	T	10
Tetrachloroethylene	U210	T	12,496
Carbon Tetrachloride	U211	T	1,000
Thiourea	U219	T	2,700
Toluene	U220	I, T	836
1,1,1-Trichloroethane	U226	T	1,305
Trichloroethylene	U228	T	20,046
Pentachlorophenol	U242	T	500
Batteries, Lead Acid	D002/D008	C, T	1,050
Batteries, depleted, non-rechargeable (zinc, mercury (mercurous chloride) electrolyte (approximately 40% aqueous solution of potassium hydroxide), potassium zincate, calcium hydroxide, calcium zincate, zinc oxide, modified acrylic type MP-20 (casing) carbon cathode)	D002/D009	C, T	100,000
Mercuric nitrate waste	D003/D009	R, T	15,281
Methyl ethyl ketone and PD 680	D001/U159	I, T	5,147
Paint, waste (may be contaminated with oil, lead polyurethane, enamel, strippers, dirt, thinners, oil, solvents)	D001/D002/D008	I, C, T	1,221,000
Paint stripper (may be contaminated with methylene chloride, phenol approximately 15%, sodium chromate, rust)	D001/D002/D007	I, C, T	18,028

TABLE 3-8. INVENTORY OF HAZARDOUS WASTES			
Waste	Waste Number	Waste Code*	Estimated Annual Quantity (lbs)
Chromic acid	U032	T	200
Kepone	U142	T	120
Hexachlorocyclohexane	U129	T	70
Trichlorofluoromethane	U121	T	350
Xylene (1)	U239	T	1,700
Hazardous liquid waste	6666	—	5,235
Plating sludge	F008	T	1,212
Spent stripping from electroplating process	F009	T	927
Calcium cyanide	P021	T	421
Potassium cyanide	P098	T	73
2-Butanone	U159	T	5,000
Benzal chloride	U017	T	200

Description of Waste Codes

- I Exhibits the characteristic of ignitability.
- R Exhibits the characteristic of reactivity.
- T Exhibits the characteristic of toxicity.
- C Exhibits the characteristic of corrosivity.

TABLE 3-9. SATELLITE ACCUMULATION AREAS AND LESS THAN 90 DAY STORAGE AREAS

Type	Activity	Shop/Code	Location
Satellite	Fleet & Mine Warfare Training Center	FMWTC	Building 202
Satellite	Fleet & Mine Warfare Training Center	FMWTC	Building 202
Satellite	Fleet & Mine Warfare Training Center	FMWTC	Building 202
Satellite	Fleet & Mine Warfare Training Center	FMWTC	Building 202
Satellite	Fleet & Mine Warfare Training Center	FMWTC	Building 202
Satellite	Fleet & Mine Warfare Training Center	FMWTC	Building 202
Satellite	Naval Shipyard	Shop 71	Pier G
Satellite	Naval Shipyard	Shop 71	Pier C
Satellite	Naval Shipyard	Shop 71	Pier H
Satellite	Naval Shipyard	Code 900ES	Pier G
Satellite	Naval Shipyard	Shop 11	SGI Barge
Satellite	Naval Shipyard	Code 900ES	Pier C
Satellite	Naval Shipyard	Code 900ES	Pier H
Satellite	Naval Shipyard	Braswell	Pier C
Satellite	Naval Shipyard	Code 900ES	Drydock 1
<90 Day	Naval Shipyard	Shop 11	Building 2
Satellite	Naval Shipyard	Code 900ES	Drydock 2
Satellite	Naval Shipyard	Shop 64	Building 2A
Satellite	Naval Shipyard	Shop 71	Drydock 2
Satellite	Naval Shipyard	Code 900ES	Drydock 5
Satellite	Naval Shipyard	Metal Trades	Drydock 5

TABLE 3-9. SATELLITE ACCUMULATION AREAS AND LESS THAN 90 DAY STORAGE AREAS

Type	Activity	Shop/Code	Location
Satellite	Naval Shipyard	Shop 64	Building 5
< 90 Day	Naval Shipyard	Shop 99	Building 9
Satellite	Naval Shipyard	Shop 06	Building 9
< 90 Day	Naval Shipyard	Code 134	Building 13
Satellite	Naval Shipyard	Code 134	Building 13
Satellite	Naval Shipyard	Code 134	Building 13
Satellite	Naval Shipyard	Code 134	Building 13
Satellite	Naval Shipyard	Code 134	Building 13
Satellite	Naval Shipyard	Code 134	Building 13
Satellite	Naval Shipyard	Shop 134	Building 13
Satellite	Naval Shipyard	Code 134	Building 13
Satellite	Naval Shipyard	Code 135	Building 13
Satellite	Naval Shipyard	Code 457	Building 25
Satellite	Naval Shipyard	Code 453	Building 32
Satellite	Naval Shipyard	Code 138	Building 35
Satellite	Naval Shipyard	Code 138	Building 35
Satellite	Naval Shipyard	Shop 26	Building 35
Satellite	Naval Shipyard	Shop 06	Building 43
Satellite	Naval Shipyard	Code 500	Building 44
Satellite	Naval Shipyard	Shop 49	Building 56
Satellite	Naval Shipyard	Shop 72	Building 57
Satellite	Naval Shipyard	Shop 17	Building 59

TABLE 3-9. SATELLITE ACCUMULATION AREAS AND LESS THAN 90 DAY STORAGE AREAS

Type	Activity	Shop/Code	Location
< 90 Day	Naval Shipyard	Shop 38	Building 80
Satellite	Naval Shipyard	Shop 67	Building 177
Satellite	Naval Shipyard	Shop 68	Building 187
Satellite	Naval Shipyard	Shop 67	Building 218
Satellite	Naval Shipyard	Shop 71	Building 223
Satellite	Naval Shipyard	Shop 31	Building 226
< 90 Day	Naval Shipyard	Shop 64	Building 228
Satellite	Naval Shipyard	Code 1160	Building 234
< 90 Day	Naval Shipyard	Shop 56	Building 236
< 90 Day	Naval Shipyard	Shop 56	Building 236
Satellite	Naval Shipyard	Code 452	Building 241
Satellite	Naval Shipyard	Code 452	Building 241
Satellite	Naval Shipyard	Code 452	Building 241
Satellite	Naval Shipyard	Code 452	Building 241
Satellite	Naval Shipyard	Code 452	Building 242
Satellite	Naval Shipyard	Code 457	Building 249
Satellite	Naval Shipyard	Code 1390	Building 250
< 90 Day	Naval Shipyard	Code 1390	Building 1173
Satellite	Naval Shipyard	Code 560	Building 1175
< 90 Day	Naval Shipyard	Shop 64	Building 1245
Satellite	Naval Shipyard	Shop 72	Building 1518

TABLE 3-9. SATELLITE ACCUMULATION AREAS AND LESS THAN 90 DAY STORAGE AREAS

Type	Activity	Shop/Code	Location
Satellite	Naval Station	Braswell	Pier P
Satellite	Naval Station	NB Code 06	Building NH51
Satellite	Naval Station	NS Code 185	Building NS53
Satellite	Naval Station	COMSUBGRU 6	Building NS67
Satellite	Naval Station	MWR Code 15	Building 636
Satellite	Naval Station	MWR Code 15	Building 636
Satellite	Naval Station	MWR Code 15	Building 636
Satellite	Naval Station	NDC Code 22A	Building 675
< 90 Day	Naval Station	SIMA	Building 681
Satellite	Naval Station	MWR Code 15	Building 810
Satellite	Naval Station	NS Code 019	Building 1346
Satellite	Naval Station	CBU-412	Building 1776
Satellite	Navy Regional Medical Center	NH Code 052	Building NH1
Satellite	Navy Regional Medical Center	NH Code 052	Building NH1
Satellite	Submarine Training Facility	SUBTRAFAC	Building 61
Satellite	Submarine Training Facility	SUBTRAFAC	Building 61
Satellite	Submarine Training Facility	SUBTRAFAC	Building 61
Satellite	Submarine Training Facility	SUBTRAFAC	Building 61

TABLE 3-9. SATELLITE ACCUMULATION AREAS AND LESS THAN 90 DAY STORAGE AREAS

Type	Activity	Shop/Code	Location
Satellite	Naval Station	Braswell	Pier P
Satellite	Naval Station	NB Code 06	Building NH51
Satellite	Naval Station	NS Code 185	Building NS53
Satellite	Naval Station	COMSUBGRU 6	Building NS67
Satellite	Naval Station	MWR Code 15	Building 636
Satellite	Naval Station	MWR Code 15	Building 636
Satellite	Naval Station	MWR Code 15	Building 636
Satellite	Naval Station	NDC Code 22A	Building 675
< 90 Day	Naval Station	SIMA	Building 681
Satellite	Naval Station	MWR Code 15	Building 810
Satellite	Naval Station	NS Code 019	Building 1346
Satellite	Naval Station	CBU-412	Building 1776
Satellite	Navy Regional Medical Center	NH Code 052	Building NH1
Satellite	Navy Regional Medical Center	NH Code 052	Building NH1
Satellite	Submarine Training Facility	SUBTRAFAC	Building 61
Satellite	Submarine Training Facility	SUBTRAFAC	Building 61
Satellite	Submarine Training Facility	SUBTRAFAC	Building 61
Satellite	Submarine Training Facility	SUBTRAFAC	Building 61

TABLE 3-10. WASTE MINIMIZATION PRIORITY WASTE STREAMS	
Waste	Annual Quantity by Weight
Paint	292,836
Acids (as a group)	34,056
Cleaning Compounds (Petroleum Naphtha, Methylene Chloride, Petroleum Distillate, etc.)	33,676
Absorbent, Spill Residue	25,300
Trichlorotrifluoroethane (Freon 113)	25,225
Rudder Preservative (Petroleum tar)	21,765
Adhesives (Sealants, Fillers, etc.)	9,070
Lead Dross (Scrap, Clothing, etc.)	8,140
Plating Sludges	7,225
1,1,1-Trichloroethane	2,215

then, the items identified in the audit have been systematically removed from service and disposed of.

Three PCB or PCB-containing transformers are known to remain on the Naval Base Charleston property, a portable 1,000 KVA transformer identified by serial number 2-50502. This unit, which is currently in use on Pier H, was tested at ≤ 500 ppm PCB (340 gallons). Plans are to remove this transformer from service and submit for disposal by April 1994. Two additional units are located in area C2 (see Figure 3-1 for map grid locations), identified under I.D. numbers R#16 and R#17. These units were tested at 526 ppm PCB (55 gallons) and 847 ppm PCB (49 gallons), respectively. No plans have yet been developed for removal of these units.

Several types of formal guidance exist at Naval Base Charleston to facilitate the identification, handling, and disposal of PCB and PCB-contaminated materials. CNSY Instruction 5090.4, Volume II, Chapter 11 covers the shipyard's management of PCBs. NAVSTACHASNINST 5100.13B covers notification and handling requirements for the Naval Station. CNSY Process Instruction Number 8010-905-737 A covers the identification, removal and handling of PCB material during the submarine overhaul process. Defense Reutilization and Marketing Service (DRMS) Manual 6050.1, Chapter XV111 identifies general guidance for both the acceptance for disposal by DRMO of PCB material as well as the actual disposal itself. Non-RCRA PCB material is disposed of through a DRMS contract with S.D. Myers, Inc. of Tallmadge, Ohio.

The probability of identifying further PCB and PCB-contaminated material is very high as long as CNSY continues to perform submarine overhaul activities, as electrical wire containing PCBs is often removed during such activities. Electrical light ballasts containing PCBs will continue to be identified over time, since no PCB inventories have been performed to identify these items. Also, information from the EBS may indicate additional PCB or PCB-contaminated transformers or capacitors. As a result, the list of active PCB containing equipment will be updated throughout the base cleanup and closure process.

A number of SWMUs and Potential Areas of Concern (PAOCs) exist which pertain to PCB transformer storage/maintenance areas and therefore suggest PCB spills. These are identified in Tables 3-1 and 3-2.

3.2.5 Asbestos

In the past, a series of asbestos surveys have been conducted to inventory the presence of friable asbestos-containing building materials (ACBMs). These surveys have primarily concentrated on thermal system insulation, sprayed-on/troweled-on fireproofing, and acoustical insulation. A list of such surveys is shown below:

- Naval Shipyard, 1990, Westinghouse Environmental & Geotechnical Services, Inc., Charleston Naval Shipyard Asbestos Inventory Assessment and Survey (Contract Number N62467-88-D-0649, Amendment #4).

- Naval Station, 1989, Westinghouse Environmental & Geotechnical Services, Inc., Charleston Naval Station Asbestos Inventory, Assessment and Survey (Contract Number N62467-88-D-0649).
- Fleet and Mine Warfare Training Center, 1990, Westinghouse Environmental & Geotechnical Services, Inc., Fleet and Mine Warfare Training Asbestos Inventory, Assessment and Survey (Contract Number N62467-88-D-0649).
- Fleet Industrial Supply Center, 1990, Westinghouse Environmental & Geotechnical Services, Inc., Naval Supply Center Asbestos Inventory, Assessment and Survey (Contract Number N62467-88-D-0649, Amendment #8).
- Officer Housing Quarters, Naval Base, Charleston, 1992, Durbin Environmental Consultants, Inc., Asbestos Survey for Officer Housing Quarters, Naval Base, Charleston (Contract Number N62467-92-C-4124).

In addition, a PWC Norfolk contracted Asbestos Survey is underway for housing areas, including those affected by the Base Closure action. The lists of buildings surveyed and the identification of those containing accessible friable asbestos are contained in Table 3-11.

The Environmental Baseline Survey (EBS) included a review of the status of accessible friable asbestos previously identified as well as a preliminary identification of possible ACMs during the walkthrough process (the EBS did not include a formal asbestos survey). Building specific information is included in the EBS File Summary, and will be incorporated into this plan at a later date.

Naval Shipyard, Public Works Department has completed a number of asbestos abatement actions through a series of contracts. Buildings associated with this effort are listed in Table 3-12. Under a separate award, a contractor is currently removing the asbestos in Building 32. In addition to these efforts, Naval Shipyard personnel have completed other asbestos abatement projects throughout the Naval Base. These are listed in Table 3-12. These projects have not included asbestos-free certifications, but have significantly reduced the amount of friable asbestos in close contact with workers throughout the Naval Base. The effort underway at this time is to abate friable asbestos which is in close proximity to working personnel, or that has a high potential of causing adverse affects on human health.

An Asbestos Abatement project for remaining onbase friable asbestos will be developed based upon the results of the various surveys.

3.2.6 Radon

Radon gas levels became a concern when several federal and state studies concluded that indoor radon could present a health risk. In response to this information, the Secretary of the Navy

TABLE 3-11. ASBESTOS SURVEY RESULTS

Building Number	Building Name	Activity	Contains Friable Asbestos
202	Training Facility	Fleet & Mine Warfare Training Center	Yes
203	Paint Storage	Fleet & Mine Warfare Training Center	No
204	Pump House	Fleet & Mine Warfare Training Center	No
643	Training Facility	Fleet & Mine Warfare Training Center	No
645	Training Facility	Fleet & Mine Warfare Training Center	Yes
647	Training Facility	Fleet & Mine Warfare Training Center	Yes
649	Storage	Fleet & Mine Warfare Training Center	No
1303	Wet Trainer	Fleet & Mine Warfare Training Center	No
1309	Fire Fighting Trainer	Fleet & Mine Warfare Training Center	No
1310	Fire Fighting Trainer	Fleet & Mine Warfare Training Center	No
1313	Gear Locker	Fleet & Mine Warfare Training Center	No
1351	Paint Locker	Fleet & Mine Warfare Training Center	Yes
1352	Air Compressor Shed	Fleet & Mine Warfare Training Center	No
1715	Maintenance Shed	Fleet & Mine Warfare Training Center	No
1722	Generator Shed	Fleet & Mine Warfare Training Center	No
1744	Staff Lounge	Fleet & Mine Warfare Training Center	No
1819	Lawn Shed	Fleet & Mine Warfare Training Center	No
1834	Laundry	Fleet & Mine Warfare Training Center	No
39 H	Miscellaneous Pipeline Facility	Fleet Industrial Supply Center	N/A
NSC45	General Bulk Warehouse	Fleet Industrial Supply Center	Yes
64	General Bulk Warehouse	Fleet Industrial Supply Center	Suspect
NSC66	General Bulk Warehouse	Fleet Industrial Supply Center	Yes
NSC67	General Bulk Warehouse	Fleet Industrial Supply Center	Yes
98	POL OP Building	Fleet Industrial Supply Center	Suspect
133	Operational Storage	Fleet Industrial Supply Center	Suspect
135	Operational Storage	Fleet Industrial Supply Center	Suspect
172	Operational Storage	Fleet Industrial Supply Center	No
173	Operational Storage	Fleet Industrial Supply Center	No
191	General Bulk Warehouse	Fleet Industrial Supply Center	Yes

TABLE 3-11. ASBESTOS SURVEY RESULTS

Building Number	Building Name	Activity	Contains Friable Asbestos
193	Cold Storage Warehouse	Fleet Industrial Supply Center	Suspect
198	General Bulk Warehouse	Fleet Industrial Supply Center	Yes
219	Battery Chargin Station	Fleet Industrial Supply Center	No
224	General Bulk Warehouse	Fleet Industrial Supply Center	Yes
224	General Bulk Warehouse	Fleet Industrial Supply Center	Yes
NSC233	Battery Charging Station	Fleet Industrial Supply Center	Suspect
243	Pass Office	Fleet Industrial Supply Center	Suspect
290	UPS Building	Fleet Industrial Supply Center	No
321	Supply Pier A	Fleet Industrial Supply Center	No
635	Generating Building	Fleet Industrial Supply Center	No
672	Fleet Training Unit	Fleet Industrial Supply Center	Suspect
673	NTISA Facility	Fleet Industrial Supply Center	Suspect
674	Performance Monitoring Facility	Fleet Industrial Supply Center	Suspect
681	SIMA	Fleet Industrial Supply Center	Suspect
1001	General Storage Shed	Fleet Industrial Supply Center	Suspect
1027	General Bulk Warehouse	Fleet Industrial Supply Center	No
1078	General Storage Shed	Fleet Industrial Supply Center	Yes
1079	HAZ FLAM Storehouse	Fleet Industrial Supply Center	Suspect
1127	General Bulk Warehouse	Fleet Industrial Supply Center	No
1136	Administrative Building	Fleet Industrial Supply Center	No
1138	General Bulk Warehouse	Fleet Industrial Supply Center	Yes
1172	Servmart	Fleet Industrial Supply Center	Suspect
1385	Administrative Building	Fleet Industrial Supply Center	Yes
1501	General Bulk Warehouse	Fleet Industrial Supply Center	No
1502	General Bulk Warehouse	Fleet Industrial Supply Center	Suspect
1503	General Bulk Warehouse	Fleet Industrial Supply Center	Suspect
1504	General Bulk Warehouse	Fleet Industrial Supply Center	No
1505	Warehouse	Fleet Industrial Supply Center	No
1507	General Bulk Warehouse	Fleet Industrial Supply Center	Yes

TABLE 3-11. ASBESTOS SURVEY RESULTS

Building Number	Building Name	Activity	Contains Friable Asbestos
1510	Gate/Sentry House	Fleet Industrial Supply Center	No
1513	General Bulk Warehouse	Fleet Industrial Supply Center	No
1570	Gate/Sentry House	Fleet Industrial Supply Center	N/A
1571	General Storage Shed	Fleet Industrial Supply Center	No
1601B	General Bulk Warehouse	Fleet Industrial Supply Center	Suspect
1602C	General Bulk Warehouse	Fleet Industrial Supply Center	Suspect
1603	MTIS Building	Fleet Industrial Supply Center	Suspect
1604	General Bulk Warehouse	Fleet Industrial Supply Center	No
1605	General Bulk Warehouse	Fleet Industrial Supply Center	No
1606	General Bulk Warehouse	Fleet Industrial Supply Center	Yes
1607	General Bulk Warehouse	Fleet Industrial Supply Center	Yes
1620	Operational Storage	Fleet Industrial Supply Center	No
1621	General Bulk Warehouse	Fleet Industrial Supply Center	Suspect
1622	Warehouse	Fleet Industrial Supply Center	No
1623	Warehouse	Fleet Industrial Supply Center	Suspect
1624	Battery Charging Station	Fleet Industrial Supply Center	No
1627	General Bulk Warehouse	Fleet Industrial Supply Center	No
1628	Printing Plant	Fleet Industrial Supply Center	Yes
1629	General Storage Shed	Fleet Industrial Supply Center	No
1631	General Storage Shed	Fleet Industrial Supply Center	No
1632	Waterfront Transit Shed	Fleet Industrial Supply Center	Suspect
1634	General Storage Shed	Fleet Industrial Supply Center	No
1800	Administrative Building	Fleet Industrial Supply Center	No
1814	General Storage Shed	Fleet Industrial Supply Center	No
2536	Mine Training Center	Fleet Industrial Supply Center	No
3900I	POL OP Building	Fleet Industrial Supply Center	No
3901B	Miscellaneous Pipe Shelter	Fleet Industrial Supply Center	No
3906L	Fuel Storage Tank (Pump Room)	Fleet Industrial Supply Center	No
3906O	Fuel Storage Tank (Pump Room)	Fleet Industrial Supply Center	No

TABLE 3-11. ASBESTOS SURVEY RESULTS

Building Number	Building Name	Activity	Contains Friable Asbestos
3906R	Electric Distribution Building	Fleet Industrial Supply Center	No
3906T	Gate/Sentry House	Fleet Industrial Supply Center	N/A
3906P	Fuel Storage Tank (Pump Room)	Fleet Industrial Supply Center	No
3906K	Fuel Storage Tank (Pump Room)	Fleet Industrial Supply Center	No
3906Q	OPERTNL Storage	Fleet Industrial Supply Center	No
3906N	Fuel Storage Tank (Pump Room)	Fleet Industrial Supply Center	No
3906M	Fuel Storage Tank (Pump Room)	Fleet Industrial Supply Center	No
3906S	Electric Distribution Building	Fleet Industrial Supply Center	No
3911	Lube Oil Storage	Fleet Industrial Supply Center	No
3926	Miscellaneous Pipeline Facility	Fleet Industrial Supply Center	No
NH 62	Heating Plant	Naval Shipyard	Yes
NS2	Utility Building	Naval Shipyard	Yes
2A	Shipfitter Shop, Sail Loft	Naval Shipyard	Yes
2	Shipfitter Shop, Structural Admin	Naval Shipyard	Yes
3	Machine Shop	Naval Shipyard	Yes
4	AFGE Office	Naval Shipyard	Yes
5	Woodworking Shop	Naval Shipyard	Yes
6	Forge Shop & Machine Shop	Naval Shipyard	Suspect
7	Info. Systems Resources Division & Comptroller Department	Naval Shipyard	Suspect
X8	Transportation Shop & Garage	Naval Shipyard	Suspect
9	Foundry, Central Tool Shop	Naval Shipyard	Yes
10	Nuclear Engineering Dept	Naval Shipyard	Yes
11	Miscellaneous Shops & Test Equipment Storage	Naval Shipyard	Yes
12	Public Works Office	Naval Shipyard	N/A
13	Quality Assurance Office	Naval Shipyard	Yes
21	Storage (Shop 99)	Naval Shipyard	Yes
25	Transportation Shop & Garage	Naval Shipyard	Suspect
26	Field Office	Naval Shipyard	No

TABLE 3-11. ASBESTOS SURVEY RESULTS			
Building Number	Building Name	Activity	Contains Friable Asbestos
30	Public Works - Trades & Offices	Naval Shipyard	Yes
X30A	Transformer Vault	Naval Shipyard	No
31	Storage for Power Plant	Naval Shipyard	Yes
X33A	Transformer Vault	Naval Shipyard	No
35	Welding, Engineering & School	Naval Shipyard	Yes
NSC39	Diesel Oil Pumphouse	Naval Shipyard	No
40	Storage (Shop 07)	Naval Shipyard	No
42	Recreational Storage	Naval Shipyard	Suspect
42A	Recreational Storage	Naval Shipyard	No
43	Central Tool Shop & Service Group Administration	Naval Shipyard	Yes
44	Plating Shop and Shop Stores	Naval Shipyard	Yes
NS44	Heating Plant	Naval Shipyard	Yes
46	Compressor & Saltwater Pumphouse	Naval Shipyard	Yes
54	Freshwater Pumphouse	Naval Shipyard	No
56	Structural Group Shops	Naval Shipyard	Yes
57	Rigger Shop	Naval Shipyard	Yes
58	Dispensary, Industrial Medicine & Radiation Health	Naval Shipyard	Yes
58A	Production Field Office	Naval Shipyard	Suspect
59	Sheetmetal & Boiler Shops	Naval Shipyard	Suspect
62	Tech. Support & Test Coordination Division	Naval Shipyard	Yes
63	Yard Cafeteria & Canteen # 1	Naval Shipyard	Yes
68	Battery Shop (Electric Shop)	Naval Shipyard	Yes
69	Storehouse, Receiving & Shipping	Naval Shipyard	Suspect
NS69	Boiler House	Naval Shipyard	Yes
74	Storehouse	Naval Shipyard	Yes
76	IRO & SUPSHIP CHASN	Naval Shipyard	Yes
77	Substation, Restroom, Ship Superintendent Office	Naval Shipyard	Yes

TABLE 3-11. ASBESTOS SURVEY RESULTS			
Building Number	Building Name	Activity	Contains Friable Asbestos
79	Repair Shop, OSHA & Quality Assurance Office	Naval Shipyard	Yes
80	Machine Shop	Naval Shipyard	Yes
88	Saltwater Pumphouse # 2	Naval Shipyard	No
8,8A	Supply Department, Telephone, Navy Audit Office	Naval Shipyard	Yes
93	Restroom	Naval Shipyard	No
97	Air Compressor House	Naval Shipyard	Suspect
99	Saltwater Pumphouse	Naval Shipyard	No
101	Material & Tool Storehouse	Naval Shipyard	No
122	Transportation (Dispatcher)	Naval Shipyard	Suspect
123	Boilerhouse	Naval Shipyard	Yes
127	Saltwater Pumphouse	Naval Shipyard	No
136	Condensate Storage & Pumphouse	Naval Shipyard	No
147	Storage (Shop 06)	Naval Shipyard	No
168	Paint and Oil Storehouse	Naval Shipyard	No
174	Switchhouse (Elec.)	Naval Shipyard	No
177	Electronics Shops and Metrology Lab	Naval Shipyard	Yes
178	Steam Flow Meter House	Naval Shipyard	No
185	Dredge Booster Pumphouse	Naval Shipyard	No
187	Module Maintenance Facility	Naval Shipyard	Yes
188	Module Maintenance Facility	Naval Shipyard	Yes
189	Mechanical Equipment Room for Building 187	Naval Shipyard	No
190	RADCON Training & Offices	Naval Shipyard	Suspect
194	Paint Storage (Shop 71)	Naval Shipyard	No
195	Rigger Shop Service, NRRO & BRMO Field Office	Naval Shipyard	Yes
197	Pumpwell - Drydock #5	Naval Shipyard	Suspect
199	Training Building (Cochrane Hall)	Naval Shipyard	Yes
209	Design Division - Code 244	Naval Shipyard	Suspect

TABLE 3-11. ASBESTOS SURVEY RESULTS			
Building Number	Building Name	Activity	Contains Friable Asbestos
210	Chlorinator Building	Naval Shipyard	No
211	Chlorinator Building	Naval Shipyard	No
212	Abrasive Blasting Facility	Naval Shipyard	No
216	Elec. Shop Cable Warehouse	Naval Shipyard	Suspect
217	Neutron Generator House	Naval Shipyard	No
218	Missile Systems Building (Shop 38)	Naval Shipyard	Yes
221	Pipe Shop Cleaning Plant	Naval Shipyard	No
222	Repair Facility	Naval Shipyard	Suspect
223	Paint Shop	Naval Shipyard	Yes
226	Plating Shop, Pump, Valve & Hydraulics Shop	Naval Shipyard	Yes
227	Employee Service Association	Naval Shipyard	Suspect
228	Pipe Insulation Facility	Naval Shipyard	Suspect
230	Canteen #2	Naval Shipyard	No
231	Canteen #3	Naval Shipyard	No
232	Administration & Training Aids Storage	Naval Shipyard	No
234	Engineering Management	Naval Shipyard	Yes
235	MAPP Gas - CO ₂ Facility	Naval Shipyard	No
236	Pipe Shop	Naval Shipyard	Suspect
237	Waterfront Support & Nuclear Engineering Department	Naval Shipyard	Suspect
238	Equipment Repair Building	Naval Shipyard	No
239	Respirator Care Facility	Naval Shipyard	Suspect
240	Refueler Repair Facility	Naval Shipyard	No
241	Crane Maintenance	Naval Shipyard	Suspect
246	Hazardous Waste Storage & Transit Facility	Naval Shipyard	Suspect
247	Waterfront Service Support	Naval Shipyard	Suspect
248	Administrative Building	Naval Shipyard	Suspect
301B	Pumphouse & Pumpwell	Naval Shipyard	No

TABLE 3-11. ASBESTOS SURVEY RESULTS

Building Number	Building Name	Activity	Contains Friable Asbestos
301	Drydock #1	Naval Shipyard	No
302B	Pumpwell (Underground)	Naval Shipyard	No
302	Drydock #2	Naval Shipyard	No
303	Drydock #3	Naval Shipyard	No
303B	Pumpwell	Naval Shipyard	No
304	Drydock #4	Naval Shipyard	No
305	Drydock #5	Naval Shipyard	No
314	Industrial Pier	Naval Shipyard	Yes
317B	Repair Wharf	Naval Shipyard	Suspect
317C	Industrial Pier	Naval Shipyard	Yes
317A	Marginal Wharf	Naval Shipyard	No
317F	Industrial Pier	Naval Shipyard	Yes
317D	Industrial Pier	Naval Shipyard	No
317E	Industrial Pier	Naval Shipyard	Suspect
333	Industrial Pier	Naval Shipyard	Suspect
342	Substation	Naval Shipyard	Suspect
351	Quay Wall	Naval Shipyard	No
352	Repair Wharf	Naval Shipyard	Suspect
374	Dredge Boat House	Naval Shipyard	No
375	Dredge Mooring Pier	Naval Shipyard	No
376	Pier at Clouter Creek	Naval Shipyard	No
377	Pumphouse at Clouter Creek	Naval Shipyard	No
380	Hose House	Naval Shipyard	Suspect
381	Storage/Administration/Pest Control	Naval Shipyard	Suspect
384	Stormwater Pumping Station	Naval Shipyard	No
391	Storage	Naval Shipyard	Suspect
414	Pumping Station	Naval Shipyard	No
454	Substation	Naval Shipyard	No
455	Substation	Naval Shipyard	No

TABLE 3-11. ASBESTOS SURVEY RESULTS

Building Number	Building Name	Activity	Contains Friable Asbestos
456	Substation	Naval Shipyard	No
457	Substation/Production Offices	Naval Shipyard	Yes
458	Switchgear & Substation	Naval Shipyard	Yes
459	Substation	Naval Shipyard	No
460	Substation	Naval Shipyard	No
590A	Radiological Control Office	Naval Shipyard	Yes
715	Deepwell Pumphouse	Naval Shipyard	No
903	Storage	Naval Shipyard	No
1024	Shop 06 Work Area	Naval Shipyard	Yes
1028	Public Work Maintenance Office	Naval Shipyard	Yes
1035	Paint Shop	Naval Shipyard	No
1069	Storage	Naval Shipyard	Suspect
1119	Production Offices	Naval Shipyard	Yes
1141	Shipyards Security Office	Naval Shipyard	Suspect
1171	Material & Equipment Storage	Naval Shipyard	Yes
1173	Storage/Office	Naval Shipyard	Suspect
1174	Offices/Storage/Ships Work Area	Naval Shipyard	Yes
1175	Storage	Naval Shipyard	Suspect
1178	Storage	Naval Shipyard	Suspect
1190	Compressor House	Naval Shipyard	Suspect
1193	Office	Naval Shipyard	Suspect
1199	Transportation Shop & Shop Stores	Naval Shipyard	Yes
1241	Storage	Naval Shipyard	Suspect
1245	Woodworking Shop	Naval Shipyard	Suspect
1248	Storage (Shop 07)	Naval Shipyard	No
1267	Receiving & Shipping Storage	Naval Shipyard	No
1269	Storage (Shop 03)	Naval Shipyard	Suspect
1271	Garbage Handling	Naval Shipyard	No
1275	Abrasive Blast Slab	Naval Shipyard	No

TABLE 3-11. ASBESTOS SURVEY RESULTS

Building Number	Building Name	Activity	Contains Friable Asbestos
1277	Storehouse	Naval Shipyard	No
1278	Submarine Battery Salvage Slab	Naval Shipyard	Suspect
1279	Shipyards Equip. Gas Station	Naval Shipyard	No
1292	Time Clock #1	Naval Shipyard	No
1294	Time Clock #3	Naval Shipyard	No
1297	Storage Sand Bins (Shop 81)	Naval Shipyard	No
1298	Brick Storage (Shop 41)	Naval Shipyard	No
1299	Shop Stores (Shop 41)	Naval Shipyard	No
1314	Material Storage (Shop 81)	Naval Shipyard	No
1316	Tool Storage (Shop 07)	Naval Shipyard	No
1317	Administrative Office	Naval Shipyard	No
1364	Sand Hopper	Naval Shipyard	No
1366	Field Office	Naval Shipyard	N/A
1378	Pipe Water Tank Storage Slab	Naval Shipyard	No
1382	Fresh Water Valve House	Naval Shipyard	No
1383	Public Works Storage	Naval Shipyard	N/A
1386	Canteen #5	Naval Shipyard	No
1388	Dredge Office	Naval Shipyard	Suspect
1400	Restroom & Press Box	Naval Shipyard	No
1423	Portable Service Sound Hut	Naval Shipyard	N/A
1426	Contaminated Waste Storage	Naval Shipyard	No
1433	Portable Field Office	Naval Shipyard	Yes
1434	Portable Field Office	Naval Shipyard	Suspect
1435	Portable Field Office	Naval Shipyard	Suspect
1436	Portable Field Office	Naval Shipyard	Suspect
1439	Time Clock #4	Naval Shipyard	N/A
1440	Time Clock #5	Naval Shipyard	Suspect
1441	Time Clock #6	Naval Shipyard	N/A
1443	Time Clock #8	Naval Shipyard	No

TABLE 3-11. ASBESTOS SURVEY RESULTS

Building Number	Building Name	Activity	Contains Friable Asbestos
1450	Sand Hoppers	Naval Shipyard	No
1452	Equipment & Boiler Par Storage	Naval Shipyard	No
1453	Cleaning & Preservation Plant	Naval Shipyard	No
1454	Equipment Storage	Naval Shipyard	No
1469	Transportation Field Office	Naval Shipyard	Suspect
1700	Sentry House	Naval Shipyard	No
1712	Storage	Naval Shipyard	Suspect
1713	Portable Field Office	Naval Shipyard	Yes
1717	Flushing Equipment Storage	Naval Shipyard	Suspect
1723	Boiler Tube Storage	Naval Shipyard	Yes
1734	Vacant	Naval Shipyard	No
1736	Restroom	Naval Shipyard	Yes
1737	Restroom	Naval Shipyard	Yes
1745	Time Clock #9	Naval Shipyard	No
1746	Storage	Naval Shipyard	No
1747	Portable Service Sound Hut	Naval Shipyard	N/A
1760	Contaminated Storage	Naval Shipyard	No
1771	Sentry House	Naval Shipyard	No
1772	Sentry House	Naval Shipyard	No
1773	Sentry House	Naval Shipyard	No
1774	Sentry House	Naval Shipyard	No
1775	Sentry House	Naval Shipyard	No
1782	Lunch Shelter	Naval Shipyard	N/A
1784	Industrial Waste Treatment	Naval Shipyard	No
1793	Substation	Naval Shipyard	No
1801	Piermaster Building	Naval Shipyard	No
1802	Piermaster Building	Naval Shipyard	No
1803	Chlorination Station	Naval Shipyard	No
1804	Chlorination Station	Naval Shipyard	No

TABLE 3-11. ASBESTOS SURVEY RESULTS

Building Number	Building Name	Activity	Contains Friable Asbestos
1836	Storage (Shop 07)	Naval Shipyard	No
1838	Storage	Naval Shipyard	No
1855	Canteen #4	Naval Shipyard	Suspect
1950	Sentry House	Naval Shipyard	No
2508	Maintenance Shop	Naval Shipyard	Yes
2554	Substation	Naval Shipyard	No
3900J	Storage	Naval Shipyard	No
3901C	Storage (Shop 07)	Naval Shipyard	No
3902	Paint & Oil Storehouse	Naval Shipyard	No
4000	Shipboard Electronics Evaluation Facility	Naval Shipyard	Suspect
NS1	Administrative Building	Naval Station	Yes
X2N	Warehouse	Naval Station	Suspect
2	Degaussing Facility/Pier	Naval Station	Suspect
NS7	Headquarters Mine Squad 125	Naval Station	Yes
X10	General Warehouse	Naval Station	
X11	Public Works Maintenance Shop	Naval Station	Suspect
X12	Maintenance Shop	Naval Station	Suspect
NS16	Administration/Maintenance Shop	Naval Station	Yes
NH16	Storage	Naval Station	No
NS19	Storage	Naval Station	Suspect
20	Machine Shop	Naval Station	Suspect
NS21	Electrical Shop	Naval Station	Yes
NH21	Engineering Lab	Naval Station	Suspect
23	Machine Shop	Naval Station	Suspect
25	Hose Hydrant House	Naval Station	No
X25	Electrical Maintenance Shop	Naval Station	Suspect
NS25	Storage	Naval Station	N/A
NS26	Ship Maintenance Shop	Naval Station	Suspect
27	Administrative Office	Naval Station	No

TABLE 3-11. ASBESTOS SURVEY RESULTS

Building Number	Building Name	Activity	Contains Friable Asbestos
28	BOQ (4 & 5)	Naval Station	Yes
30	Sewage Treatment Plan	Naval Station	No
NS31	Disciplinary Barracks	Naval Station	Suspect
NS32	Enlisted Mens Barracks	Naval Station	Yes
33	Enlisted Mens Barracks	Naval Station	Suspect
34	Enlisted Mens Barracks	Naval Station	Suspect
NS35	Enlisted Mens Barracks	Naval Station	Yes
36	Enlisted Mens Barracks	Naval Station	Yes
37	Enlisted Mens Barracks	Naval Station	Yes
NS38	Enlisted Mens Barracks	Naval Station	Yes
NS43	Enlisted Dining Hall	Naval Station	Yes
NH45	Administrative Office	Naval Station	Yes
NS46	NAVSTA Headquarters/Armory	Naval Station	Suspect
NH47	Administrative Office	Naval Station	Yes
NH48	Administrative Office	Naval Station	Yes
49	Fire Pump Station	Naval Station	No
NH49	Administrative Office	Naval Station	No
NH50	Administrative Office	Naval Station	Yes
51	Hose Hydrant House	Naval Station	No
NH51	Administrative Office	Naval Station	Yes
52	Hose Hydrant House	Naval Station	No
NH52	Administrative Office	Naval Station	Yes
NH53	Administrative Office	Naval Station	Yes
NS53	Barber/Maintenance Shop	Naval Station	Yes
SS53	Hose Hydrant House	Naval Station	No
SS54	Hose Hydrant House	Naval Station	No
NH54	Administrative Office	Naval Station	Yes
NS54	Billeting Office	Naval Station	No
X54	Correctional Custody Unit	Naval Station	Suspect

TABLE 3-11. ASBESTOS SURVEY RESULTS

Building Number	Building Name	Activity	Contains Friable Asbestos
SS55	Hose Hydrant House	Naval Station	No
NH55	Legal Services Office	Naval Station	Yes
X55	Ammunition Storage	Naval Station	No
SS56	Hose Hydrant House	Naval Station	No
X56	Ammunition Storage	Naval Station	No
NS59	Outdoor Swimming Pool	Naval Station	Yes
NH61	Family Service Center	Naval Station	Suspect
NH62	NSC Household Goods/Housing	Naval Station	Yes
65	Enlisted Mens Barracks	Naval Station	Suspect
NS66	Enlisted Mens Barracks	Naval Station	Suspect
NS67	Enlisted Mens Barracks	Naval Station	Suspect
NS71	Cafeteria	Naval Station	Suspect
NS79	Dispensary	Naval Station	Yes
NS80	Ambulance Garage	Naval Station	No
81	Fire Station #2	Naval Station	Yes
82	Recreation Building	Naval Station	No
M82	Headquarters/Supply	Naval Station	Yes
83	Storage	Naval Station	Suspect
84	Public Issuing Office	Naval Station	Suspect
85	Bath House	Naval Station	Suspect
86	Officers Club	Naval Station	Yes
87	Hose Hydrant House	Naval Station	No
89	Exchange Maintenance Shop	Naval Station	Yes
92	Indoor Swimming Pool	Naval Station	No
132	Dive Shop	Naval Station	No
SS135	Maintenance	Naval Station	N/A
136	Service Station	Naval Station	No
141	Union Office/Police Storage	Naval Station	Yes
160	Seawall 4012	Naval Station	Suspect

TABLE 3-11. ASBESTOS SURVEY RESULTS			
Building Number	Building Name	Activity	Contains Friable Asbestos
NS161	Inert Storage, Sub Ships	Naval Station	No
169	Storage	Naval Station	No
171	Storage	Naval Station	N/A
179	Sentry House	Naval Station	No
180	Recreation Building	Naval Station	Yes
182	Laundry Boiler House	Naval Station	N/A
184	Outdoor Swimming pool	Naval Station	Yes
186	Police/Fire Station #1	Naval Station	Yes
M192	Armory/MCRTC	Naval Station	Suspect
194	Sewage Lift Station	Naval Station	Yes
195	Storage/Rental Office	Naval Station	Suspect
196	Boat Repair Shop	Naval Station	No
197	Paint Storage	Naval Station	No
198	Maintenance Shop	Naval Station	Suspect
199	Storage	Naval Station	No
200	Port Services	Naval Station	Yes
201	Liaison Office	Naval Station	Suspect
202	Wall, South	Naval Station	No
203	UEPE	Naval Station	No
214	Filter House	Naval Station	No
215	Bath House	Naval Station	Yes
220	Golf Pro Shop	Naval Station	Yes
225	Navy Lodge	Naval Station	Suspect
229	Bath House	Naval Station	No
243	Pass Office	Naval Station	Suspect
245	Fire Station Support	Naval Station	No
401	Cooling Tower/AC Plant	Naval Station	Yes
635	Generating Building	Naval Station	No
636	Auto Hobby Shop	Naval Station	No

TABLE 3-11. ASBESTOS SURVEY RESULTS			
Building Number	Building Name	Activity	Contains Friable Asbestos
637	Storage	Naval Station	No
639	CPO Swimming Pool	Naval Station	No
640	CPO Club with Mess	Naval Station	Yes
641	Warehouse/Administrative	Naval Station	Suspect
644	Bowling Alley	Naval Station	Suspect
646	Administration/Training Building	Naval Station	Yes
648	Brig	Naval Station	Suspect
650	Post Office	Naval Station	Yes
652	Chief Quarters	Naval Station	Yes
653	Enlisted Mens Barracks	Naval Station	Yes
654	Personnel Support	Naval Station	Yes
655	Commissary	Naval Station	Yes
656	Navy Exchange/Warehouse	Naval Station	Yes
657	Enlisted Mens Club	Naval Station	Yes
658	Enlisted Mens Barracks	Naval Station	Suspect
659	Boat House	Naval Station	Suspect
661	Communications Center	Naval Station	Yes
664	Subgroup 6 Storage	Naval Station	No
665	Package Store	Naval Station	Yes
668	UEPH	Naval Station	Suspect
669	UEPH	Naval Station	Suspect
670	Racquet Ball Court	Naval Station	Suspect
672	Fleet Training Unit	Naval Station	Suspect
673	NTISA Facility	Naval Station	Suspect
674	Performance Monitoring Facility	Naval Station	Suspect
675	Dental Clinic	Naval Station	Suspect
680	Fleet Maintenance	Naval Station	No
681	SIMA	Naval Station	Suspect
682	Marina	Naval Station	Suspect

TABLE 3-11. ASBESTOS SURVEY RESULTS			
Building Number	Building Name	Activity	Contains Friable Asbestos
807	Child Care Center	Naval Station	Suspect
M1051	Garbage House	Naval Station	N/A
M1067	Storage	Naval Station	No
M1116	Warehouse	Naval Station	Suspect
M1123	Storehouse/Boiler Room	Naval Station	No
NH1137	Administrative Office	Naval Station	Yes
1143	Special Services Center	Naval Station	Yes
M1149	NCO Club	Naval Station	N/A
M1150	Marine Reserve Training Center	Naval Station	Suspect
1167	Exchange Warehouse	Naval Station	No
1177	Fire Station #3	Naval Station	Suspect
1179	Chapel	Naval Station	Yes
1189	Administrative Office	Naval Station	No
1197	NAVSTA Quarterdeck	Naval Station	Suspect
1221	Officers Club Recreation Area	Naval Station	Yes
M1238	Warehouse	Naval Station	No
M1257	Warehouse	Naval Station	Suspect
1263	Storage	Naval Station	No
1265	Storage	Naval Station	No
1296	Storage	Naval Station	No
1345	Restrooms	Naval Station	No
1346	Service Station	Naval Station	Suspect
1347	Hobby Shop	Naval Station	No
1448	Filter House	Naval Station	No
1490	Restroom	Naval Station	No
1493	Auto Hobby Shop	Naval Station	No
1494	Tool Storage	Naval Station	Suspect
1508	Car Wash/Hobby Shop	Naval Station	No
1509	Storage	Naval Station	No

TABLE 3-11. ASBESTOS SURVEY RESULTS

Building Number	Building Name	Activity	Contains Friable Asbestos
1643	Automobile Storage	Naval Station	No
1646	Golf Course Warehouse	Naval Station	No
1652	Automobile Storage	Naval Station	No
1708	Generator Building	Naval Station	No
1719	Equipment Storage	Naval Station	No
1720	Police Locker Room	Naval Station	No
1721	Refrigeration Equipment	Naval Station	No
1749	Equipment Storage Shed	Naval Station	Suspect
1755	Storage	Naval Station	No
1776	Seabee Shop Building	Naval Station	Suspect
1777	Seabee Office Building	Naval Station	Suspect
1778	Seabee Tool/Shop Storage	Naval Station	Suspect
1786	A/C Plant	Naval Station	No
1791	Storage	Naval Station	No
1795	Storage	Naval Station	No
1796	Personnel Services Annex	Naval Station	Yes
1813	Storage	Naval Station	No
1839	Sentry House	Naval Station	No
1840	Butler Building at Brig	Naval Station	No
1841	Butler Building at Brig	Naval Station	No
1843	Incinerator	Naval Station	No
1848	Public Toilet/Press Box	Naval Station	No
1874	Port Services Storage	Naval Station	No
1875	UOPH Storage	Naval Station	No
1879	CBU Building	Naval Station	No
1880	Paint Locker	Naval Station	No
1881	Storage	Naval Station	No
1882	Storage	Naval Station	No
1883	Storage	Naval Station	No

TABLE 3-11. ASBESTOS SURVEY RESULTS

Building Number	Building Name	Activity	Contains Friable Asbestos
1884	Storage	Naval Station	Suspect
1885	Administration Office	Naval Station	Suspect
1886	Storage	Naval Station	Suspect
1888	Pistol Range	Naval Station	No
1889	Storage	Naval Station	No
1891	BEQ Maintenance	Naval Station	No
1892	CBU Storage	Naval Station	Suspect
1895	Cable Reel Storage	Naval Station	No
1901	Sentry House	Naval Station	Suspect
1902	Sentry House	Naval Station	Suspect
1903	Sentry House	Naval Station	Suspect
1904	Sentry House	Naval Station	Suspect
1905	Sentry House	Naval Station	Suspect
1984	Pistol Range Classroom	Naval Station	Suspect
1994	CBU Storage	Naval Station	No
2501	NCO Mess/Radar Club	Naval Station	Yes
2505	Maintenance Storage	Naval Station	No
2506	Falcon Barracks	Naval Station	Yes
2507	Bath House	Naval Station	No
2509	FPS 27 Tower	Naval Station	No
2511	Office Storage	Naval Station	Suspect
2517	Recreation Building	Naval Station	Suspect
2520	Tiger Barracks	Naval Station	Suspect
2521	Panther Barracks	Naval Station	Suspect
2522	Storage	Naval Station	No
2523	Day Room Lounge	Naval Station	Suspect
2524	Mine Assembly Plant	Naval Station	Yes
2525	Supply Office	Naval Station	Suspect
2530	Storage	Naval Station	Yes

TABLE 3-11. ASBESTOS SURVEY RESULTS

Building Number	Building Name	Activity	Contains Friable Asbestos
2532	Boiler Plant	Naval Station	No
2533	Galley	Naval Station	Yes
2535	Water Treatment	Naval Station	N/A
2536	Mine Training Center	Naval Station	No
2552	Swimming Pool	Naval Station	No
2556	COMOMAG Facility	Naval Station	No

TABLE 3-12. ASBESTOS ABATEMENT PROJECTS

Contract/Order Number	Location	Actions Completed
N62467-92-D-1746, Order 001	Building NH-49, Rooms 3,4,5	Removed 125 LF from 1" and Smaller Pipe
N62467-92-D-1746, Order 002	Building 10	Removed 70 LF from 2" and Smaller Pipe & 200 SF Spilled Material from Ground
N62467-92-D-1746, Order 003	Shop 40, Between Boiler #10 and Boiler #11	Removed from Spill
N62467-92-D-1746, Order 004	Building FBM-61, Pipe Chase, Building 656	Removed from Spill, Removed from Duct Work
N62467-92-D-1746, Order 005	Building 4, Building NH-52	Removed 66 LF from 3" Pipe and Smaller, Removed 50 LF from 1.5" Pipe and Smaller and Spilled Material
N62467-92-D-1746, Order 006	Building FBM-61	Removed 200 SF of Spilled Material
N62467-92-D-1746, Order 007	Building 191	Removed 66 LF from 3" and 6" Pipe
N62467-92-D-1746, Order 008	Building 1138	Removed 300 SF of Tile
N62467-92-D-1746, Order 009	Building 2517	Removed 160 SF from A/C Duct Joints and Floor
N62467-92-D-1746, Order 010	Pier P	Removed 100 LF from 12" Pipe and 480 SF from Pipe Tunnel
N62467-92-D-1746, Order 011	Pier F	Removed 46 SF from Spill, and 15 LF from 6" Pipe
N62467-92-D-1746, Order 012	Building 1385	Removed 128 SF of Floor Tile
N62467-92-D-1746, Order 013	Pier F Quaywall	Removed Spilled Material to a Depth of 3"
N62467-92-D-1746, Order 014	Building 81	Removed 340 LF from 5" Pipe and Smaller
N62467-92-D-1746, Order 015	Building FBM-61	Removed 198 LF from up to 3" & 12" Pipe, a LP Tank and an Adapter Line
N62467-92-D-1622, Order 001	Building 202	Removed from Various Pipe and Equipment
N62467-92-D-1622, Order 002	Building NS-2, Building 66, Building 665, Building 89, Building 200	Various

TABLE 3-12. ASBESTOS ABATEMENT PROJECTS

Contract/Order Number	Location	Actions Completed
N62467-92-D-1622, Order 003	Building NH-49	Removed 100 LF from 3" Pipe and Smaller
N62467-92-D-1622, Order 004	Building 2506	Removed 500 SF from A/C Ducting
N62467-92-D-1622, Order 005	Building 656	Removed 95 SF from Duct in Janitor's Closet
N62467-92-D-1622, Order 006	Drydock #2	Canceled — CNSY Shop 63 Completed Work
N62467-92-D-1622, Order 007	Drydock #1	Canceled — CNSY Shop 63 Completed Work
N62467-92-D-1622, Order 008	Building FBM-61	Removed 84 SF from Cooling Tower
N62467-92-D-1622, Order 009	Building NS200	Removed 2,600 SF of Floor Tile and Mastic
N62467-92-D-1622, Order 010	Building 221	Removed 143 SF from Sliding Door
N62467-92-D-1622, Order 011	NH-1	Various
N62467-92-D-1622, Order 012	Building NS43, Building 1179	Removed 10 LF from 5 Elbows in Galley Removed 500 LF from 3" Pipe
N62467-92-D-1622, Order 013	Building 9, Building 646, Steam Pipe near Building 1027, Steam Pipe to the East of Building 4, Steam Pipe to the East of Building 45	Removed 244 SF from Furnace #1 and 30 SF from Furnace #2, Removed 300 LF from Pipe Elbows, Removed from 12" Elbow, Removed from a 45° Bend and an Elbow, Removed 4 LF from 8" Pipe
N62467-92-D-1622, Order 014	Building 1226, Building 32	Removed 50 LF from 2" and Smaller Pipe, Removed 126 LF from 8" and 10" Pipe
N62467-93-D-3887 — New Contract	None As Yet	None as Yet

initiated the Navy Radon Assessment and Mitigation Program (NAVRAMP) in January, 1989 to implement testing of facilities. The initial portion of this effort concentrated on living spaces, training and hospital buildings where personnel frequently live. Since the U.S. Navy issued this program, Federal Law (TSCA, Title III) was enacted requiring all Federal agencies to test for radon.

Random radon level testing surveys have been performed for the housing areas, the brigs, the barracks, and the Fleet and Mine Warfare Training Center under NAVRAMP. Random radon level testing survey is underway for CNSY, but results will not be available until April, 1994.

Results of the tests completed to date indicate Building 202 has radon gas concentrations above the EPA's action level of four picocuries per liter (4 pC/l). This building is used as a training facility by Fleet and Mine Warfare Training Center. Within the building, four rooms were confirmed to have levels above the action level. These results ranged from 4.20 pC/l to 19.10 pC/l. Mitigation has not been initiated due to the impending closure of the facility; however, disclosure of this information will be made to potential purchasers.

The EPA mitigation action levels for structures containing radon gas are:

Concentration (pC/l)	Mitigation Timeframe
0 - 4	No Action Required
4 - 20	Within 5 Years
20 - 200	Within 6 Months
> 200	Within 3 Weeks

Radon levels were tested in thirty-two housing units, seven Fleet and Mine Warfare Training Center buildings, the Brig and two Barracks. Except for Building 202, results for all buildings involved in the testing was below the initial action threshold.

3.2.7 RCRA Facilities (SWMUs)

There are currently 39 Solid Waste Management Units (SWMUs) and 330 Potential Areas of Concern (PAOCs). A discussion of the RFA/RFI projects is shown in Section 3.1 of this plan. Tables 3-1 and 3-2 describe each SWMU/PAOC associated with the base.

3.2.8 NPDES Permits

Naval Base Charleston has a variety of permitted water discharges under the jurisdiction of the Clean Water Act. These include two National Pollution Discharge Elimination System (NPDES)

Permits issued from the South Carolina Department of Health and Environmental Control (SCDHEC) and a Non-Domestic Wastewater Discharge Permit with the North Charleston Sewer District.

In addition to the existing discharge permits, there are two outstanding permit applications:

- The General Storm Water Permit application which includes the discharges from the Naval Base Charleston.
- An application for the discharge of water from the five land based drydocks and one floating drydock at CNSY.

The water discharge program status is as follows:

NPDES Permit #SC0003816, Naval Base Charleston

The existing permit expired on August 13, 1985. An application for renewal was submitted to SCDHEC on February 20, 1985. SCDHEC acknowledged receipt of the application and authorized the use of the existing permit until the new permit is issued. A draft of the new NPDES permit was reviewed and returned to SCDHEC on December 11, 1986. The latest information on the issuance on the permit renewal is that all Charleston basin permits will be reviewed and reissued during the 1994-1995 time frame. Two basic outfall types are covered under this permit:

- Outfalls which convey stormwater runoff from the petroleum storage areas, specifically tanks 3900E, 3900F, 39A, and 39D, and the Chicora tank farm.
- Outfalls conveying wastewater from the compressor house building (1292/46); this outfall is not currently in use and is not expected to be returned to service.

The remainder of the outfalls discharge stormwater collected at various points throughout the Naval Base area. A large number of industrial discharges were redirected to the municipal sanitary sewer system in 1972; while this effort significantly reduced the quantity of industrial wastewaters being discharged through the base storm sewer system, unknown or illicit discharges are still occasionally discovered. However, there are no outstanding Notices of Violation and no known outstanding issues associated with the new permit, which is expected to be reissued within the next two years.

NPDES Permit #SC0024708, Short Stay Wastewater Treatment Facility

This permit expired on August 31, 1991. A permit renewal request was submitted to SCDHEC on February 13, 1991. Unless preempted, the existing permit will remain fully effective and

enforceable until a new permit is issued. The wastewater treatment facility treats municipal wastewater generated at the Short Stay Recreation Area and discharges to Lake Moultrie. The plant is permitted to discharge up to 30,000 gallons per day, but flow is maintained substantially below this threshold. The plant is currently operated under contract. There are no outstanding Notices of Violation. One Notice of Violation was issued for a discharge on September 7, 1993 for a high level of Fecal Coliform. The problem was determined to be a malfunctioning chlorinator, which was repaired. No enforcement action was taken and no outstanding issues are known to exist regarding the Short Stay permit.

North Charleston Sewer District (NCSD) Non-Domestic Wastewater Discharge Permit #008

This permit expired in January, 1994. The renewal application was submitted within prescribed guidelines. The permit includes three discharge points requiring monitoring: the main sewer continuous discharge, the metal plating facility (Building 226) batch discharge, and the FISC oil/water separator continuous discharge. In addition, a large portion of industrial wastewater discharged from the base is covered under this permit, including a number of discharges previously routed directly to the Cooper River. The volume also includes wastewater from ships which is collected in the Sewage Ship Waste Offload Barges (SWOBs) and tanks. There are no outstanding Notices of Violation. Three Notices of Violation were issued in the last three years for exceeding discharge permit contamination levels for oil & grease (May 1991), high pH (March 1992), and silver (September 1992). In addition, there was a violation concerning the requirement to test samples, or certify absence of Cyanide and items on the Total Toxic Organics list. No outstanding issues are known to exist regarding the non-domestic wastewater discharge permit; however, the entire sanitary sewer system has been designated as PAOC 16 in the RFA/RFI program.

General Stormwater Discharge Permit Application

CNSY has unpermitted stormwater discharge points associated with industrial activity. The Chief of Naval Operations submitted a Group Application which included Naval Base, Charleston on July 9, 1992. SEC Donohue, Inc. is currently performing a stormwater survey of the Naval Base Charleston in conjunction with Phase II of the application process. The stormwater survey and recent review efforts indicate some industrial wastewaters are probably being discharged through the base storm sewer system.

Drydock Discharge Permit Application

An application for an NPDES discharge permit for the CNSY drydocks was submitted on March 3, 1992. The analytical information for drydocks 1 through 5 has been submitted to SCDHEC for review. It is planned to submit analytical information for discharges from the floating drydock in the near future.

Miscellaneous Discharge Information

Dockside chlorination units (DCUs) are operated by the CNSY and Naval Station Charleston by permission of SCDHEC. Naval Base Charleston submitted an NPDES application on June 29, 1991, but was informed this was not necessary for this discharge. Although the discharge is not controlled by an NPDES permit, there are guidelines and testing parameters which must be followed.

The water discharged from the fuel tank farm and loading facility (Tanks 3911 & 3912, and Building 3913) most likely flows to the Cooper River through outfall #41. This information is not on the present NPDES permit review documentation at CNSY Environmental. However, the water from the tank berms is tested (by FISC), as is the water from the listed tank berms.

Both the NPDES and NCSD discharge permits for the Naval Base include clauses on transfer of property and permit status. Due to the complexity of the effort which will be required when the base is transferred to others, provisions will be established with SCDHEC and NCSD to expedite the transfer of permits and simplify the burden on the purchaser/receiver of the property. This will be particularly important for discharges to the Cooper River (process and stormwater) due to the age of the NPDES permit and the drastic changes that have taken place in water quality standards since the permit was issued in 1980.

Despite efforts over the past few years, there are still questions as to the origin of all waters entering the storm water discharge system. The effort just completed in the *Final Report for Stormwater Discharge Studies, Phase I*, dated February 1993 as SEC Donohue Project C1718 is the most comprehensive effort yet undertaken to identify sources of industrial waste which need to be eliminated from the storm water system. The study recommends further investigation on 30 of the 53 outfalls at the Naval Base. Preliminary testing of these outfalls has been performed; additional information concerning this testing will be incorporated into this section at a later date. The Environmental Baseline Survey (EBS) has also identified a number of boilers & cooling towers which discharge blowdown water and condensate to the storm sewer. Although these are low volume streams and may not pose a significant threat by themselves, they do indicate (along with the information from the Stormwater Study mentioned above) that there are a number of industrial sources which are discharging wastewaters to the Cooper River through the storm drain system.

3.2.9 Oil/Water Separators

Nineteen oil/water separators are known to presently exist at Naval Base Charleston. Onbase oil/water separators discharge water to either the Cooper River through the stormwater system or to the sanitary sewer system under the NCSD permit. Responsibility for water discharge programs is divided among the Fleet Industrial Supply Center (Fuel Department), Naval Shipyard (Shop 99), Naval Shipyard Occupational Safety, Health & Environmental Office (Water

Programs Branch), Naval Station Port Services, Public Works Department (Transportation), and Public Works Department (Utilities).

Waste oil removed from the separators is collected by PWD and taken to FISC, where it is offloaded at Truck Offload Stand 3913 and pumped to one of the collection tanks (39A & 39D), which also receive ballast water and other oily water wastes generated from shipboard activities. From there, the water is processed through the Ballast Waste Treatment Plant and discharged to the sanitary sewer under NCSD Permit #008. The waste oil is collected, segregated, tested for Used Oil specifications and sold to FISC Norfolk as *Fuel Oil Reclaimed* for further sale.

One oil/water separator does not operate through this system. It is located at the Marine Corps Automotive Maintenance Shop (Building 2505 at the Naval Station Annex). Water is apparently discharged without a permit to the North Charleston Sewer District, and oil is removed by a contractor.

The individual oil/water separators are listed by function in Table 3-13.

3.2.10 Air Emissions

Air emissions are regulated through the South Carolina Office of Air Quality Control, Bureau of Air Quality Control. Naval Base Charleston operates under Permit Number 0560-0002, issued March 8, 1989. The permit expired August 31, 1993, but has been extended until a new permit is issued. The application for the new permit was compiled by Environmental Science and Engineering, Inc. and submitted on June 17, 1993 with a follow-on submittal on July 6, 1993.

No Notices of Violation have been issued to the Naval Shipyard in regard to this permit. Per the conditions of the permit, reports on the operation of the barge boiler are submitted on a quarterly basis. All permitted emission sources are listed in Table 3-14.

The *Air Emissions Compliance Audit Report, Charleston Naval Base* was conducted by Environmental Science and Engineering, Inc. under contract N62467-90-D-1118. A required emission source inventory is underway as of the date of this plan.

Title V Operating Permit submissions are not being required by SCDHEC due to the impending closure of the facility. Similar to the approach planned for water discharge permits, provisions will be established with SCDHEC to expedite the permitting of air emission sources during the transfer process.

TABLE 3-13. OIL/WATER SEPARATORS

Location	Source	NCSD/NPDES	Status/Comments
Building 241, East Side	CNSY, Shop 02	NCSD	
Building 242, SW-End	CNSY, Shop 02	NCSD	
Building 242, East Side	CNSY, Shop 02	NCSD	
Building 226, West End	CNSY, Shop 31	NCSD	
Building 80, North End	CNSY, Shop 38	NCSD	
Building 236, East Side	CNSY, Shop 56	NCSD	Across from Building 1024
Building NS-2	CNSY, Shop 03 — Boiler House	NCSD	
Building Ns44	CNSY, Shop 03 — Boiler House	NCSD	
Building NS123	CNSY, Shop 03 — Boiler House	NCSD	
Training Field 1303, Building 202	Fire Fighting Water	NCSD	Effluent Flows to Sanitary Sewage System
Facility 1308	Helo Fire Fighting System	NCSD	Effluent Discharges via OWS 1303
Building FBM 61	Training Facility	NCSD	Inactive
Facility 3920	Chicora French Drain	NPDES	Tested Quarterly or When Discharged to Marsh Which Feeds Storm Drain
Adjacent to Road by Tank 3900E	Tank Berms From 3900E, 3900F, 3916, 3917	NPDES	Tested Quarterly or When Discharged to Storm Drain
Adjacent to Truck & Rail Car Loading Station 3913	Truck/Rail Car Loading Rack & 3911/12 Tank Berms	NPDES	Discharges to Cooper River thru Outfall #41. Tested Quarterly or When Discharged to Storm Drain
Facility 3926	Ballast Water Treatment Unit	NCSD	Daily Sampling/Testing When Operating. Discharges Through NCSD Discharge Point #3
Building 680	SIMA	NCSD	Equipment Drains to In-Floor OWS
Building 681	SIMA	NCSD	Equipment Drains to In-Floor OWS
Building 2505 Naval Annex	USMC Vehicle Maintenance Facility	NCSD (Not Permitted)	Oil Collected by Coastal Recovery, Inc.

TABLE 3-14. PERMITTED AIR EMISSION SOURCES

ID#	Building	Description	Pollutant/Limitation	Monitoring Requirements/Comments
01	681	Two 3.35x10 ⁶ BTU #2 Fuel Oil-Fired Boilers	Opacity 20% Each (Method 9)	
02	NS2	Two 20.0x10 ⁶ BTU #5 Fuel Oil-Fired Boilers	1) Particulate Matter 12.0 Lb/Hr & 0.6 Lb/10 ⁶ BTU Each (Method 5) 2) SO ₂ 46.0 Lb/Hr & 2.3 Lb/10 ⁶ BTU Each (Method 6) 3) Opacity 20% (Method 9)	
03	123	One 30x10 ⁶ BTU #5 Fuel Oil-Fired Boiler	1) Particulate Matter 18.0 Lb/Hr & 0.6 Lb/10 ⁶ BTU Each (Method 5) 2) SO ₂ 69.0 Lb/Hr & 2.3 Lb/10 ⁶ BTU Each (Method 6) 3) Opacity 20% (Method 9)	
04	226	Two 6x10 ⁶ BTU #2 Fuel Oil-Fired Boilers	Opacity 20% (Method 9)	
05	226	One 4x10 ⁶ BTU #2 Fuel Oil-Fired Boiler	Opacity 20% (Method 9)	
06	Void	Four 6.7x10 ⁶ BTU #2 Fuel Oil-Fired Boilers	None	
07	Unknown	One 5.175x10 ⁶ BTU #2 Fuel Oil-Fired Boiler	Opacity/20% (Method 9)	This Unit Can Only Operate When Another Boiler Is Out of Service.
08	NS53	One 2.659x10 ⁶ BTU #2 Fuel Oil-Fired Boiler	Opacity 20% (Method 9)	
09	Void	One 3.145x10 ⁶ BTU #2 Fuel Oil-Fired Boiler	None	
10	656	One 3.1x10 ⁶ BTU #2 Fuel Oil-Fired Boiler	Opacity 20% (Method 9)	
11	202	One 1.673x10 ⁶ #2 Fuel Oil-Fired Boiler	Opacity 20% (Method 9)	
12	NH68	One 1.855x10 ⁶ #2 Fuel Oil-Fired Boiler	Opacity 20% (Method 9)	
13	Unknown	One 225 Lb/Hr Type O Waste Incinerator	Opacity 20% (Method 9)	
14	Asbestos Delagging Shop	Asbestos Contaminated Equipment DeLagging Facility	Opacity 0% (Method 9)	Source Subject to Requirements of 40 CFR 61 Subpart M (NESHAP)

TABLE 3-14. PERMITTED AIR EMISSION SOURCES

ID#	Building	Description	Pollutant/Limitation	Monitoring Requirements/Comments
15	ESP & Baghouses	Five 88.7x10 ⁶ BTU Coal-Fired Boilers, Coal Handling & Fly Ash Systems	1) Particulate Matter 53.2 Lb/Hr & 0.6 Lb/10 ⁶ BTU (Method 5) 2) SO ₂ 204.0 Lb/Hr & 2.3 Lb/10 ⁶ BTU (Method 6) 3) Opacity 40% (Method 9)	1) Opacity — Continuous Monitoring 2) Particulate Matter — Every 2 Years (Method 5) 3) Precipitator Performance Gauges Shall Be Maintained 4) Only 3 Can Be Operated at Any Time
16	Mobile #1	One 72x10 ⁶ BTU #5 Fuel Oil-Fired Mobile Boiler	1) Particulate Matter 43.2 Lb/Hr & 0.6 Lb/10 ⁶ BTU (Method 5) 2) SO ₂ 165.6 Lb/Hr & 2.3 Lb/10 ⁶ BTU (Method 6) 3) Opacity 20% (Method 9)	The Combined Hours of Operation of Mobile Boilers #1 & #2 Shall Not Exceed 10,950 Hours per Year. Records of Operation Shall Be Kept & Available for SCDHEC Review.
17	Special Services/ Equipment Shop	Scrubbers	Opacity 20% (Method 9)	
18	Void	Six 20x10 ⁶ BTU #5 Fuel Oil-Fired Boilers	None	
19	Naval Hospital	Three 17x10 ⁶ BTU #2 Fuel Oil & Natural Gas-Fired Boilers	Opacity 20% (Method 9)	
20	Naval Hospital	One 400 Lb/Hr Type 0 & 4 Incinerator	Opacity 20% (Method 9)	
21	Mobile #2	One 72x10 ⁶ BTU/Hr Fuel Oil-Fired Mobile Boiler	1) Particulate Matter 43.2 Lb/Hr & 0.6 Lb/10 ⁶ BTU (Method 5) 2) SO ₂ 165.6 Lb/Hr & 2.3 Lb/10 ⁶ BTU (Method 6) 3) Opacity 20% (Method 9)	The Combined Hours of Operation of Mobile Boilers #1 & #2 Shall Not Exceed 10,950 Hours per Year. Records of Operation Shall Be Kept & Available for Dhec Review.
22	32	Two 1200 KW Diesel Powered Emergency Generators	Opacity 20% (Method 9)	These Generators Shall Operate Only 700 Hours per Year Each. Records of Operation Shall Be Kept & Available to SCDHEC for Review.
23	661	One 500 KW Diesel Powered Emergency Generator	Opacity 20% (Method 9)	These Generators Shall Operate Only 250 Hours per Year Each. Records of Operation Shall Be Kept & Available to SCDHEC for Review.
24	NH1	Two 500 KW Diesel Powered Emergency Generators	Opacity 20% (Method 9)	These Generators Shall Operate Only 250 Hours per Year Each. Records of Operation Shall Be Kept & Available to SCDHEC for Review.

3.2.11 Radiological Facilities

Radiological environmental monitoring is conducted by the U.S. Navy in shipyards frequented by U.S. Naval nuclear-powered ships. This monitoring consists of analyzing harbor sediment, water and marine life samples for radioactivity associated with Naval Nuclear Propulsion Plants, radiation monitoring around the perimeter of support facilities, and effluent monitoring. Environmental samples from each of these harbors are also checked at least annually by a U.S. Department of Energy laboratory to ensure analytical procedures are correct and standardized.

Radiological containment, monitoring and surveys have continually been a high priority and have been conducted since the beginning of the Program in the 1950s. Sites previously used for the storage of radiological materials and sites where radiological work has taken place have had detailed surveys conducted prior to release to ensure all radioactive material associated with the Naval Nuclear Propulsion Program (NNPP) has been removed. All radioactive waste associated with the NNPP is processed, shipped from the Shipyard in solid form, and buried in either licensed commercial or Federal Low Level Radioactive Waste sites.

Facilities and areas which have been used for performance of radiological work for the Naval Nuclear Propulsion Program (NNPP), which have been used for storage of NNPP radioactive materials, or which have the potential to contain radioactivity associated with the NNPP, have been identified. Each building, facility and area so identified will have all radioactive material associated with the NNPP removed. Following removal, detailed surveys will be conducted to verify removal of radioactivity and to document the status of the buildings, facilities and areas.

Facilities and areas which have been used for the performance of radiological work not associated with the NNPP (G-RAM), which have been used for the storage of G-RAM, have been identified. G-RAM examples include radiographic sources used for non-destructive test purposes, sources used for instrument calibration, electrical instrumentation containing vacuum tubes with radioactive elements, radium dials and gages, and naturally occurring radioactive materials such as potassium-40, thorium, and uranium and thorium daughter products. Identified G-RAM areas and facilities will be surveyed to identify the presence or absence of these radioactive materials and corrective action will be taken as necessary.

The list of buildings, facilities and areas is contained in the attached Table 3-15 entitled *Radiological Areas Matrix*. The matrix identifies each location where radioactive material was either stored or worked on by a designator in the Radiological Designator column, *NNPP* for radioactive material associated with the Naval Nuclear Propulsion Program and/or *G-RAM* for material not associated with NNPP.

3.2.12 Mixed Waste

Charleston Naval Shipyard performs systems repair, propulsion plant overhaul and inactivation of nuclear-powered ships. Despite largely successful efforts to minimize the generation of mixed

TABLE 3-15. RADIOLOGICAL CONTROLS MATRIX

Area Designator	Description	Usage*	Radiological Designator
Anti-contamination Clothing Trailer	Mobile Building	Work	NNPP
Auxiliary Repair Drydocking Medium-3	Floating Drydock	Work	NNPP
Building 2	Building	Storage	G-RAM
Building 3	Building	Work	G-RAM/NNPP
Building 9 Foundry	Building	Work	NNPP
Building 10	Building	Storage	G-RAM
Building 11	Building	Storage	NNPP
Building 13	Building	Work	G-RAM/NNPP
Building 13A	Building	Work	NNPP
Building 35	Building	Storage	NNPP
Building 44 Plating Facility	Building	Work	NNPP
Building 56	Building	Storage	G-RAM
Building 58	Building	Storage	G-RAM/NNPP
Building 59A	Building	Storage	NNPP
Building 59 Fenced Area	Outside	Storage	NNPP
Building 62	Building	Storage	NNPP
Building 79	Building	Work	NNPP
Building 79A & (2) Fenced Areas	Building Outside	Work Storage	NNPP
Building 80	Building	Storage	NNPP
Building 95	Building	Storage	NNPP
Building 96	Building	Storage	NNPP
Building 101 & Covered Storage Area	Building Outside	Storage Storage	NNPP
Building 177	Building	Work	G-RAM/NNPP
Building 187	Building	Storage	G-RAM
Building 190	Building	Storage	NNPP
Building 217	Building	Work	G-RAM/NNPP
Building 218	Building	Work	G-RAM/NNPP
Building 222 & (2) Fenced Areas	Building Outside	Work Work	NNPP

TABLE 3-15. RADIOLOGICAL CONTROLS MATRIX

Area Designator	Description	Usage*	Radiological Designator
Building 239	Building	Work	G-RAM/NNPP
Building 246	Building	Storage	NNPP
Building 320-1207	Building	Storage	NNPP
Building 1024	Building	Storage	NNPP
Building 1171	Building	Storage	NNPP
Building 1173	Building	Storage	NNPP
Building 1174	Building	Storage	NNPP
Building 1175	Building	Storage	NNPP
Building 1267	Building	Storage	G-RAM
Building 1317	Building	Work	NNPP
Building 1426	Building	Storage	NNPP
Building 1746	Building	Storage	NNPP
Building 1760	Building	Storage	NNPP
Change/Frisk House (2)	Mobile Building	Work	NNPP
Contaminated Storage Enclosures (2)	Mobile Building	Storage	NNPP
Counting Lab Trailer	Mobile Building	Work	NNPP
Covered Brows	Mobile Building	Work	NNPP
Demineralizer Shed	Building	Work	NNPP
Depot Maintenance Period Hull House	Mobile Building	Work	NNPP
Dockside Refueling Enclosure #1	Mobile Building	Work	NNPP
Dockside Refueling Enclosure #2	Mobile Building	Work	NNPP
Dockside Training Support Enclosure	Building	Work	NNPP
Drydock 1	Outside	Work	NNPP
Drydock 2	Outside	Work	NNPP
Drydock 3	Outside	Work	NNPP
Drydock 4 & Fenced Area	Outside Outside	Work Storage	NNPP
Drydock 5 & Quay Wall Storage Area	Outside Outside	Work Storage	NNPP

TABLE 3-15. RADIOLOGICAL CONTROLS MATRIX

Area Designator	Description	Usage*	Radiological Designator
Drydock 5 S5G Refueling Foundations	Outside	Work	NNPP
Drydock 5 S5W Foundations	Outside	Work	NNPP
Module 130 #1	Building	Work	NNPP
Module 130 #2	Building	Work	NNPP
Module 130 #3	Building	Work	NNPP
New Fuel Enclosure/ Installation and Activation Fixture	Building	Work	NNPP
Ninth Street Rail Line Storage Area	Rail Car	Storage	NNPP
Off Hull Nucleonics Laboratories (2)	Mobile Building	Work	NNPP
Off Hull Refueling Enclosure	Mobile Building	Work	NNPP
Parking Lot E-5	Outside	Work	NNPP
Pier A	Outside	Storage	NNPP
Pier C	Outside	Work	NNPP
Pier D	Outside	Work	G-RAM/NNPP
Pier F	Outside	Work	NNPP
Pier F-G Storage Area	Outside	Storage	NNPP
Pier G	Outside	Work	NNPP
Pier G-H Storage Area	Outside	Storage	NNPP
Pier G Rail Line Storage Area	Outside	Storage	NNPP
Pier H	Outside	Work	NNPP
Pier J	Outside	Work	NNPP
Pier J Rail Line Storage Area	Outside	Storage	NNPP
Pierside Cofferdam	Mobile Building	Work	NNPP
Portable Frisking Enclosure (2)	Mobile Building	Work	NNPP
Power Plant Rail Line Storage Area	Rail Car	Storage	NNPP

TABLE 3-15. RADIOLOGICAL CONTROLS MATRIX			
Area Designator	Description	Usage*	Radiological Designator
Radioactive Liquid Waste Tank House	Mobile Building	Work	NNPP
Refueling Access Enclosure Annexes (2)	Mobile Building	Work	NNPP
Refueling Access Enclosure #1	Mobile Building	Work	NNPP
Refueling Access Enclosure #3	Mobile Building	Work	NNPP
Refueling Access Enclosure #4	Mobile Building	Work	NNPP
S6G Training Base	Mobile Building	Work	NNPP
Steam Generator Chemical Cleaning Enclosure	Mobile Building	Work	NNPP
Steam Generator Inspection Barge	Barge	Storage	NNPP
Thirteenth Street Rail Line Storage Area	Rail Car	Storage	NNPP
Training Facility Support Structure	Mobile Building	Work	NNPP
Vertical Stair Structures (4)	Mobile Building	Work	NNPP

* Usage only in specified designated locations within listed areas.

radioactive and hazardous waste, the Shipyard has produced minor quantities of mixed waste. Given the lack of national capacity to treat and dispose of mixed waste, it is necessary to store this small amount of mixed waste at the the Shipyard. A revised RCRA Part B permit application for storage of mixed waste has been submitted to the State for approval.

Under the Federal Facilities Compliance Act of 1992 (FFCA), the United States Department of Energy (DOE) is required to prepare Site Treatment Plans (STPs) to address treatment of mixed radioactive and hazardous waste for each site under DOE cognizance that generates and stores mixed waste. The STPs will be submitted to the State for approval by October 1995. DOE has established a three step process for developing the STPs, which includes preparation of conceptual, draft, and final proposed versions of these plans to facilitate coordination with the State and the Federal EPA as the plans are developed. Navy or DOE facilities that generate and store mixed waste associated with Naval Nuclear Propulsion work are included in the FFCA process and are preparing STPs based on the joint Navy/DOE nature of such work and the legislative history of the FFCA.

3.2.13 Others

It may be necessary to address other programs as part of this plan, including possibly Lead-Based Paint in Housing, Potable Water, and Pesticides Control issues.

3.3 Status of Natural and Cultural Resources Programs

3.3.1 Historical and Cultural Resources

Procedures have been initiated to identify, evaluate, and afford the State Historic Preservation Officers and the Advisory Council on Historic Preservation the opportunity to comment on the Navy's BRAC undertakings, in accordance with Sections 106 and 110 of the National Historic Preservation Act of 1966, as amended. These actions are being conducted in concert with, and to support, the actions being taken in compliance with the National Environmental Policy Act.

3.3.2 Natural Resources Programs

Naval Base Charleston has a Natural Resources Plan that has been approved for implementation. It consists of:

- Basic Section — Approved 20 June 1989
- Land Management Section — Approved 20 June 1989
- Fish & Wildlife Section — Approved 21 July 1992

A wetlands map was prepared for the Base and certified for three years by the Charleston District Corps of Engineers on 1 January 1987. The map was certified for an additional three years on 31 March 1993. Present certifications are good only for planning purposes and expire 14 August 1995.

An endangered plant survey was completed 20 July 1993 by Richard D. Porcher of the Citadel. No plants of importance were identified during the survey.

No resident endangered species of fauna were found on the Base when the Fish & Wildlife plan was prepared in 1992.

No further actions for natural resources are planned at this time.

3.4 Environmental Condition of Property

In order to prepare an environmental condition of property map, evidence must be gathered that screens base property at a high level of confidence in seven area types. These seven area types or categories are as follows:

NAVAL BASE CHARLESTON BRAC AREA TYPES		
Ranking Number	Map Color	Ranking Criteria
1	White	Areas where no storage, release, or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).
2	Blue	Areas where only storage of hazardous substances or petroleum products has occurred (but where no release or disposal or migration from adjacent areas has occurred).
3	Light Green	Areas where storage, release, disposal and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require a removal or remedial action.
4	Dark Green	Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken.
5	Yellow	Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are underway, but all required remedial actions have not yet been taken.
6	Red	Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented.
7	Gray	Areas that are unevaluated or require additional evaluation.

Table 3-16 and Figure 3-2 summarize the status of information on the environmental condition of base property in terms of the seven categories above. Figure 3-2 is located in the map pocket

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
OL-SS	Short Stay	Naval Station	Open Land	1
3 (NS)	Downtown Charleston	Naval Station	Medium Range (533)	1
4 (NS)	Downtown Charleston	Naval Station	Shallow Range	1
5 (NS)	Downtown Charleston	Naval Station	Stray Magnetic Field Garden	1
46	Short Stay	Naval Station	Bath House	1
140	Short Stay	Naval Station	Fishing Pier #1	1
150	Short Stay	Naval Station	Small Boat Ramp/Concrete No. 2	1
160	Short Stay	Naval Station	Seawall (4012 Ft)	1
179	Short Stay	Naval Station	Sentry House	1
193	Short Stay	Naval Station	Boat Ramp/Concrete No. 1	1
213	Short Stay	Naval Station	Seawall (1070 Ft)	1
2553	Naval Annex	Naval Station	Softball Field	1
2555	Naval Annex	Naval Station	Entrance Sign	1
4001	Sullivans Island	Naval Shipyard	Flagpole	2
2 (NS)	Downtown Charleston	Naval Station	Degaussing Facility and Boat Pier (533)	2
25	Short Stay	Naval Station	Hose Hydrant House	2
30	Short Stay	Naval Station	Sewage Treatment Plant	2
44	Short Stay	Naval Station	Well, North	2
45	Short Stay	Naval Station	Well, West	2
50	Short Stay	Naval Station	Water Storage Tank	2

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
52	Short Stay	Naval Station	Hose Hydrant House	2
53	Short Stay	Naval Station	Hose Hydrant House	2
55	Short Stay	Naval Station	Hose Hydrant House	2
56	Short Stay	Naval Station	Hose Hydrant House	2
82	Short Stay	Naval Station	Recreation Pavilion #2	2
85	Short Stay	Naval Station	Supply and Game Room	2
87	Short Stay	Naval Station	Hose Hydrant House	2
128	Short Stay	Naval Station	Guest House Trailer	2
151	Short Stay	Naval Station	Marina Boat Basin	2
159	Short Stay	Naval Station	Fishing Pier #2	2
198	Short Stay	Naval Station	Maintenance Shop	2
200	Short Stay	Naval Station	Bath House	2
201	Short Stay	Naval Station	Military Liaison Office	2
203	Short Stay	Naval Station	Unescorted Personnel Housing (10 Man)	2
206	Short Stay	Naval Station	Roundette	2
209	Short Stay	Naval Station	Roundette	2
212	Short Stay	Naval Station	Security Building	2
215	Short Stay	Naval Station	Pavilion	2
218	Short Stay	Naval Station	Duplex Quarters	2
234	Short Stay	Naval Station	Duplex Quarters	2
235	Short Stay	Naval Station	Recreation Building	2
236	Short Stay	Naval Station	Mini Golf Course	2

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
2536	Naval Annex	Naval Station	Administration, CO MOMAG	2
1079	G49	Fleet Industrial Supply Center	Hazardous Flammable Storage	4
178	E39	Naval Shipyard	Steam Flow Meter House	4
NS11	P13	Naval Station	Floating Pier (V)	4
NS12	P13	Naval Station	Floating Pier (W)	4
NS13	P13	Naval Station	Floating Pier (X)	4
332	D3	Naval Station	Wharf, Catwalk & Finger Piers (Y), Degaussing Station	4
198	E44	Fleet Industrial Supply Center	Supply Receiving, Shipping & Administration, and ADP Building	5
240	G32	Naval Shipyard	Carwash Facility	5
458	L39	Naval Shipyard	Switchgear and Substation	5
1278	H30	Naval Shipyard	Battery Processing Slab	5
X10	H23	Naval Station	General Warehouse	5
48	Short Stay	Naval Station	Storage	5
NH49	E47	Naval Station	Administrative Office	5
NH53	F48	Naval Station	Administrative Office (Naval Investigative Service)	5
1143	E38	Naval Station	Special Services Center	5
1346	E35	Naval Station	Service Station/Minimart	5
202	L18	Fleet & Mine Warfare Training Center	Instruction Building	6
208	K17	Fleet & Mine Warfare Training Center	5000 Gallon Underground Fuel Oil Tank	6
1302	K18	Fleet & Mine Warfare Training Center	Helicopter Mock-Up Pad	6
1303	K18	Fleet & Mine Warfare Training Center	Damage Control Mock-Up	6

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
1306	K18	Fleet & Mine Warfare Training Center	5000 Gallon Fuel Oil Tank	6
1308	K18	Fleet & Mine Warfare Training Center	Water/Oil Separator	6
1309	K18	Fleet & Mine Warfare Training Center	Engine Room Mock-Up	6
1310	K18	Fleet & Mine Warfare Training Center	Carrier Compartment Mock-Up	6
1351	L17	Fleet & Mine Warfare Training Center	Storage Shed (Paint Locker)	6
1744	K18	Fleet & Mine Warfare Training Center	Field Medical Locker	6
SWMU 1	T51	Fleet Industrial Supply Center	Near DRMO, Building 1617	6
SWMU 2	S52	Fleet Industrial Supply Center	DRMO Salvage Bin #3	6
OL9	N52	Fleet Industrial Supply Center	Open Land	6
NSC66	G45	Fleet Industrial Supply Center	Warehouse	6
83	A45	Fleet Industrial Supply Center	Business Opportunity Center	6
98	F31	Fleet Industrial Supply Center	Fuel Oil Booster Pumphouse	6
191	M50	Fleet Industrial Supply Center	Controlled Humidity Warehouse (CNSY, MMF)	6
325	K28	Fleet Industrial Supply Center	Fueling Pier (K)	6
3906-Q	Chicora	Fleet Industrial Supply Center	Operational Storage	6
3906-O	Chicora	Fleet Industrial Supply Center	Ballast/Sludge Storage Tank (1,153,000 Gallons)	6
3906-N	Chicora	Fleet Industrial Supply Center	Ship Fuel Oil Tank (2,126,000 Gallons)	6
3906-M	Chicora	Fleet Industrial Supply Center	Ship Fuel Oil Tank (2,132,000 Gallons)	6
3906-K	Chicora	Fleet Industrial Supply Center	Diesel Fuel Oil Tank (2,130,000 Gallons)	6
3906-R	Chicora	Fleet Industrial Supply Center	Transformer Vault	6
3906-L	Chicora	Fleet Industrial Supply Center	Diesel Fuel Oil Tank (2,128,000 Gallons)	6
3906-S	Chicora	Fleet Industrial Supply Center	Transformer Vault	6

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
3906-P	Chicora	Fleet Industrial Supply Center	Diesel Fuel Oil Tank (2,128,000 Gallons)	6
3915	D33	Fleet Industrial Supply Center	Lubricant Storage Tank (1,008,000 Gallons)	6
3916	E30	Fleet Industrial Supply Center	Diesel Oil Tank (4,200,000 Gallons)	6
3917	D30	Fleet Industrial Supply Center	Diesel Oil Tank (4,200,000 Gallons)	6
3920	Chicora	Fleet Industrial Supply Center	Runoff Oil/Water Separator	6
NH68	G47	Naval Regional Medical Center	Medical Storehouse	6
SWMU 9	C20	Naval Shipyard/Naval Station	Closed Landfill	6
NS2	M16	Naval Shipyard	Utility Building	6
2A	K43	Naval Shipyard	Shipfitter Shop and Sail Loft	6
2	J43	Naval Shipyard	Shipfitter Shop, Structural and Piping Group Offices	6
ARDM3	J33	Naval Shipyard	5500 Ton Floating Dry Dock	6
4	G43	Naval Shipyard	Administration Offices (Engineering, Nuclear Engineering, IRM)	6
NS4	M16	Naval Shipyard	Fuel Oil Storage	6
5	H42	Naval Shipyard	Woodworking Shop	6
6	H43	Naval Shipyard	Forge Shop and Propeller Repair Shop	6
9	G39	Naval Shipyard	Temporary Service Shop	6
13	G38	Naval Shipyard	Quality Assurance Office & Supply Administration	6
32	F41	Naval Shipyard	Central Power Plant	6
35	H43	Naval Shipyard	Welding School and Welding Engineering	6
43	H41	Naval Shipyard	Central Tool Shop & Service Group Offices	6
NS44	L14	Naval Shipyard	Heating Plant	6

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
46	J41	Naval Shipyard	Compressor and Salt Water Pumphouse	6
59	J43	Naval Shipyard	Sheetmetal Shop and Boiler Shop (Shop 17)	6
62	L41	Naval Shipyard	Operations Project Offices & Engineering	6
68	G30	Naval Shipyard	Battery Shop (Electric Shop)	6
76	D40	Naval Shipyard	Human Resource & Safety/Environmental Offices	6
79	J35	Naval Shipyard	Repair Shop and Quality Assurance Office	6
88A	G43	Naval Shipyard	Administrative Offices (NAVSTA Telephone Office, Engineering, Navy Audit)	6
97	G37	Naval Shipyard	Air Compressor House	6
123	J23	Naval Shipyard	Boiler House	6
127	J28	Naval Shipyard	Salt Water Pumphouse	6
PAOC 16	Basewide	Naval Shipyard	Sanitary Sewer System	6
187	G37	Naval Shipyard	Module Maintenance Facility	6
199	F36	Naval Shipyard	Training Building (Cochrane Hall)	6
234	H44	Naval Shipyard	Engineering Management Building	6
242	G33	Naval Shipyard	Automobile Maintenance Building	6
246	E26	Naval Shipyard	Hazardous Waste Storage and Transfer Facility (new PW Corral)	6
303	H31	Naval Shipyard	Drydock #3	6
304	H30	Naval Shipyard	Drydock #4	6
305	J37	Naval Shipyard	Drydock #5	6
381	F30	Naval Shipyard	Storage/Administration Facility (Pest Control)	6
451B	F41	Naval Shipyard	Substation	6

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
451C	E29	Naval Shipyard	Substation	6
451D	F41	Naval Shipyard	Switching Station	6
457	J41	Naval Shipyard	Switchgear, Substations & Production Offices	6
466	G30	Naval Shipyard	Switching Substation	6
560	J49	Naval Shipyard	Coal Storage Yard	6
590A	H34	Naval Shipyard	Radiological Control Office	6
903	D24	Naval Shipyard	Storage Building	6
1119	J41	Naval Shipyard	Operations Support Offices (Waterfront)	6
1275	L42	Naval Shipyard	Abrasive Blast Slab	6
1426	H34	Naval Shipyard	Contaminated Waste Storage	6
1433	Various	Naval Shipyard	Portable Field Office	6
1723	K44	Naval Shipyard	Boiler Tube and Firebrick Storage Shed	6
1784	H42	Naval Shipyard	Industrial Waste Treatment Facility	6
1838	C22	Naval Shipyard	General Storage	6
3902	G27	Naval Shipyard	Paint and Oil Storehouse (PW Storage Yard, Old Corral, PCB Transfer Station)	6
OL6	G29	Naval Station	Parking Area	6
NS8	N17	Naval Station	Berthing Pier (S)	6
SWMU-8	G25	Naval Station	Oil Sludge Pit	6
NS9	P16	Naval Station	Berthing Pier (T)	6
NS10	P14	Naval Station	Berthing Pier (U)	6
NH45	E47	Naval Station	Administrative Office (COMNAVBASE HQ)	6
NH46	E48	Naval Station	Administrative Office (DESRON 20/36)	6

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
NH48	D48	Naval Station	Administrative Office	6
NH50	D48	Naval Station	Administrative Office	6
NH52	E48	Naval Station	Resident Officer In Charge Of Construction	6
NH55	E47	Naval Station	Legal Service Office	6
NH62	F47	Naval Station	Household Goods and Housing Storage	6
NS71	G16	Naval Station	Nex Cafeteria, Restaurant-Snack Bar	6
208	Short Stay	Naval Station	Boat Maintenance Ramp	6
335	K21	Naval Station	Bulkhead	6
641	F26	Naval Station	Warehouse/Administrative (SUBRON 4)	6
652	G15	Naval Station	EM Quarters	6
851	L16	Naval Station	Gas/Diesel Pumping Station	6
NH1137	G46	Naval Station	Administrative Office	6
M1257	E46	Naval Station	General Warehouse	6
1508	H20	Naval Station	Car Wash and Hobby Shop	6
2501	Naval Annex	Naval Station	Air Force Property (Radar Club)	6
2505	Naval Annex	Naval Station	Vehicle Maintenance For NMCR	6
2524	Naval Annex	Naval Station	Administration (MU11)	6
B	L46	Naval Weapons Station Housing	Quarters, COMINFLANT (Flag)	6
760 (NHD)	E49	Naval Weapons Station Housing	Officers Quarters	6
FBM61	J16	Submarine Training Facility	FBM Submarine Training Center	6
600	J16	Submarine Training Facility	30,000-Gallon Fuel Oil Tank	6
203	K18	Fleet & Mine Warfare Training Center	Gas Storage	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
204	K18	Fleet & Mine Warfare Training Center	Fresh Water Booster Pumphouse	7
643	H18	Fleet & Mine Warfare Training Center	Training Building	7
645	J17	Fleet & Mine Warfare Training Center	Engine Overhaul Facility	7
647	J17	Fleet & Mine Warfare Training Center	Training Building	7
649	J17	Fleet & Mine Warfare Training Center	Warehouse	7
1281	K18	Fleet & Mine Warfare Training Center	Cooling Tower	7
1282	K18	Fleet & Mine Warfare Training Center	Antenna Poles and Wire	7
1313	K18	Fleet & Mine Warfare Training Center	Hose Storage	7
1352	K17	Fleet & Mine Warfare Training Center	Air Compressor Shed	7
1424	K18	Fleet & Mine Warfare Training Center	10,200 Gallon Fresh Water Storage Tank	7
1715	L17	Fleet & Mine Warfare Training Center	Maintenance Shop	7
1722	J17	Fleet & Mine Warfare Training Center	Training Mock-Up	7
1819	L17	Fleet & Mine Warfare Training Center	Mechanical Equipment Storage	7
1834	K18	Fleet & Mine Warfare Training Center	OBA Storage and Laundry Room	7
OL-8	K50	Fleet Industrial Supply Center	Open Land	7
14	K17	Fleet Industrial Supply Center	Small Craft Ready Fuel Storage (Not In Use)	7
M17	D45	Fleet Industrial Supply Center	Administration Building	7
39D	F33	Fleet Industrial Supply Center	Ballast/Sludge Storage Tank (741,000 Gallon)	7
39L	E32	Fleet Industrial Supply Center	Diesel Tank (6,500 Gallon)	7
39A	E33	Fleet Industrial Supply Center	Ballast/Sludge Storage Tank (741,000 Gallon)	7
39M	E32	Fleet Industrial Supply Center	Diesel Pumphouse	7
39N	E32	Fleet Industrial Supply Center	Motor Gas Tank (825 Gallon Underground) (Abandoned)	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
NSC45	G43	Fleet Industrial Supply Center	Warehouse	7
64	G46	Fleet Industrial Supply Center	Warehouse	7
NSC67	F45	Fleet Industrial Supply Center	Warehouse	7
133	E32	Fleet Industrial Supply Center	Operational Storage	7
135	P50	Fleet Industrial Supply Center	Operational Storage	7
148	F31	Fleet Industrial Supply Center	Stripper Concrete Tank	7
172	E31	Fleet Industrial Supply Center	Operational Storage	7
173	J49	Fleet Industrial Supply Center	Operational Storage	7
193	G26	Fleet Industrial Supply Center	Cold Storage Warehouse/Laboratory	7
219	E44	Fleet Industrial Supply Center	Battery Charging Station	7
224	E27	Fleet Industrial Supply Center	Ships Outfitting, Clothing Storage, and Fleet Purchasing	7
233	F46	Fleet Industrial Supply Center	Battery Charging Facility	7
290	F44	Fleet Industrial Supply Center	Uninterruptable Power Source Building	7
321	R47	Fleet Industrial Supply Center	Supply Pier (Alpha)	7
536	H4	Fleet Industrial Supply Center	Weighting Facility	7
547	H48	Fleet Industrial Supply Center	Open Storage (Steel Plate)	7
M766	D44	Fleet Industrial Supply Center	Administration Building	7
1001	H49	Fleet Industrial Supply Center	Cylinder/POL Storage Shed	7
1127	H44	Fleet Industrial Supply Center	Preservation Shop and Bulk Storage	7
M1136	D44	Fleet Industrial Supply Center	Administrative Building	7
1138	F44	Fleet Industrial Supply Center	Bin Issue Warehouse	7
1172	G34	Fleet Industrial Supply Center	Servmart	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
1226	K49	Fleet Industrial Supply Center	Shop Repair Storage	7
M1263	E45	Fleet Industrial Supply Center	Picnic Area	7
1385	H48	Fleet Industrial Supply Center	Field Office	7
1419	F44	Fleet Industrial Supply Center	Missile Display	7
1420	E45	Fleet Industrial Supply Center	Flag Pole	7
1449	R52	Fleet Industrial Supply Center	Portable Field Office	7
1501	A44	Fleet Industrial Supply Center	Warehouse	7
1502	B44	Fleet Industrial Supply Center	Warehouse	7
1503	B43	Fleet Industrial Supply Center	Warehouse	7
1504	B43	Fleet Industrial Supply Center	Warehouse	7
1505	A44	Fleet Industrial Supply Center	Warehouse (NWS Housing Storage)	7
1507	B42	Fleet Industrial Supply Center	Warehouse	7
1513	B43	Fleet Industrial Supply Center	Storage Building (RUBB)	7
1514	C43	Fleet Industrial Supply Center	1500 GPM Pumping Station	7
1571	D44	Fleet Industrial Supply Center	Flammable Storage Shelter	7
1601B	P48	Fleet Industrial Supply Center	Warehouse	7
1602C	P49	Fleet Industrial Supply Center	Warehouse	7
1603	R50	Fleet Industrial Supply Center	MTIS (Material Turn In Site) Warehouse	7
1604	R53	Fleet Industrial Supply Center	Warehouse	7
1605	R52	Fleet Industrial Supply Center	Warehouse (Repairables Processing)	7
1606	S51	Fleet Industrial Supply Center	Warehouse (DRMO)	7
1607	P52	Fleet Industrial Supply Center	Warehouse (DRMO)	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
1612	R51	Fleet Industrial Supply Center	Open Storage (DRMO)	7
1613	S51	Fleet Industrial Supply Center	Open Storage (DRMO)	7
1614	N52	Fleet Industrial Supply Center	Open Storage	7
1620	P50	Fleet Industrial Supply Center	Warehouse, Operational Storage	7
1621	P50	Fleet Industrial Supply Center	Warehouse	7
1622	N50	Fleet Industrial Supply Center	Warehouse (PMO)	7
1623	N50	Fleet Industrial Supply Center	Warehouse (PMO)	7
1624	P49	Fleet Industrial Supply Center	Battery Charging Facility	7
1627	S52	Fleet Industrial Supply Center	Sales Facility (DRMO)	7
1628	M51	Fleet Industrial Supply Center	Publications and Printing Plant (NPPSO)	7
1629	R50	Fleet Industrial Supply Center	Flammable Storage Shelter	7
1631	F46	Fleet Industrial Supply Center	Vehicle Storage Shed	7
1632	P48	Fleet Industrial Supply Center	General Storage Shed	7
1633	R48	Fleet Industrial Supply Center	Valve House	7
1634	K49	Fleet Industrial Supply Center	Shelter For Band Saw	7
1635	K49	Fleet Industrial Supply Center	Field Office	7
1636	P49	Fleet Industrial Supply Center	Storage Building (RUBB)	7
1637	R49	Fleet Industrial Supply Center	Storage Building (RUBB)	7
1638	R49	Fleet Industrial Supply Center	Storage Building (Rubb)	7
1639	N51	Fleet Industrial Supply Center	Controlled Humidity Warehouse	7
1640	S50	Fleet Industrial Supply Center	Conforming Storage Facility (DRMO)	7
1647	N51	Fleet Industrial Supply Center	Pump House	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
1648	P51	Fleet Industrial Supply Center	General Storage Building	7
1649	S51	Fleet Industrial Supply Center	Storage Shed (DRMO)	7
1650	F44	Fleet Industrial Supply Center	Security House	7
1651	G49	Fleet Industrial Supply Center	2500 GPM Pumping Station	7
1652	R48	Fleet Industrial Supply Center	Sentry House	7
1653	E31	Fleet Industrial Supply Center	Fuel Testing Lab	7
1654	E31	Fleet Industrial Supply Center	Accounting Building	7
1655	F45	Fleet Industrial Supply Center	General Warehouse	7
1800	H29	Fleet Industrial Supply Center	Warming/Administration Building	7
1810	H29	Fleet Industrial Supply Center	Air Compressor Building	7
1814	E27	Fleet Industrial Supply Center	Flammable Storage Shelter	7
3900I	E31	Fleet Industrial Supply Center	Diesel Oil Pumphouse/Laboratory	7
3900F	D31	Fleet Industrial Supply Center	Diesel Oil Tank (2,350,000 Gallon)	7
3900E	E31	Fleet Industrial Supply Center	Diesel Oil Tank (2,350,000 Gallon)	7
3901A	E31	Fleet Industrial Supply Center	Ballast/Sludge Storage Tank (103,194 Gallon)	7
3901B	E31	Fleet Industrial Supply Center	Sludge Pumphouse	7
3911	H29	Fleet Industrial Supply Center	Lubricant Storage Tank (50,000 Gallon)	7
3912	G29	Fleet Industrial Supply Center	Lubricant Storage Tank (50,000 Gallon)	7
3913	H29	Fleet Industrial Supply Center	Tank Truck/Car Loading/Unloading Facility, Attendant Weather Shelter	7
3914	H29	Fleet Industrial Supply Center	POL OPN/Sampling/Test Building	7
3926	E32	Fleet Industrial Supply Center	Ballast Water Treatment Facility	7
NCCPSD	C30	Naval Shipyard	Sewer Pumping Station	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
Santee 1	E22	Naval Shipyard	Transformer Station	7
Santee 2	E41	Naval Shipyard	Transformer Station	7
3	J42	Naval Shipyard	Inside Machine Shop (Shop 31)	7
NS3	M17	Naval Shipyard	Pump House (Aircraft Truck Fueling Facility)	7
NS5	L17	Naval Shipyard	500,000 Gallon Fresh Water Storage	7
NS6	L17	Naval Shipyard	Pumphouse (Fresh Water)	7
7	H44	Naval Shipyard	Comptroller Department and IRM	7
10	G39	Naval Shipyard	Nuclear Engineering Department	7
11	J37	Naval Shipyard	Miscellaneous Shops & Test Equipment Storage	7
12B	D34	Naval Shipyard	Public Works Trailer Site	7
12A	D34	Naval Shipyard	Public Works Trailer Site	7
SWMU-19	F23	Naval Shipyard	Solid Waste Transfer Station	7
21	H36	Naval Shipyard	Storage (Shop 99)	7
23	F32	Naval Shipyard	Training Aids Storage & Administration	7
25	E40	Naval Shipyard	Transportation Shop and Garage (Shop 02)	7
26	K38	Naval Shipyard	Field Office	7
X30A	L19	Naval Shipyard	Transformer Vault	7
30	F41	Naval Shipyard	PW Building Trades and Administrative Offices	7
31	F41	Naval Shipyard	Storage For Power Plant	7
X33A	L16	Naval Shipyard	Transformer Vault	7
NSC39	J32	Naval Shipyard	Diesel Oil Pumphouse (Abandoned)	7
42	E32	Naval Shipyard	Fleet Motor Pool	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
44	G42	Naval Shipyard	Supply & Shop Stores (Old Plating Shop)	7
NS45	L13	Naval Shipyard	Fuel Storage	7
53	F43	Naval Shipyard	Fresh Water Storage Underground	7
54	F43	Naval Shipyard	Fresh Water Pumphouse	7
55	M42	Naval Shipyard	Collimation Facility	7
56	J42	Naval Shipyard	Electrical/Mechanical Group Shops (Shop 29)	7
57	G42	Naval Shipyard	Rigger Shop	7
58	F43	Naval Shipyard	Dispensary, Industrial Medicine and Radiation Health	7
58A	J42	Naval Shipyard	Shipyard Quality Field Office	7
63	H42	Naval Shipyard	Yard Cafeteria #1	7
69	G31	Naval Shipyard	Storehouse, Receiving and Shipping	7
NS69	H15	Naval Shipyard	Boiler House	7
NH72	E48	Naval Shipyard	Heating Plant Building	7
74	K42	Naval Shipyard	Storehouse	7
75	K38	Naval Shipyard	Substation	7
77	H41	Naval Shipyard	Substation, Restroom, Ship Superintendent Office	7
78	F47	Naval Shipyard	Water Tank (Elevated)	7
80	H39	Naval Shipyard	Outside Machine Shop	7
84	H40	Naval Shipyard	Substation, Drydock #2	7
85	J35	Naval Shipyard	Substation, Piers 317D To 317E	7
88	J39	Naval Shipyard	Salt Water Pumphouse #2	7
91	J33	Naval Shipyard	Substation	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
93	J39	Naval Shipyard	Restroom	7
94	G33	Naval Shipyard	Substation	7
95	H31	Naval Shipyard	Substation & Storage	7
96	H30	Naval Shipyard	Substation & Storage	7
99	J41	Naval Shipyard	Salt Water Pumphouse	7
101	H34	Naval Shipyard	Material and Tool Storehouse	7
122	F32	Naval Shipyard	Transportation Motor Pool (Dispatcher)	7
124	H28	Naval Shipyard	Substation	7
125	H23	Naval Shipyard	Substation	7
126	K20	Naval Shipyard	Substation	7
136	G42	Naval Shipyard	Condensate Storage and Pumphouse	7
137	K44	Naval Shipyard	Oxygen Charging Station	7
143	L37	Naval Shipyard	Automatic Tide Gauge House (Abandoned)	7
145	G37	Naval Shipyard	Test Stand (Rigger Shop)	7
147	H42	Naval Shipyard	Storage (Shop 06)	7
168	J33	Naval Shipyard	Storehouse	7
174	F36	Naval Shipyard	Switch House (Electrical)	7
177	F40	Naval Shipyard	Electric and Electronics Shops	7
185	H29	Naval Shipyard	Dredge Booster Pumphouse	7
188	G37	Naval Shipyard	Mechanical Equipment Building For Building 187	7
189	G37	Naval Shipyard	Mechanical & Electrical Equipment Building for Building 187	7
190	J34	Naval Shipyard	Radiological Controls Training & Offices	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
194	J39	Naval Shipyard	Paint Shop Storage (Shop 71)	7
195	J38	Naval Shipyard	Rigger Shop Service Building; NRRO & BRMO Field Office	7
196	K19	Naval Shipyard	250,000 Gallon Fresh Water Elevated Tank	7
197	J37	Naval Shipyard	Pumpwell, Drydock #5	7
209	E42	Naval Shipyard	Employee Outplacement Center	7
210	A45	Naval Shipyard	Chlorinator Building, Fresh Water	7
211	E50	Naval Shipyard	Chlorinator Building, Fresh Water	7
212	K43	Naval Shipyard	Abrasive Blasting Facility	7
216	G37	Naval Shipyard	Electrical Shop Cable Warehouse	7
217	G38	Naval Shipyard	Neutron Generator House	7
218	H35	Naval Shipyard	Missile Ordnance Systems Shop (Shop 67)	7
221	K42	Naval Shipyard	Pipe Shop Cleaning Plant (Pickling)	7
222	G41	Naval Shipyard	Drydock Support Repair Facility	7
223	L43	Naval Shipyard	Paint Shop	7
226	J42	Naval Shipyard	Plating Plant; Pump, Valve & Hydraulics	7
227	E42	Naval Shipyard	Employee Services Association	7
228	L42	Naval Shipyard	Pipe Insulation Facility	7
230	H39	Naval Shipyard	Canteen #2	7
231	J36	Naval Shipyard	Canteen #3	7
235	G35	Naval Shipyard	MAPP Gas (CO ₂ Facility)	7
236	H37	Naval Shipyard	Operations Center & Pipefitting Shop (Shop 56)	7
237	G37	Naval Shipyard	Ships Storage & Engineering Test Facility	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
238	H36	Naval Shipyard	Repair Equipment Building	7
239	L42	Naval Shipyard	Respirator Care Facility	7
241	G34	Naval Shipyard	Crane Maintenance Building	7
244	D42	Naval Shipyard	Federal Credit Union (Owned By CFCU)	7
247	J38	Naval Shipyard	Waterfront Service Support Building	7
248	G35	Naval Shipyard	Supply Administrative Building	7
249	E33	Naval Shipyard	Public Works Maintenance	7
250	H40	Naval Shipyard	Waterfront Service Support Building	7
252	H34	Naval Shipyard	Training Facility	7
254	H35	Naval Shipyard	Component Inspection Facility	7
255	G32	Naval Shipyard	Industrial Logistics Facility	7
256	H36	Naval Shipyard	Shipwork Staging/Storage Building	7
301	H41	Naval Shipyard	Drydock #1	7
301B	H40	Naval Shipyard	Pumphouse and Pumpwell	7
302	G40	Naval Shipyard	Drydock #2	7
302B	H40	Naval Shipyard	Pumpwell (Underground)	7
303B	H30	Naval Shipyard	Pumpwell	7
314	K40	Naval Shipyard	Industrial Pier (D)	7
317A	K38	Naval Shipyard	Marginal Wharf	7
317D	K36	Naval Shipyard	Industrial Pier (G)	7
317C	L38	Naval Shipyard	Industrial Pier (F)	7
317F	J32	Naval Shipyard	Industrial Pier (J)	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
317E	K34	Naval Shipyard	Industrial Pier (H)	7
317B	J39	Naval Shipyard	Repair Wharf (F)	7
333	L40	Naval Shipyard	Industrial Pier (C)	7
342	L42	Naval Shipyard	Substation	7
343	L43	Naval Shipyard	Concrete Ship Buildingways (Abandoned)	7
351	H40	Naval Shipyard	Quay Wall (E)	7
352	K41	Naval Shipyard	Repair Wharf	7
353	L41	Naval Shipyard	Bulkhead, Buildingways	7
354	J30	Naval Shipyard	Bulkhead, Drydock #4	7
355	J41	Naval Shipyard	Bulkhead, Piers 352 To 314	7
356	J31	Naval Shipyard	Bulkhead, Drydocks 3 To 4	7
374	H29	Naval Shipyard	Dredge Boat House	7
375	J29	Naval Shipyard	Dredge Mooring Pier	7
376	R36	Naval Shipyard	Pier At Clouter Creek Disposal Area	7
377	S36	Naval Shipyard	Booster Pumphouse At Clouter Creek	7
378	J29	Naval Shipyard	Tide Gauge House	7
380	H28	Naval Shipyard	Hose House For Ship To Shore Sewage	7
384	E43	Naval Shipyard	Storm Water Pumping Station	7
391	F42	Naval Shipyard	Storage Building	7
400	G43	Naval Shipyard	Public Works Facility	7
414	J41	Naval Shipyard	Fire Protection Pumping Station	7
417	N15	Naval Shipyard	Salt Water Pumphouse	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
420	F41	Naval Shipyard	Maintenance Shed	7
445D	K42	Naval Shipyard	Gas Bottle Shed	7
445A	H41	Naval Shipyard	Gas Bottle Shed	7
445B	H39	Naval Shipyard	Gas Bottle Shed	7
445C	G35	Naval Shipyard	Gas Bottle Shed	7
451H	J37	Naval Shipyard	Substation	7
451M	G45	Naval Shipyard	Switching Station	7
451L	F36	Naval Shipyard	Switching Station	7
451A	E42	Naval Shipyard	Substation (SCE&G Property)	7
451K	J22	Naval Shipyard	Switching Station	7
451X	H19	Naval Shipyard	Switching Station	7
454	H38	Naval Shipyard	Substation	7
455	H38	Naval Shipyard	Substation	7
456	J38	Naval Shipyard	Substation	7
459	H43	Naval Shipyard	Switching Substation	7
460	K42	Naval Shipyard	Switching Substation	7
482	L50	Naval Shipyard	Railroad Bridge Trestle	7
513	E43	Naval Shipyard	Railroad Track Scales	7
520A	E39	Naval Shipyard	Flag Pole	7
622	L50	Naval Shipyard	Highway Bridge	7
715	F33	Naval Shipyard	Deep Well Pumpouse	7
808	K43	Naval Shipyard	Storage Building	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
809	H31	Naval Shipyard	Shipwork Support Building	7
824	J20	Naval Shipyard	Storage Shed	7
904	E41	Naval Shipyard	Canteen #6 (Trailer)	7
910	B45	Naval Shipyard	Detention Pond	7
1024	H37	Naval Shipyard	Pipe Shop Staging/Storage	7
1035	F39	Naval Shipyard	Paint Shop	7
1141	F42	Naval Shipyard	Naval Shipyard Security Office	7
1171	G35	Naval Shipyard	Material & Equipment Storage	7
1173	G35	Naval Shipyard	Storage and Office	7
1174	H32	Naval Shipyard	Training and Administration Offices	7
1175	F32	Naval Shipyard	Shop Stores & Grounds Maintenance Building	7
1178	F39	Naval Shipyard	Storage	7
1190	H30	Naval Shipyard	Compressor House	7
1193	F32	Naval Shipyard	Office	7
1229C	J36	Naval Shipyard	Lunch Shelter	7
1241	F32	Naval Shipyard	Storage	7
1245	J37	Naval Shipyard	Woodworking Shop (Field)	7
1248	F41	Naval Shipyard	Storage (Shop 07)	7
1267	G31	Naval Shipyard	Receiving and Shipping Transit Shed	7
1269	F41	Naval Shipyard	Storage (Shop 03)	7
1271	H25	Naval Shipyard	Garbage Handling (Container Cleaning)	7
1277	H33	Naval Shipyard	Storehouse	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
1292	J42	Naval Shipyard	Time Clock Station #1	7
1295	G42	Naval Shipyard	Steam Condensate Storage Tank	7
1297	G39	Naval Shipyard	Storage Sand Bins (Shop 81)	7
1298	G40	Naval Shipyard	Brick Storage (Shop 41)	7
1299	G40	Naval Shipyard	Shop Stores (Shop 41)	7
1314	G39	Naval Shipyard	Material Storage (Shop 81)	7
1316	F30-33	Naval Shipyard	Tool Storage (Shop 07)	7
1317	H39	Naval Shipyard	Crane Operations Building	7
1358	F40	Naval Shipyard	Cooling Tower For Building 177	7
1363	F42	Naval Shipyard	Cooling Tower For Building 32	7
1364	G36	Naval Shipyard	Sand Hopper	7
1365	G36	Naval Shipyard	Sand Hopper	7
1374	J41	Naval Shipyard	Cooling Tower For Building 46	7
1378	G42	Naval Shipyard	Pure Water Tank Storage Slab	7
1382	G43	Naval Shipyard	Fresh Water Valve House	7
1393	G36	Naval Shipyard	Sand Hopper	7
1394	F42	Naval Shipyard	Pure Water Facility (2 Tanks)	7
1400	F35	Naval Shipyard	Restroom and Press Box	7
1405	F35	Naval Shipyard	Baseball Field (Fletcher Field)	7
1421	G36	Naval Shipyard	Cooling Tower For Building 97	7
1423	Various	Naval Shipyard	Portable Service Sound Hut	7
1431	H23	Naval Shipyard	Small Equipment Storage Shed	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
1434	Various	Naval Shipyard	Portable Field Office	7
1435	Various	Naval Shipyard	Portable Field Office	7
1436	Various	Naval Shipyard	Portable Field Office	7
1443	E41	Naval Shipyard	Time Clock Station #8	7
1453	J44	Naval Shipyard	Cleaning and Preservative Plant	7
1454	G39	Naval Shipyard	Equipment Storage	7
1700	J43	Naval Shipyard	Sentry House	7
1711	H35	Naval Shipyard	Incinerator	7
1712	H40	Naval Shipyard	Storage	7
1713	Various	Naval Shipyard	Abandoned Portable Field Office (Pier H-North Side, East End)	7
1717	G41	Naval Shipyard	Flushing Equipment Storage	7
1734	?	Naval Shipyard	Vacant (Shop 07 Rigger Storage, New Public Works Corral)	7
1736	H37	Naval Shipyard	Restroom	7
1737	J34	Naval Shipyard	Restroom	7
1745	F41	Naval Shipyard	Time Clock Station #9	7
1746	H38	Naval Shipyard	Storage Shed	7
1747	Various	Naval Shipyard	Portable Service Sound Hut	7
1760	H35	Naval Shipyard	Contaminated Storage	7
1761	J19	Naval Shipyard	Sewer Pumping Station #1	7
1762	M18	Naval Shipyard	Sewer Pumping Station #2	7
1763	H20	Naval Shipyard	Sewer Pumping Station #3	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
1764	F34	Naval Shipyard	Sewer Pumping Station #4	7
1765	E38	Naval Shipyard	Sewer Pumping Station #5	7
1766	F39	Naval Shipyard	Sewer Pumping Station #6	7
1767	F41	Naval Shipyard	Sewer Pumping Station #7	7
1768	N46	Naval Shipyard	Sewer Pumping Station #8	7
1769	R49	Naval Shipyard	Sewer Pumping Station #9	7
1770	D18	Naval Shipyard	Sewer Pumping Station (Building 661)	7
1771	F32	Naval Shipyard	Sentry House	7
1772	H34	Naval Shipyard	Sentry House	7
1773	F39	Naval Shipyard	Sentry House	7
1774	H33	Naval Shipyard	Sentry House	7
1775	G38	Naval Shipyard	Sentry House	7
1782	H39	Naval Shipyard	Lunch Shelter	7
1783	J41	Naval Shipyard	Sewage Pumping Station	7
1787	F17	Naval Shipyard	Sewage Pumping Station	7
1793	J23	Naval Shipyard	Substation Building	7
1797	H29	Naval Shipyard	Acid Waste Treatment Facility	7
1798	H45	Naval Shipyard	Flag Pole At Building #234	7
1801	J42	Naval Shipyard	Piermaster Building	7
1802	J39	Naval Shipyard	Piermaster Building	7
1803	M51	Naval Shipyard	Chlorination Station	7
1804	E29	Naval Shipyard	Chlorination Station	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
1805	R49	Naval Shipyard	Analyzer Station	7
1806	H29	Naval Shipyard	Sewage Pumping Station	7
1807	M17	Naval Shipyard	Sewage Pumping Station	7
1808	J22	Naval Shipyard	Sewage Pumping Station	7
1809	H39	Naval Shipyard	Sewage Pumping Station	7
1811	H29	Naval Shipyard	Sewage Surge Tank	7
1812	F35	Naval Shipyard	Sewage Pumping Station	7
1824	F30	Naval Shipyard	Hazardous/Flammable Storage Facility	7
1826	G42	Naval Shipyard	Time Clock Station	7
1827	G42	Naval Shipyard	Time Clock Station	7
1828	H39	Naval Shipyard	Time Clock Station	7
1829	G31	Naval Shipyard	Storage Shelter	7
1836	F31	Naval Shipyard	Storage (Shop 07)	7
1855	G38	Naval Shipyard	Canteen #4	7
1950	G42	Naval Shipyard	Sentry House	7
3900J	H32	Naval Shipyard	Storage	7
3909	J22	Naval Shipyard	200,000 Gallon Fuel Oil Tank	7
4000	Sullivans Island	Naval Shipyard	Shipboard Electronics Systems Evaluation Facility	7
SWMU 35	H23	Naval Station	Drum Storage Area	7
PAOC 37	Various	Naval Station	Unexploded Ordnance Sites	7
NS1	M15	Naval Station	Administration Building (COMINEWARCOM/COMCRUDESGRU Two)	7
OL-1	E11	Naval Station	Open Land	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
X2N	E38	Naval Station	General Warehouse	7
OL-2	Spoils Island	Naval Station	Open Land	7
OL-3	H2	Naval Station	Open Land	7
OL-4	D15	Naval Station	Open Land	7
OL-5	J21	Naval Station	Parking Area	7
6	Short Stay	Naval Station	Flag Pole	7
NS7	N13	Naval Station	Administrative Building (Mine Division 125)	7
OL-7	D31	Naval Station	Recreation Area	7
X11	H23	Naval Station	Public Works Maintenance Shops	7
X12	H23	Naval Station	Maintenance Shop	7
NS16	L17	Naval Station	Administrative Office (DESRON 4/6)	7
17	N15	Naval Station	Quay Wall	7
NS19	M17	Naval Station	Covered Storage (MOTU 10)	7
20	M17	Naval Station	Administration/Training Building (MOTU 10)	7
NH21	D49	Naval Station	General Purpose Laboratory	7
NS21	M17	Naval Station	Cable Reel Building (SIMA)	7
23	M14	Naval Station	Machine Shop (SIMA)	7
X25	J20	Naval Station	Fleet Laundromat (Temporary)	7
NS26	N14	Naval Station	Administrative Office (SIMA Carpentry Shop)	7
27	N14	Naval Station	Administrative Office (COOP 22)	7
28	N13	Naval Station	Bachelor Officers Quarters	7
NS31	M13	Naval Station	Disciplinary & Transit Personnel Barracks	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
NS32	M14	Naval Station	Transit Personnel Barracks	7
33	M14	Naval Station	Enlisted Mens Barracks	7
34	M14	Naval Station	Enlisted Mens Barracks	7
NS35	M14	Naval Station	Enlisted Mens Barracks	7
36	M14	Naval Station	Enlisted Mens Barracks	7
37	M15	Naval Station	Enlisted Mens Barracks	7
NS38	M15	Naval Station	Enlisted Mens Barracks	7
NS43	L14	Naval Station	Enlisted Dining Hall	7
NS46	L15	Naval Station	NAVSTA HQ, Library, Laundry, and Armory	7
47	Short Stay	Naval Station	Snack Bar	7
NH47	E47	Naval Station	Administrative Office/NSGA Maintenance Shop	7
NS48	K14	Naval Station	Tennis Court	7
49	Short Stay	Naval Station	Fire Fighting Pump Station	7
51	Short Stay	Naval Station	Hose Hydrant House	7
NH51	F47	Naval Station	Administrative Office	7
NS53	L16	Naval Station	Barber Shop/Maintenance Shop	7
X54	J10	Naval Station	Correctional Custody Unit (Indoctrination Division)	7
NS54	K15	Naval Station	Billeting Office	7
NH54	E48	Naval Station	Administration Office (NSGA Operations/Communications)	7
54	Short Stay	Naval Station	Hose Hydrant House	7
X55	G9	Naval Station	Ammunition Storage	7
NS55	M15	Naval Station	Flag Pole	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
X56	F8	Naval Station	Ammunition Storage	7
NS59	L15	Naval Station	Outdoor Swimming Pool	7
NH61	F47	Naval Station	Family Service Center	7
65	H16	Naval Station	EM Barracks (A)	7
NS66	H16	Naval Station	EM Barracks (B)	7
NS67	H15	Naval Station	EM Barracks (C)	7
NS79	H19	Naval Station	Dispensary	7
NS80	H20	Naval Station	Dispensary Supply Storage	7
81	H46	Naval Station	Fire Station #2	7
M82	E46	Naval Station	NAVSTA Security	7
NS84	J19	Naval Station	Naval Security Group Activity	7
86	N45	Naval Station	Cooper River Center	7
86	Short Stay	Naval Station	Drain Field	7
89	E37	Naval Station	Exchange Maintenance Shop	7
90	Short Stay	Naval Station	Recreation Pavilion #1	7
NS91	F9	Naval Station	Antenna System (Abandoned)	7
92	F38	Naval Station	Indoor Swimming Pool	7
132	G26	Naval Station	Storage	7
135	Short Stay	Naval Station	Maintenance Building	7
136	Short Stay	Naval Station	Service Station (Gas Pump)	7
141	E39	Naval Station	Union Office and Police Department Storage	7
PAOC 120	Various	Naval Station	Oil in Soil at Waterfront	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
161	Short Stay	Naval Station	Seawall	7
161	F25	Naval Station	Inert Storage, SUPSHIPS	7
169	K20	Naval Station	Flammable Storehouse	7
180	E38	Naval Station	Recreation Building	7
183	K15	Naval Station	Flag Pole	7
184	N45	Naval Station	Outdoor Swimming Pool	7
186	E39	Naval Station	Fire Station #1	7
192	Short Stay	Naval Station	Dock/Gas Pump	7
M192	E46	Naval Station	Security Training Building	7
194	Short Stay	Naval Station	Sewage Lift Station	7
195	Short Stay	Naval Station	Store/Rental Office	7
196	Short Stay	Naval Station	Boat Repair Sop	7
197	Short Stay	Naval Station	Paint Stowage	7
200	L18	Naval Station	Port Services With Tower	7
202	Short Stay	Naval Station	Well, South	7
214	Short Stay	Naval Station	Pavilion	7
214	N45	Naval Station	Filter House For Structure #184	7
220	M46	Naval Station	Golf Pro Shop/Snack Bar	7
225	D36	Naval Station	Navy Lodge	7
229	N45	Naval Station	Bathhouse CRC Pool	7
237	Short Stay	Naval Station	Diesel Storage	7
243	D40	Naval Station	Pass Office	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
245	E39	Naval Station	Fire Station Support Building	7
326	K27	Naval Station	Berthing Pier (L)	7
327	L23	Naval Station	Berthing Pier (N)	7
328	L21	Naval Station	Berthing Pier (P)	7
329	M20	Naval Station	Berthing Pier (Q)	7
330	L19	Naval Station	Berthing Pier (R)	7
331	E2	Naval Station	Bulkhead	7
334	G9	Naval Station	Concrete Ramp	7
336	K24	Naval Station	Berthing Pier (M)	7
337	K26	Naval Station	Berthing Pier (Z)	7
338	M43	Naval Station	Pier (B)	7
373	E39	Naval Station	Radio Tower	7
382	F29	Naval Station	Weapons Display	7
401	H15	Naval Station	Cooling Tower	7
419	E33	Naval Station	Recreational Storage	7
425	C29	Naval Station	Vehicular Bridge - Viaduct Road	7
520B	E47	Naval Station	Flag Pole	7
601	H15	Naval Station	12,000 Gallon Fuel Oil Tank	7
602	F16	Naval Station	8,000 Gallon Fuel Oil Tank	7
604	J17	Naval Station	Flag Pole	7
623	G17	Naval Station	Garden Shop (Visual Merchandise Department)	7
635	D3	Naval Station	Degaussing Generator Building	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
636	H21	Naval Station	Auto Hobby Shop	7
637	J23	Naval Station	Storage Building	7
638	J20	Naval Station	Bath House	7
639	J20	Naval Station	Swimming Pool	7
640	J20	Naval Station	Steamers	7
642	G19	Naval Station	McDonalds (Owned By McDonalds)	7
644	J18	Naval Station	Bowling Center	7
646	J17	Naval Station	Administrative and Training Building (COMSUBGRU 6)	7
648	G20	Naval Station	Vacant	7
650	G21	Naval Station	Post Office	7
653	G15	Naval Station	Enlisted Mens Barracks	7
654	K15	Naval Station	Personnel Support Detachment	7
655	E17	Naval Station	Commissary	7
656	G17	Naval Station	Navy Exchange, Retail and Warehouse and Service Outlets	7
657	F16	Naval Station	Americas Original Sports Bar/James E. Williams Complex	7
658	E36	Naval Station	EM Barracks, Marine Security Detachment	7
659	D3	Naval Station	Boat House	7
660	D3	Naval Station	Instrument Building (Degaussing)	7
661	C18	Naval Station	Communications Center	7
662	C19	Naval Station	Antenna Field (Abandoned)	7
663	C17	Naval Station	Antenna Field (Abandoned)	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
664	G14	Naval Station	SUBGRU 6 Storage	7
665	E16	Naval Station	Consolidated Package Store	7
666	G17	Naval Station	Federal Credit Union (Owned By Charleston Federal Credit Union)	7
668	F15	Naval Station	BEQ (CPO)	7
669	F15	Naval Station	BEQ (CPO)	7
670	J14	Naval Station	Racquet & Fitness Center	7
671	D17	Naval Station	Dog Kennel	7
672	F21	Naval Station	Fleet Training Facility	7
673	F21	Naval Station	NCTSI Facility	7
674	F26	Naval Station	Performance Monitoring Facility	7
675	H14	Naval Station	Dental Clinic	7
676	G13	Naval Station	Enlisted Mens Barracks	7
677	G13	Naval Station	Enlisted Mens Barracks	7
678	N13	Naval Station	Administrative Building (MINERON 2)	7
680	M14	Naval Station	Fleet Maintenance Building (SIMA)	7
681	M14	Naval Station	Shop and Administration Building (SIMA)	7
682	M12	Naval Station	Sailing Center (Office)	7
683	N12	Naval Station	Floating Pier For NS Marina	7
684	N14	Naval Station	Shop Building (SIMA)	7
685	L18	Naval Station	Ship Radar Calibration Facility with Tower	7
687	N14	Naval Station	Antenna Repair Shop (SIMA)	7
688	H3	Naval Station	Floating Pier For NS Marina	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
807	F48	Naval Station	Child Development Center	7
810	C21	Naval Station	MWR Recycle Center	7
823	F47	Naval Station	Radio Repeater Shelter	7
850	E46	Naval Station	Volleyball/Basketball Court	7
M1067	E45	Naval Station	Storehouse	7
M1116	E45	Naval Station	General Warehouse	7
M1123	E46	Naval Station	Storehouse and Boiler Room	7
M1150	E46	Naval Station	Counseling and Assistance Center	7
1167	E35	Naval Station	Exchange Warehouse	7
1177	E29	Naval Station	Fire Station #3	7
1179	F37	Naval Station	Chapel	7
1189	E36	Naval Station	Fire Prevention & Inspection Division and MWR Laundry	7
1197	E29	Naval Station	NAVSTA Quarterdeck	7
1221	N46	Naval Station	Recreational Building	7
1254	K21	Naval Station	Bus Shelter	7
M1262	E45	Naval Station	Tennis Court	7
1263	E35	Naval Station	NEX Storage	7
M1264	E45	Naval Station	Racquet Ball Court	7
1265	E35	Naval Station	Security Detective Office	7
1268	E2	Naval Station	Associated with Stray Magnetic Field Garden	7
1296	H24	Naval Station	Open Storage (Motorcycle Shed)	7
1345	F36	Naval Station	Restrooms (Cochran Field)	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
1347	H21	Naval Station	Auto Hobby Shop	7
1401	E34	Naval Station	Three Football Fields	7
1403	F33	Naval Station	Softball Field (Winkel Field)	7
1410	L48	Naval Station	Golf Course	7
1412	F36	Naval Station	Softball Field (Cochran Field)	7
1447	L16	Naval Station	Bath House For Structure NS59	7
1448	L15	Naval Station	Filter House For Structure #NS59	7
1455	M47	Naval Station	Foot Bridge	7
1489	D33	Naval Station	Picnic Shelter	7
1490	D32	Naval Station	Restroom	7
1493	H21	Naval Station	Automotive Hobby Shop (Garage)	7
1494A	G20	Naval Station	Tool Storage (Brig)	7
1494	G20	Naval Station	Tool Storage (Brig)	7
1509	C42	Naval Station	Storage	7
1512	H19	Naval Station	Flag Pole	7
1630	R53	Naval Station	Bus Shelter	7
1642	H47	Naval Station	Automobile Storage	7
1643	H47	Naval Station	Automobile Storage	7
1646	K49	Naval Station	Golf Course Warehouse	7
1706	N12	Naval Station	Small Boat Ramp	7
1708	H10	Naval Station	Generator Building	7
1718	C18	Naval Station	Septic Tank and Drain Field (Abandoned)	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
1719	D38	Naval Station	Special Service Equipment Storage Building	7
1720	E39	Naval Station	Police Locker Room (Fire Department Gym)	7
1721	L14	Naval Station	Refrigeration Equipment Building	7
1724	D32	Naval Station	Picnic Shelter	7
1725	D32	Naval Station	Picnic Shelter	7
1738	E40	Naval Station	Bus Shelter	7
1740	H24	Naval Station	Bus Shelter	7
1741	H23	Naval Station	Bus Shelter	7
1743	M17	Naval Station	Bus Shelter	7
1749	H22	Naval Station	Maintenance Equipment Storage Shed	7
1756	E1	Naval Station	SSBN Deep Range	7
1757	E1	Naval Station	SSBN Medium Range	7
1758	D2	Naval Station	Stray Magnetic Field Garden	7
1776	J13	Naval Station	Shop (CBU 412)	7
1777	K13	Naval Station	Administration (CBU 412)	7
1778	K13	Naval Station	Tool and Shop Storage (CBU 412)	7
1779	D36	Naval Station	Playground	7
1785	G20	Naval Station	Basketball Court	7
1786	L14	Naval Station	Air Conditioner Equipment Building	7
1790	K13	Naval Station	Tennis Courts	7
1791	M17	Naval Station	Storage Shed (MOTU 10)	7
1792	M17	Naval Station	Collimation Equipment Building	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
1794	D33	Naval Station	Picnic Shelter	7
1795	L12	Naval Station	General Storage	7
1799	M13	Naval Station	Playing Court	7
1813	E47	Naval Station	Flammable Storage For NLSO	7
1816	L16	Naval Station	Storage	7
1817	L16	Naval Station	Storage	7
1820	J22	Naval Station	Bus Shelter	7
1823	G16	Naval Station	Bus Shelter	7
1830	K15	Naval Station	Picnic Shelter	7
1837	F26	Naval Station	Ball Field	7
1839	H20	Naval Station	Sentry House (Brig)	7
1840	G20	Naval Station	Butler Building (Naval Dental Clinic Storage)	7
1841	G20	Naval Station	Butler Building (Naval Dental Clinic Storage)	7
1843	H13	Naval Station	Incinerator	7
1845	D19	Naval Station	Ball Field	7
1846	D20	Naval Station	Ball Field	7
1847	E19/20	Naval Station	Running Track	7
1848	F26	Naval Station	Public Toilet and Pressbox	7
1869	H10	Naval Station	Obstacle Course	7
1873	?	Naval Station	Flag Pole	7
1874	L18	Naval Station	Port Services Storage	7
1875	L12	Naval Station	BEQ Storage	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
1876	G14	Naval Station	Flag Pole	7
1877	K14	Naval Station	Wash Rack (CBU 412)	7
1878	K13	Naval Station	Flag Pole (CBU 412)	7
1879	J13	Naval Station	Equipment Building (CBU 412)	7
1880	J13	Naval Station	Paint Locker (CBU 412)	7
1881	J13	Naval Station	Storage (CBU 412)	7
1882	J13	Naval Station	Storage (CBU 412)	7
1883	J13	Naval Station	Storage (CBU 412)	7
1885	K13	Naval Station	Administration Office (CBU 412)	7
1886	K14	Naval Station	General Storage (CBU 412)	7
1887	H13	Naval Station	General Storage (BEQ)	7
1888	J12	Naval Station	Indoor Pistol Range	7
1889	M16	Naval Station	Supply Storage (NAVSTA)	7
1891	L16	Naval Station	BEQ Maintenance	7
1892	J13	Naval Station	Supply Storage (CBU 412)	7
1893	J13	Naval Station	BEQ Warehouse	7
1894	K13	Naval Station	Collateral Storage (CBU 412)	7
1895	B6	Naval Station	Cable Reel Storage	7
1896	H13	Naval Station	BEQ Storage	7
1897	H13	Naval Station	BEQ Storage	7
1898	J13	Naval Station	BEQ Storage	7
1899	J13	Naval Station	Hazardous Material Storage (CBR 412)	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
1901	D29	Naval Station	Sentry House (Gate 1)	7
1902	E39	Naval Station	Sentry House (Gate 2)	7
1903	F43	Naval Station	Sentry House (Gate 3)	7
1904	C48	Naval Station	Sentry House (Gate 4)	7
1905	P53	Naval Station	Sentry House (Gate 5)	7
1906	C28	Naval Station	Sentry House - Truck Inspection	7
1980	D39	Naval Station	Former Visitor Information Sign (Reynolds Gate)	7
1981	F34	Naval Station	Service Station Sign	7
1982	F38	Naval Station	Information Sign (Sterett Hall)	7
1983	E29	Naval Station	Entrance Sign Viaduct Gate	7
1984	H13	Naval Station	Pistol Range Classroom	7
2506	Naval Annex	Naval Station	Vacant	7
2507	Naval Annex	Naval Station	Vacant	7
2508	Naval Annex	Naval Station	CNSY Property (Maintenance Shop)	7
2509	Naval Annex	Naval Station	Storage For MU11	7
2511	Naval Annex	Naval Station	Administration For MU11	7
2513	Naval Annex	Naval Station	Storage For MU11	7
2517	Naval Annex	Naval Station	Administration For NMCR	7
2520	Naval Annex	Naval Station	Classrooms For NMCR	7
2521	Naval Annex	Naval Station	Armory/Supply (NMCR)	7
2522	Naval Annex	Naval Station	Storage For MU11	7
2523	Naval Annex	Naval Station	Administration, NMCR	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
2525	Naval Annex	Naval Station	Supply Office, MU11	7
2530	Naval Annex	Naval Station	Storage, MU11	7
2532	Naval Annex	Naval Station	Storage, MU11	7
2533	Naval Annex	Naval Station	Storage, MCRC	7
2535	Naval Annex	Naval Station	Water Treatment	7
2550	Naval Annex	Naval Station	Tennis Courts, Air Force	7
2552	Naval Annex	Naval Station	Swimming Pool (Unused)	7
2554	Naval Annex	Naval Station	CNSY Property (TV)	7
2556	Naval Annex	Naval Station	Mine Training Center MU11	7
2557	Naval Annex	Naval Station	Sewage Pumping Station	7
F	K45	Naval Weapons Station Housing	Quarters, CO, NSC	7
T	K47	Naval Weapons Station Housing	Officers Quarters	7
I	L44	Naval Weapons Station Housing	Officers Quarters	7
G	K47	Naval Weapons Station Housing	Quarters, COMDESGRU 2 (Flag)	7
R	J46	Naval Weapons Station Housing	Officers Quarters	7
A	L45	Naval Weapons Station Housing	Quarters, CONSIX/COMNAVBASE (Flag)	7
M8	C45	Naval Weapons Station Housing	Officers Quarters	7
701	J45	Naval Weapons Station Housing	Officers Quarters	7
745	J46	Naval Weapons Station Housing	Officers Quarters	7
758 (NHA)	F49	Naval Weapons Station Housing	Officers Quarters	7
RTC1	L18	Reserve Readiness Center	Academic General Instruction Building (HX-30)	7
RTC4	L19	Reserve Readiness Center	Paint Storage	7

TABLE 3-16. ENVIRONMENTAL CONDITION OF PROPERTY

Facility Number	Location/ Coordinates	Activity	Facility Use	Classification
1656	P48	Reserve Readiness Center	Transit Cargo Handling Warehouse	7
686	J15	Submarine Training Facility	Operational Trainer Facility	7
1815	J16	Submarine Training Facility	Storage Building	7

accompanying this plan (Figure 3-1(a), also located in the map pocket, provides a legend to the various classification colors); Figures 3-2(a) through (f) are located on the following pages. The condition of property was determined during the Environmental Baseline Survey (EBS) process, in which facility walkthroughs, interviews, and document reviews were conducted to determine historical usage of each onbase facility. This usage includes items such as hazardous material, chemical, and petroleum storage or usage, onsite disposal, or other such potential items of environmental concern.

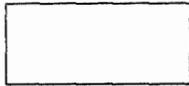
3.4.1 Areas Where No Storage, Release, or Disposal Has Occurred

This area type is defined as a geographically contiguous and mappable area where the results of investigations show that no hazardous substances or petroleum products were stored, released into the environment or site structures, or disposed of on site property. A determination of this area type can only be made after a minimum level of information gathering and assessment has been completed. In accordance with Section 120(h)(4) of CERCLA as amended by CERFA, all such determinations (i.e., uncontaminated) of this area type are made on the basis of a records search of the area in question and adjacent property; a review of the chain of title documents for the area, a review of aerial photographs of the area, a visual inspection of the area and all adjacent property, and interviews with current and former employees regarding their knowledge of past and current activities on the property. These efforts were accomplished via an EBS of each property or facility in question. When the information gathered from these efforts indicates that hazardous substances or petroleum products have been released, disposed of, or stored in the area, the geographic location becomes one of the other area types.

The areas designated on Figure 3-2 and in Table 3-16 as *White* (Areas of Suspected No Contamination) were determined by default using the above criteria and the following assumptions:

- Review of past and current activities; this includes review of historical records and review of historical aerial photographs.
- Interviews with current and past base employees.
- Visual site inspection conducted as part of the Environmental Baseline Survey process.
- Sampling data associated with relevant NACIP, RFA/RFI, UST, and related studies.

Due to the possibility of migration of contaminants across the facility as well as proximity to SWMUs and PAOCs, the only facilities at Naval Base Charleston to be classified as *White* are located on offbase noncontiguous parcels.



1) Areas where no storage, release, or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas) [white]



150

2) Areas where only storage of hazardous substances or petroleum products has occurred (but no release, disposal, or migration from adjacent areas has occurred) [blue]



70

3) Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require a removal or remedial action [light green]



106

4) Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken [dark green]

50

5) Areas where storage, release, disposal and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are under way, but all required remedial actions have not yet been taken [yellow]



231

6) Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented [red]



253

7) Areas that are unevaluated or require additional evaluation [gray]

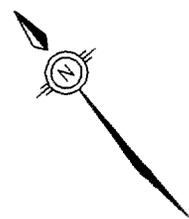
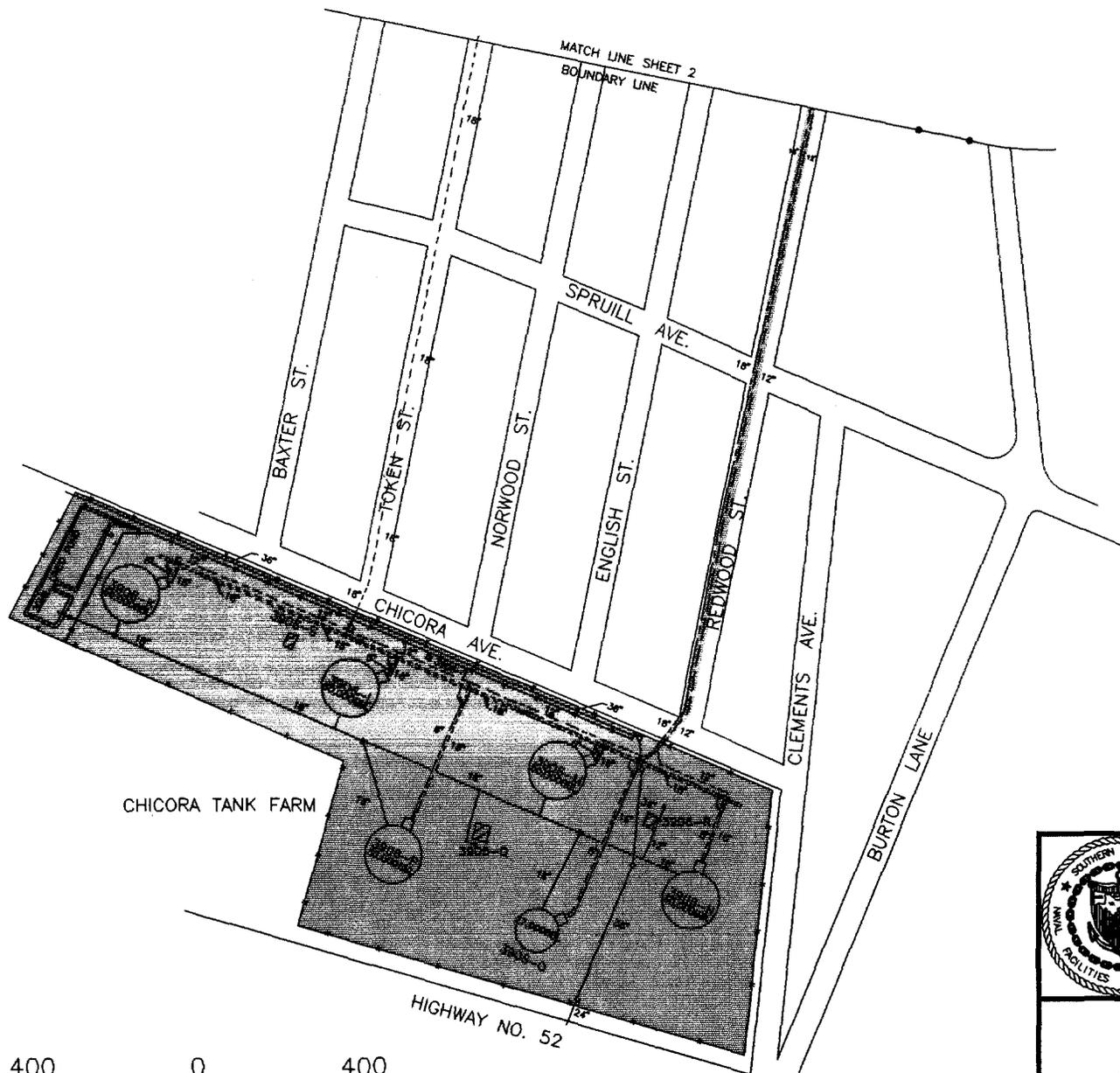
NOTE: THESE ARE COLORS/COLOR NUMBERS
IN USE FOR BRAC ENVIRONMENTAL
CONDITION OF PROPERTY MAPS



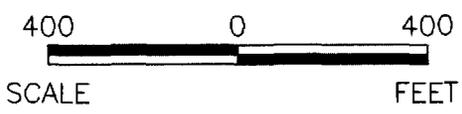
BRAC CLEAN UP PLAN
NAVAL BASE
CHARLESTON

FIGURE 3-1A
LEGEND FOR
ENVIRONMENTAL CONDITION
OF PROPERTY MAPS

DWG DATE: 02/20/94 | DWG NAME: 76HATCH4



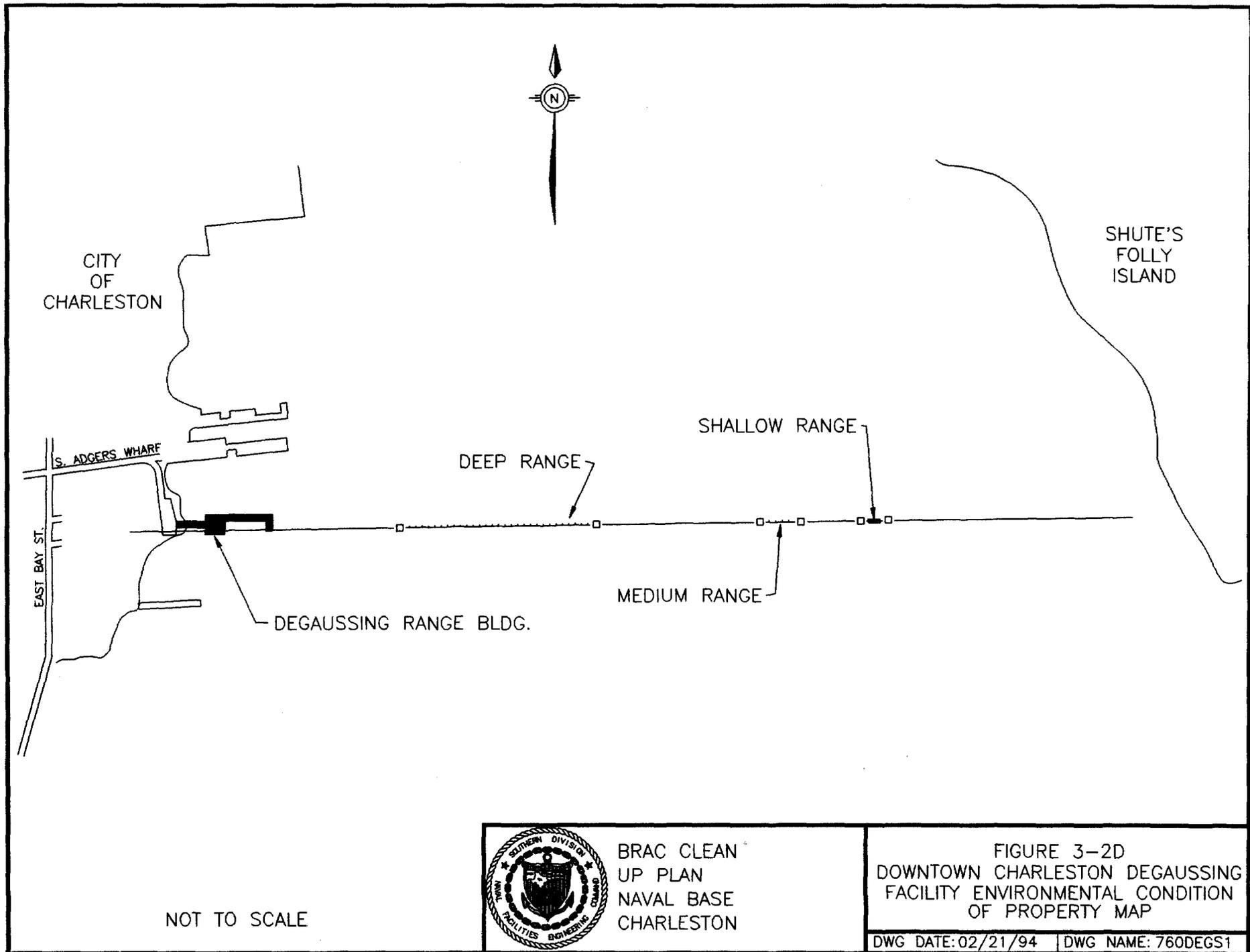
- LEGEND
- FUEL OIL
 - SLUDGE LINES
 - DRAIN LINES
 - DIESEL LINES
 - CATCH BASIN
 - VALVE
 - MANHOLE



BRAC CLEAN UP PLAN
NAVAL BASE
CHARLESTON

FIGURE 3-2C
CHICORA TANK FARM
ENVIRONMENTAL CONDITION
OF PROPERTY MAP

DWG DATE: 02/18/94 | DWG NAME: 760CHIC1



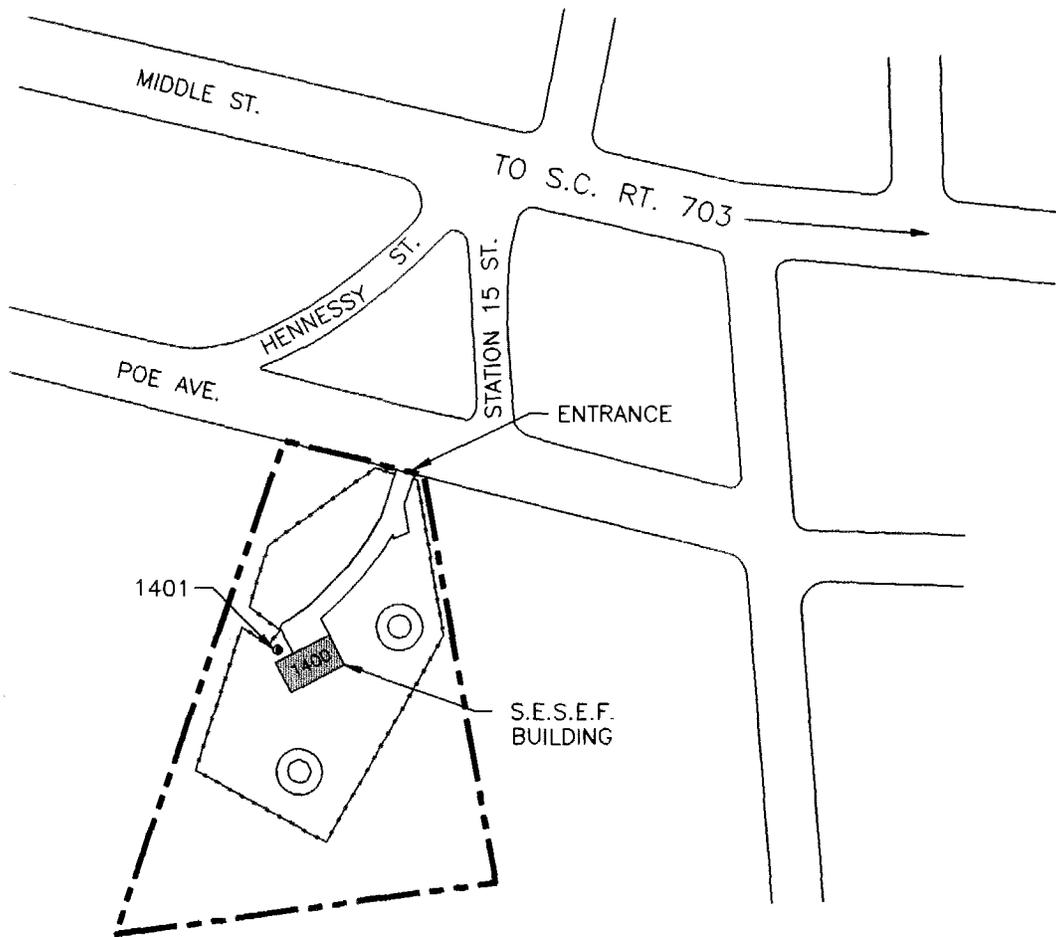
NOT TO SCALE



BRAC CLEAN
UP PLAN
NAVAL BASE
CHARLESTON

FIGURE 3-2D
DOWNTOWN CHARLESTON DEGAUSSING
FACILITY ENVIRONMENTAL CONDITION
OF PROPERTY MAP

DWG DATE: 02/21/94 | DWG NAME: 760DEGS1



1401

S.E.S.E.F.
BUILDING

SEAWARD

50 0 50
SCALE FEET

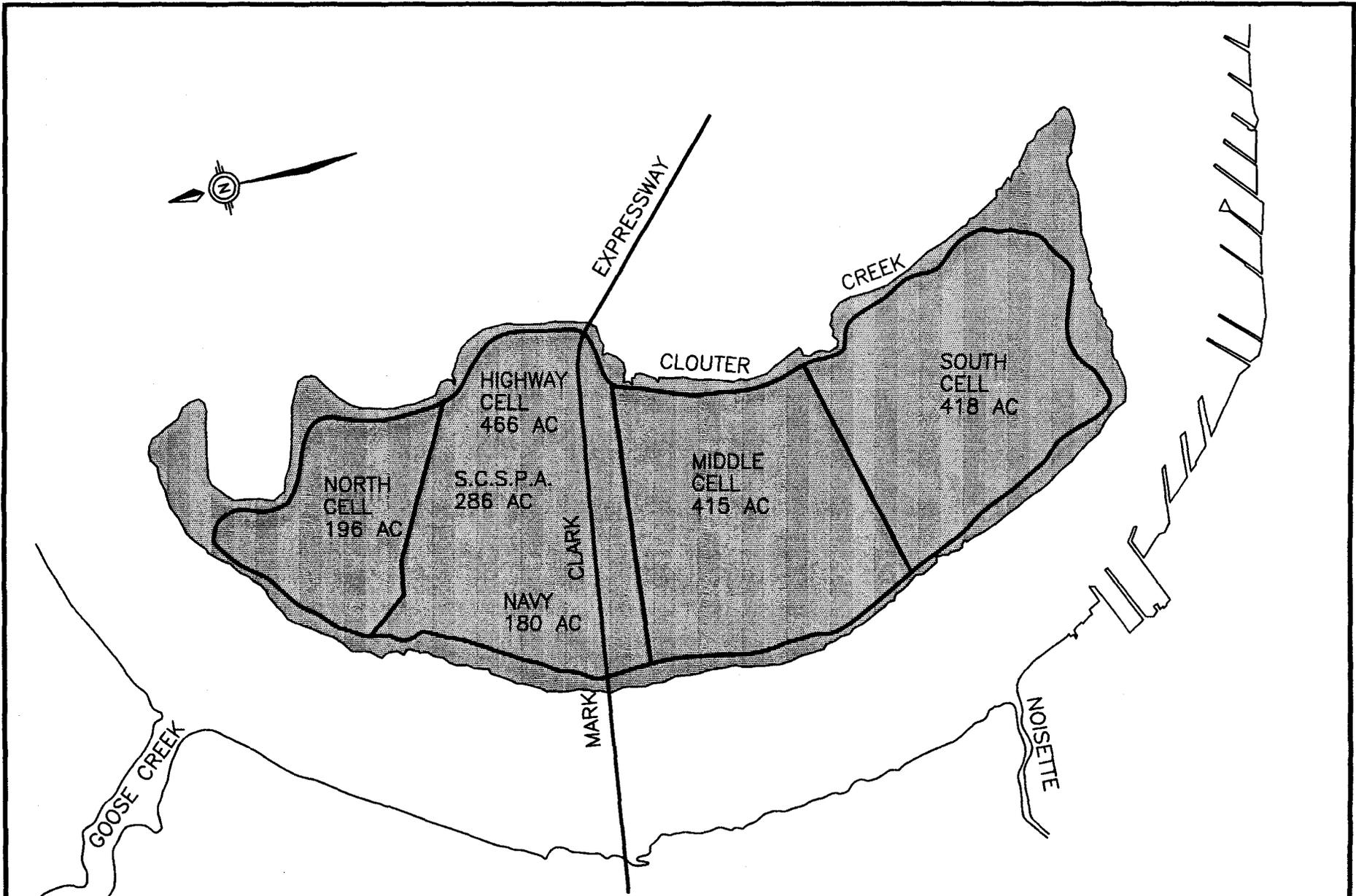


BRAC
CLEAN-UP PLAN
NAVAL BASE
CHARLESTON

FIGURE 3-2E
SULLIVAN'S ISLAND FACILITY ENVIRONMENTAL
CONDITION OF PROPERTY MAP

DWG DATE: 02/19/94

DWG NAME: 760SULS2



NOT TO SCALE



BRAC CLEAN
UP PLAN
NAVAL BASE
CHARLESTON

FIGURE 3-2F
SPOILS ISLAND ENVIRONMENTAL
CONDITION OF PROPERTY MAP

DWG DATE: 02/21/94 | DWG NAME: 760CELL1

3.4.2 - 3.4.7

3.4.2 Areas Where Only Storage Has Occurred

This area is defined as a geographically contiguous and mappable area where the results of investigations show only that storage of hazardous substances or petroleum products has occurred. A determination of this area type is made in accordance with the same requirements in Section 120(h)(4) of CERCLA, as listed in Section 3.4.1.

Areas noted as *Blue* as delineated in Table 3-16 and Figure 3-2 are based upon the findings of the EBS as well as NACIP, RFA/RFI, UST, and related studies. Due to the possibility of migration of contaminants across the facility, the only facilities at Naval Base Charleston to be classified as Blue are located on offbase noncontiguous parcels.

3.4.3 Areas Where Storage, Release, Disposal, and/or Migration Has Occurred, but Require No Remedial Action

This area type is defined as a geographically contiguous and mappable area where environmental evidence demonstrates that hazardous substances or petroleum products have been stored, released, or disposed of, but are present in quantities that require no response action to protect human health and the environment. Such quantities of hazardous substances or petroleum products can be below defensible detection limits, or can be above detection limits but below action levels. *Below action levels* means, in the absence of installation-specific risk-based or standards-based criteria, that the concentration of any hazardous substance or petroleum constituent in any medium *does not exceed* chemical-specific ARARs. Designation of this area type also means that risk estimates completed for contamination do not meet any of the following criteria:

- Exceed 10^{-6} for any carcinogenic hazardous substance or petroleum constituent detected in any medium.
- Result in a hazard quotient above 1 for any non-carcinogenic hazardous substance or petroleum constituent detected in any medium.
- Exceed 10^{-6} for all carcinogenic hazardous substances and petroleum constituents, taken together, in any exposure pathway.
- Result in a hazard index above 1 for all non-carcinogenic hazardous substances and petroleum constituents, taken together, in any exposure pathway.
- Exceed 10^{-4} for all carcinogenic hazardous substances and petroleum constituents accumulated across all pathways.
- Result in a hazard index above 1 for all non-carcinogenic hazardous substances and petroleum constituents across all pathways.

A designation of a Type 3 area cannot be made with confidence unless a minimum level of information gathering and assessment has been completed. As such, all such determinations are made on the basis of an SI/RFI or equivalent level of effort, which includes biased field sampling and laboratory analysis to support a conceptual understanding of the area.

Areas noted as *Light Green* as delineated in Table 3-16 and Figure 3-2 are based upon the findings of the EBS, the RFA/RFI, and UST findings to date.

3.4.4 Areas Where Storage, Release, Disposal, and/or Migration Has Occurred, and All Remedial Actions Have Been Taken

This area type is defined as a geographically contiguous and mappable area where all remedial actions necessary to protect human health and the environment have been taken. Type 4 areas include those areas in which an EBS documents evidence that hazardous substances are known to have been released or disposed of on the property, but all remedial actions necessary to protect human health and the environment with respect to any hazardous substances remaining on the property have already been taken to meet the provisions of CERCLA § 120 (h)(3). *All remedial action has been taken* means that the construction and installation of an approved remedial design has been completed, and the remedy has been demonstrated to EPA to be operating properly and successfully (in practice, usually a year).

Areas noted as *Dark Green* as delineated in Table 3-16 and Figure 3-2 are based upon the findings of the EBS, the RFA/RFI, UST findings, and related studies to date.

3.4.5 Areas Where Storage, Release, Disposal, and/or Migration Has Occurred and Action is Underway, but Not Final

This area type is defined as a geographically contiguous and mappable area where the presence of sources or releases of hazardous substances or petroleum products (including derivatives) is confirmed based on the results of sampling and analysis in electronic databases and/or environmental restoration and compliance reports. By definition, this area type contains contaminant concentrations *above action levels*. Such concentration do not meet the criteria that would allow a determination of a Type 3 area. Remedial systems for Type 5 areas are partially or entirely in place, but have not been fully demonstrated.

Areas noted as *Yellow* as delineated in Table 3-16 and Figure 3-2 are based upon the findings of the EBS, the RFA/RFI, UST studies, and related inquiries to date.

3.4.6 Areas Where Storage, Release, Disposal and/or Migration Has Occurred, but Required Response Actions Have Not Been Taken

The area type is defined as a geographically contiguous and mappable area where the presence of sources or releases of hazardous substances or petroleum products (including derivatives) is confirmed based on the results of sampling and analysis as contained in electronic databases and/or environmental restoration and compliance reports. This area type contains concentrations of contaminants *above action levels*. Such concentrations do not meet the criteria that would allow a determination of a Type 3 area. Additionally, required remedial systems have not been selected or implemented.

Areas noted as *Red* as delineated in Table 3-16 and Figure 3-2 are based upon the findings of the EBS, the RFA/RFI, UST studies, and related inquiries to date.

3.4.7 Unevaluated Areas or Areas Requiring Additional Evaluation

This area type is defined as a geographically contiguous and mappable area where the presence of sources or releases of hazardous substances or petroleum products (including derivatives) is suspected, but not well characterized, based on the results of a properly scoped records search, chain of title review, aerial photography review, visual inspection, set of employee interviews, and possibly sampling and analysis. They do not, with certainty, fit any of the previous area types because evaluation efforts have not occurred, are ongoing, or are inconclusive.

The areas noted as *Gray* as designated on Figure 3-2 and in Table 3-16 were determined based upon results of the EBS.

3.5 Status of Community Involvement

Community relations activities that have taken place at Naval Base Charleston to date include the following:

- **Information repositories.** A public repository for information has been established in Building 76 onbase and in the Charleston County Dorchester Road Regional Branch Library, 6325 Dorchester Road, North Charleston, South Carolina. It contains information relative to environmental activities at Naval Base Charleston.
- **Community Relations Plan.** The contractor prepared a Community Relations Plan (CRP), which was approved in winter 1993. The CRP is currently being revised.
- **Technical Review Committee (TRC).** The TRC has been reformed and has met regularly since March 1992. In addition to the Component, EPA, SCDHEC, and DOI,

the TRC includes representatives from the City of North Charleston, Charleston and Berkeley county representatives, and a USFWS representative.

- **Restoration Advisory Board.** The RAB is in the process of being finalized with the first scheduled meeting targeted for March 1994. The RAB includes the TRC members with additional diverse community representatives.
- **Mailing list.** A mailing list of all interested parties in the community is maintained by the base and updated regularly.
- **Fact sheet.** The following fact sheets describing status of the IRP and UST activities at the base have been distributed to the mailing list:
 - February 1993 — Community Relations Plan.
 - January 1994 — Information Update, BRAC Property Transfer.
- **Open House.** An informational meetings on the status of IRP efforts at the base was held on September 1993 for the media.

4.0 INSTALLATION-WIDE STRATEGY FOR ENVIRONMENTAL RESTORATION

This chapter describes and summarizes the installation-wide environmental restoration and compliance strategy for Naval Base Charleston. Prior to the announcement of the Base Realignment and Closure Commission, Installation Restoration effort was in the early stages of investigation (RFI) to identify and characterize environmental contamination. With the closure announcement the strategy shifted to expediting the investigation and moving more to remediation to facilitate property disposal. Figure 4-1 provides a flowchart illustrating the steps necessary to accomplish the Naval Base Charleston environmental restoration and transfer of property to the community.

The strategy for determining the most effective response mechanism for contaminant sources and contaminated areas is being performed on a case-by-case basis by the BRAC Cleanup Team. The BCT has developed a comprehensive strategy to identify the appropriate regulatory programs applicable to the areas of contamination discovered during the closure process.

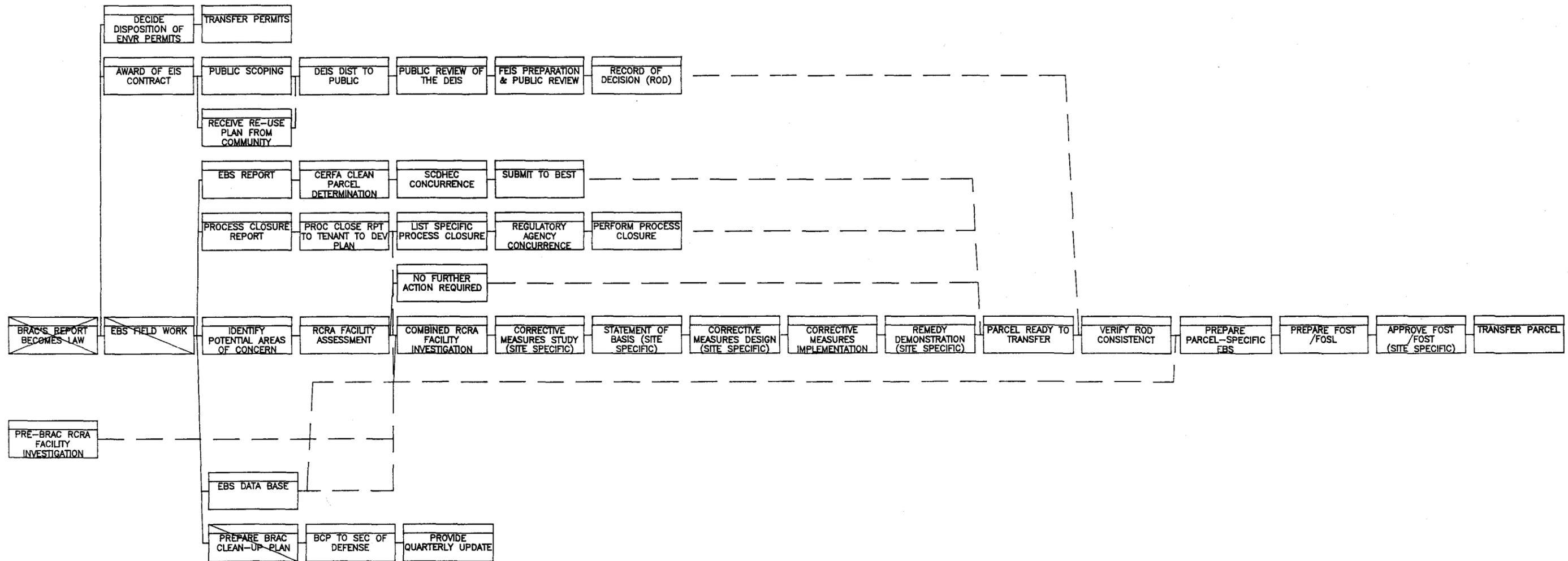
4.1 Zone Designation and Strategy

4.1.1 Zone Designations

In response to base closure environmental restoration goals, the BCT Project Team has divided the base into eleven investigative zones. These zones encompass the entire area of the base, as well as the non-contiguous properties. The zones were established based on the following criteria:

- Areas which pose the greatest environmental concern.
- Areas for which similar contaminants are expected or similar types of activity have occurred.
- Areas small enough to be manageable.
- Areas based upon existing geographical features.
- Areas that can be investigated quickly.
- Areas of significant community interest.

Zones A through K contain all of the original SWMU sites on the base as well as additional areas of concern that are in the RFA process at this time. Three additional SWMUs have been identified since the original 36. SWMU 37 (Dredge Material onbase) will have some affect on

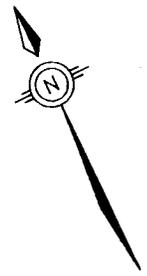
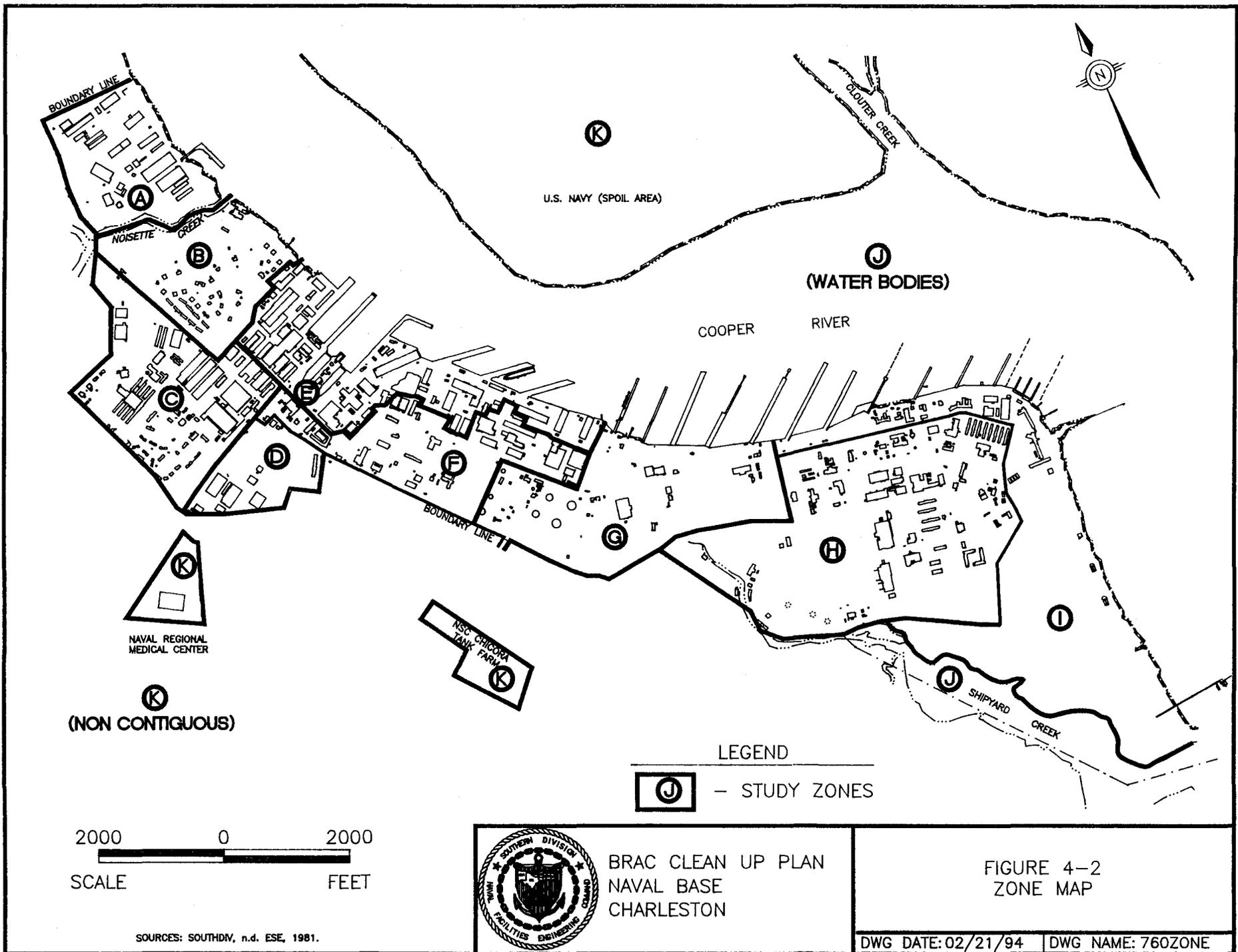


BRAC CLEAN
UP PLAN
NAVAL BASE
CHARLESTON

FIGURE 4-1
RESTORATION PROCESS
FLOW CHART

all zones. The zone boundaries, which are described below, are shown in Figure 4-2. Tables 3-1 and 3-2 in Chapter 3.0 of this plan list all SWMUs and PAOCs in each zone.

- Zone A This zone is located at the extreme northern portion of the main base, and includes all base areas north of Noisette Creek. SWMUs 1 and 2 are the only SWMUs currently identified in this zone.
- Zone B This zone comprises the base golf course and senior officers housing areas.
- Zone C This zone is comprised of administrative areas, additional housing areas, warehouses, and the base coal pile. This zone contains SWMU 39.
- Zone D This zone consists of property and facilities between Reynolds Avenue and McMillan Avenue. It contains primarily parking areas and warehouses.
- Zone E This zone is located on the waterfront and includes the shipyard industrial areas and dry docks. This zone contains SWMUs 5, 18, 21, 22, 23, 25, 26, 27, 28, 30, 32, 33, and 38.
- Zone F This zone is located in the central portion of the base, and includes the area between Hobson Street, Carolina Street, the eastern base boundary, Wood Street and 11th Street. Facilities within this zone include both the existing and former public works areas. This zone contains SWMUs 4 and 36.
- Zone G This zone, also located in the central portion of the base, includes the FISC petroleum facilities as well as the Chicora Tank Farm. The Chicora Tank Farm is not located on the base itself, but is located approximately 0.5 miles east of the base. However, since Chicora is connected to the base via pipeline easements, it is included in Zone G. This zone contains SWMUs 3, 6, 7, 8, 10, 11, 24, 29, 34, and 35.
- Zone H This zone is located at the southern end of the base. It contains properties identified for the State Department transfer as well as Naval support activities, training areas, and administrative areas. This zone contains SWMUs 9, 13, 14, 15, 17, 19, and 20.
- Zone I This zone comprises the remainder of the southern end of the base. It includes the waterfront property from Halsey Street to the southern tip of the base. This zone contains SWMUs 12 and 16.
- Zone J This zone includes the water bodies such as the creeks, wetlands, and the Cooper River.



(K)
U.S. NAVY (SPOIL AREA)

(J)
(WATER BODIES)

COOPER RIVER

(K)
(NON CONTIGUOUS)

2000 0 2000
SCALE FEET

LEGEND
[J] - STUDY ZONES



BRAC CLEAN UP PLAN
NAVAL BASE
CHARLESTON

FIGURE 4-2
ZONE MAP

DWG DATE: 02/21/94 | DWG NAME: 760ZONE

SOURCES: SOUTH DIV, n.d. ESE, 1981.

Zone K This zone is comprised of all additional non-contiguous properties (the Short Stay recreational facility, the antenna site on Sullivan's Island, the Naval Annex, the island, and the downtown degaussing facility).

4.1.2 OU Designations

All Naval Base Charleston investigations and subsequent remedial activities are being conducted under the RCRA process. Operable Units, which are CERCLA designators, will not be utilized at this base. However, the base has been subdivided into Investigative Zones, which are described in Section 4.1.1 of this BCP. Since these zones are for investigative purposes only, it is possible they will be further subdivided or integrated as the investigative work proceeds. Any subdivision will be given a number designation with a corresponding zone letter designation (i.e., A-1, A-2, A-3, etc.). If the information collected from the groundwater sampling indicates a wide-spread problem overlapping established zones, the groundwater itself may be designated as an additional zone.

4.1.3 Sequence of Zones

A comprehensive strategy for sequencing these investigative zones has been developed by the BRAC Cleanup Project Team. This strategy involves prioritizing the zones based on actual or potential reuse.

The framework for this strategy is given in Figure 4-3. The intent is to commence investigative activities within each individual zone, and to complete each zone investigation prior to commencing another zone. However, through the use of multiple investigative teams, several zones may be investigated simultaneously. Figure 4-3 does not give site specific dates for individual zone studies, but rather provides the general sequencing of events between zones.

The first zone to be investigated will be Zone H. This zone includes the property transferred to the State Department in 1994. The zone was established to include all areas that might be impacted by the two large landfills in the area (SWMU 9 & 14).

It is planned for the Zone C and D investigations to be conducted next, since there are buildings within these zones which have been requested by NISE-EAST. Due to the types of activities conducted within these zones, it is not expected that these areas will require extensive investigation.

The investigation of Zone E will follow, since this area is anticipated to be the most difficult to remediate because of the highly industrial activities. It is also the area which offers the greatest potential for reuse and job creation. This investigation will therefore be commenced early in the process.

↑ why NOT First?

Figure 4-3 Investigative Strategy

Figure 4-3 continued

Zones B and A will be investigated next. It is anticipated that these zones should be relatively easy to investigate and can be turned over to the community quickly. However, several historical activities in Zone A have been noted which may extend activities within this area.

The remaining zones are Zone F, Zone I, Zone J, and Zone K. As the community reuse plans are finalized, the priorities may be changed.

The current strategy is to use multiple contractor teams to perform the investigation. One (or possibly two) teams will conduct investigation activities in conjunction with the priorities from Figure 4.3. A quick-response team will also be utilized to handle areas that are targeted for rapid turnover.

4.1.4 Early Actions Strategy

Several sites have been identified for early actions. These include:

- Multiple unexploded ordnance sites.
- DRMO lead contamination in Zone A (SWMU 2).
- Old Public Works Department Storage Area (SWMU 6).
- Multiple UST sites.

4.1.5 Remedy Selection Approach

Remedies will be selected in accordance with statutory and RCRA Corrective Measures Study criteria. The BCT will involve all parties who have an impact on the remedies selected. An important source of input will be the Restoration Advisory Board. Particular attention will be given the following during the evaluation of alternatives:

- Land use/risk assessment. Risk Assessment protocols will incorporate future land use in its exposure scenarios.
- Basewide treatment facilities.
- Applicable remedies. The presumptive remedy approach advocated in EPA's 30-day study will be applied in selected cases.
- Corrective Action Management Units (CAMU) regulation. These will be used as we go into remedy implementation.

- POL remedies. Source-specific actions for petroleum, oils, and lubricants (POL's) will be addressed under South Carolina's UST program as POL releases have occurred mostly as a result of leaking UST's. Any groundwater contamination that can be determined to be originating from a specific leaking UST will be remediated under existing State UST regulations, otherwise the appropriate groundwater remediation will be included in the IRP.
- Future land use. Cleanup goals will be factored into the future land use or deed restrictions.

BCT Project Team meetings will be held to discuss remedies early in the RFI process to ensure the RFI focuses on the appropriate types of remedies for data gathering.

4.2 Compliance Strategy

The IRP will ensure the conditions and requirements of the RCRA Facility Investigation (RFI), which is included as Appendix B in the Part B permit issued to the facility by the State of South Carolina and EPA Region IV, are accomplished.

4.2.1 Storage Tanks

The underground storage tank compliance program will be continuing at the base. These activities include tank closures, initial site characterizations, site investigations, remedial action plan preparation, and remedial action plan implementation. Programmed activities for execution in fiscal year (FY) 1994 and 1995 include the following:

- Continued monitoring of Tank 647 at State Department property.
- UST removals planned for 1994:
 - (1) CNSY: Tanks 6A, 6B, 1219A, 1219B, 1219C, 13A, 13B, MS-1, MS-54, MS-56, MS-240, MS-590A.
 - (2) NAVSTA: Tanks 686, 202, 647, 681b, 58, 63, 1346A, 1346B, 1346C, 1346D, and eighteen heating oil tanks.

A basewide strategy will be used to coordinate remedial action alternatives between the IRP and the UST program. The overall groundwater plumes issue will be addressed by the IRP. Any UST sites where the contamination is not intermingled with IRP contamination will be handled strictly within the UST program.

In an effort to coordinate UST program activities with the state regulators, UST program meetings will be held as needed with the Naval Base Charleston representatives, SCDHEC, and the contractor or Navy personnel performing the removals.

The EBS has discovered numerous unregistered USTs which will be reported by Naval Base Charleston environmental personnel (Code 106). In addition, several fuel oil USTs associated with housing area exist which do not require registration. These tanks will also be addressed under the above criteria.

4.2.2 Hazardous Materials/Waste Management

As areas of the base shut down, the Satellite Accumulation Areas will be closed. These have been listed in Table 3.2 as Potential Areas of Concern. It is planned to close these areas as soon as they are not required; early removal actions or activities to reach a finding of No Further Action will be conducted immediately following closure.

In addition, some areas of hazardous waste management were listed in Section 4.1.4 for early action.

4.2.3 Solid Waste Management

There are no early actions planned for this program area at this time.

4.2.4 Polychlorinated Biphenyls (PCB's)

Three PCB or PCB-containing transformers are known to remain on the Naval Base Charleston property, a portable 1,000 KVA transformer identified by serial number 2-50502. This unit, which is currently in use on Pier H, was tested at ≤ 500 ppm PCB (340 gallons). Plans are to remove this transformer from service and submit for disposal by April 1994. Two additional units are located in area C2 (see Figure 3-1 for map grid locations), identified under I.D. numbers R#16 and R#17. These units were tested at 526 ppm PCB (55 gallons) and 847 ppm PCB (49 gallons), respectively. No plans have yet been developed for removal of these units.

The EBS has identified additional transformers suspected of containing PCBs. In addition, it is possible that PCBs exist in hydraulic fluids or other equipment. These items will be addressed by individual commands as part of their operational closure plan.

4.2.5 Asbestos

Numerous buildings exist on base which contain friable asbestos. These areas will be identified through the EBS so that plans to abate or remove can be developed as necessary so that each building can be transferred. Asbestos abatement will be an early action to be completed before operational closure. CNO has issued draft guidance on the removal and abatement of asbestos prior to transfer.

Any areas that have not been evaluated for asbestos will be evaluated using an existing indefinite delivery contract managed by SOUTHNAVFACENGCOM.

4.2.6 Radon

There are no early actions planned for this program area at this time.

4.2.7 RCRA Facilities (SWMU's)

Four SWMUs (1, 6, 21, 44) have undergone closure because of their interim status under the previous Part A application. Groundwater and soil investigations as well as studies regarding building contamination at these locations are being included in the existing RFI investigations.

4.2.8 NPDES Permits

There are no early actions planned for this program area at this time.

4.2.9 Oil/Water Separators

There are no early actions planned for this program area at this time.

4.2.10 Radiological Surveys

Detailed survey plans for the radiological decommissioning of the Shipyard are being prepared by the Shipyard's Radiological Control Office. Buildings, facilities, work and storage areas, used by the Naval Nuclear Propulsion Program (NNPP), have been identified and included in radiological decommissioning plans. The decommissioning plans will define for the NNPP the procedures that will be used for removal of radioactive material needed to verify the removal of radioactivity. The extent of surveys and sampling will be commensurate with the radioactive contamination potential.

Areas and facilities are being categorized according to their radiological contamination potential. This categorization is based on the past and present use of the areas, review of past radiological areas, operating records, and interviews with senior Shipyard employees. Each building, facility and area identified will have all radioactive material associated with the NNPP removed. Following removal, detailed surveys will be conducted to verify the removal of radioactivity.

In addition to the NNPP radioactivity, the Shipyard has used and stored other general radioactive materials (G-RAM) such as radiographic sources used for non-destructive test purposes, sources used for instrument calibration, electrical instrumentation containing vacuum tubes with radioactive elements, radium dials and gauges, and naturally occurring radioactive materials such as potassium-40, thorium, and uranium and thorium daughter products. Buildings, facilities, and areas which have a potential for contamination from these sources of radioactivity will be surveyed to identify the presence or document the absence of these radioactive materials and corrective action will be taken as necessary.

4.2.11 Mixed Waste

Charleston Naval Shipyard is part of the DOE Site Treatment Plan process for mixed waste associated with Naval Nuclear Propulsion work. The DOE Site Treatment Plan process is described herein. The Conceptual Site Treatment Plan (CSTP), which identifies the potential treatment options for each mixed waste stream, is the first step in the process. The Draft Site Treatment Plan (DSTP), which identifies the preferred treatment option for each mixed waste stream, is the second step in the process. Based on regulator review of the CSTP and the DSTP, the final version of the plan, the Site Treatment Plan (STP) will be issued to the State to comply with the Federal Facility Compliance Act of 1992 (FFCA). Charleston Naval Shipyard will endeavor to ensure that the final STP, to be issued by February 1995, contains provisions to ensure that all mixed waste is shipped offsite by the operational closure date. Additionally, any mixed waste resulting from the decommissioning of Naval Nuclear Propulsion Program radiological work facilities will be included in the STP for Charleston Naval Shipyard.

There is no radioactive and hazardous G-RAM mixed waste from work not associated with the NNPP identified to date.

4.3 Natural and Cultural Resources Strategy

The strategy employed for compliance with the requirements of the National Historic Preservation Act of 1966, as amended (the Act) is the process set forth by the Advisory Council on Historic Preservation's regulations (36 CFR Part 800) and meeting the requirements for Section 110 of the Act for conduct of an inventory and evaluation of all properties by professionals meeting the qualifications standards set forth in the Secretary of the Interior's *Standards and Guidelines for Professional Qualifications* as mandated by the Act and the implementing regulations.

4.4 Community Involvement/Strategy

A Community Relations Plan (CRP) has been implemented to encourage open communication among Naval Base Charleston; Federal, State, or local regulatory agencies; interested community groups; and, individual community residents regarding environmental activities initiated at Naval Base Charleston in connection with closure of the base. The CRP will ensure that all interested individuals, groups or offices are provided accurate, consistent information throughout the base closure process. All information will be timely and will relate to cleanup activities, contaminants identified, possible effects of any contamination identified and remedial actions proposed to remediate any contamination found on the base. The CRP provides several ways for all parties to provide input into the decision-making process of the IRP.

The Charleston BRAC Cleanup Team has adopted the following strategy to encourage and support a proactive community relations program that will meet or exceed requirements of current environmental legislation (e.g., CERCLA, RCRA, HSWA, etc.):

- Publish points of contact on the base for information on the BRAC cleanup actions.
- Develop a list of speakers for making presentations to community groups regarding BRAC cleanup initiatives.
- Update CRP as needed (add activities that will ensure continuous and timely information is made available, add individuals, groups, and offices to the mailing list, etc.).
- Publish information frequently to keep the community up-to-date on the progress of environmental restoration and disposal programs (e.g., fact sheets, media releases, paid ads, etc.).
- Hold 30-day public comment periods on proposed actions and respond to all comments in a responsiveness summary.
- Hold informal and formal public meetings when needed or required during the BRAC cleanup process (e.g., to explain the Navy's approach to the BRAC cleanup, proposed actions to cleanup the base or specific sites, required meetings during the response process, etc.).
- Provide an opportunity for public comment on removal actions selected for the base.
- Establish and maintain an information repository to make documents available to the public.

5.0 ENVIRONMENTAL PROGRAM MASTER SCHEDULES

This chapter presents Naval Base Charleston's Master Schedule of anticipated activities in the installation's environmental programs. These schedules are simplified from the more detailed operational schedules developed to support site/zone specific work plans. IRP activities are graphically summarized in Figure 5-1. Compliance activities associated with mission/operational and closure are summarized in Figure 5-2 and historic/cultural resource activities are presented in Figure 5-3.

5.1 Environmental Restoration Program

5.1.1 Response Schedules

The schedule is based on the following general time periods between documents:

- Completion of the comprehensive RFI Work Plan 60 days after the BCP is approved.
- 30-day review periods for regulatory reviews. This can be done because of the partnering effort as well as the involvement of the regulators in the preparation of the plans.

Additionally, the BCT has agreed that the Corrective Measures Study and the Risk Assessment will be prepared as much as possible in conjunction with the RFI rather than in sequence.

5.1.2 Requirements by Fiscal Year

The detailed requirements information by fiscal year is contained in Appendix A of this BCP.

5.2 Compliance Programs

5.2.1 Master Compliance Schedules

The compliance schedule for mission/operational and closure compliance is given in Figure 5-2.

Figure 5-1 Summary of IRP Activities

Figure 5-2 Compliance Activities Associated with Mission/Operational and Closure

EARLY START	EARLY FINISH	ORIG DUR	1994										1995										
			MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	
	1MAR94	0	Intensive Historical Survey																				
	1MAR94	31MAY94	65	Review Intensive Historical Survey																			
	1MAR94	31AUG94	130	Cold War Survey																			
	31AUG94	30JUN95	208	Programmatic Argument Review																			
	30JUN95	31OCT95	86											Programmatic Argument									

Plot Date 21FEB94
 Data Date 21FEB94
 Project Start 21FEB94
 Project Finish 31OCT95

Activity Bar: Early Dates
 Critical Activity
 Program Bar
 Milestone/Flag Activity

BRAC Clean-Up Plan
 Historical & Cultural Resource Tasks
 Figure 5-3

NAVY CLEAN N62467-89-D-0318/xxx

Date	Revision	Checked	Approved

Radiological Facilities

The Shipyard is still performing mission essential work associated with the Naval Nuclear Propulsion Program (NNPP). Decommissioning surveys have not been completed at this time, but are expected to be completed prior to operational closure.

The Shipyard is currently scheduling and preparing the written work procedures necessary to release areas with varying potential for radioactive contamination. Pilot procedures will be prepared first and used to test the techniques and resources necessary to release buildings and areas. Pilot work will commence in February 1994.

Buildings, facilities and areas associated with general radioactive material (G-RAM), not associated with the NNPP, have been identified. A plan of action to address these areas is being developed.

5.2.2 Requirements by Fiscal Year

The detailed requirements information by fiscal year is contained in Appendix A of this BCP.

5.3 Natural and Cultural Resources

5.3.1 Natural and Cultural Resources Schedules

The schedule for the Historical and cultural resources is given in Figure 5-3.

5.3.2 Requirements by Fiscal Year

The detailed requirements information by fiscal year for Cultural Resources is contained in Appendix A of this BCP. No Natural Resources requirements are planned.

5.4 Meeting Schedule

Meetings are scheduled as required by the applicable program. Meetings are typically held as follows:

- SOUTHNAVFACENGCOM and Naval Base Personnel: Bi-weekly to discuss and resolve any cross-functional problems and information-sharing.

- BECs and CLEAN Contractors: Monthly partnering sessions to ensure consistency of approach and deliverables between the SOUTHNAVFACENCOM CLEAN contractors. This also provides access to contractors expertise from the private sector regarding property transfer.
- Restoration Advisory Board: As needed.
- BRAC Cleanup Team: Monthly, and more often as necessary. Planned meetings are shown in the informal table below:

BRAC CLEANUP TEAM MEETINGS	
Date	Purpose
March 1994	Plan Risk Assessment Workshop
April 1994	Review Groundwater Monitoring Approach
May 1994	Review EBS Document
June 1994	Risk-Assessment Workshop
July 1994	Review Community Reuse Plan and Discuss Cleanup Levels
August 1994 and Beyond	As Developed

6.0 TECHNICAL AND OTHER ISSUES TO BE RESOLVED

This chapter summarizes technical and other issues that are yet to be resolved. These issues include background determination, risk protocols, cleanup standards, and uses of historical data. It also addresses the ten areas in the DOD guidance for fast-track cleanup.

6.1 Data Usability

This section summarizes issues that need to be resolved with regard to managing information gathered and used in the environmental restoration and compliance programs.

- Improve coordination of, access to, and management of environmental restoration and real estate-type data generated for Naval Base Charleston.
- Ensure all historical data has been loaded into the GIS database format.
- Require all contractors to submit data in electronic format.
- Establish method/procedure to be able to distribute data to applicable parties.
- Establish procedures for real time analysis of data to determine effects on adjacent zones.

6.1.1 BRAC Cleanup Team Action Items

- Develop a plan for securing historical data and ensuring its inclusion in the database.
- Install networking capability on BCT computers.
- Provide training on use of EPA databases.

6.1.2 Rationale

As the number of agencies and contractors associated with the Naval Base Charleston disposal and environmental restoration program grows, it is important that all parties be able to share data for decision making. The establishment and maintenance of an electronic database for sampling and analysis data are the most efficient method of sharing data among parties.

6.1.3 Status/Strategy

- All current information is being loaded into the GIS database.
- Current contracts include the provision for data to be provided in electronic format.

6.2 Information Management

This section summarizes unresolved issues pertaining to the use of historical data sets in the base environmental restoration program and the use of a database of general EBS information to be used by potential buyers and to support FOST/FOSL's.

6.2.1 BRAC Cleanup Team Action Items

- Develop an agreement for use of data generated prior to Naval Base Charleston being slated for Base Closure.
- Develop a Comprehensive Sampling and Analysis Plan to be included as part of the RFI Work Plan.
- Coordinate with the reuse committee regarding the availability of facility information that will be available in the Base Closure Office on CD-ROM.

6.2.2 Rationale

Historical analytical data can contribute to the completion of site characterization by filling data gaps. Current and future data from each data collection system are critical to the completion of all site characterization efforts, comprehensive conceptual model development, risk assessments, and ultimately the selection of remedial actions to protect human health and the environment.

Timely access to historical building and facility information can assist with prompt transfer of properties.

6.2.3 Status/Strategy

- BCT will review historical data and determine its use for generating RFA and RFI information.

- All information generated from the fence-to-fence surveys has been organized by facility number. For example, everything about Building 199 is collated in one file—blueprints of floor plans, asbestos sampling results, SWMUs, photographs, permits, sampling results, etc. An index of the file structure is provided in Appendix F. This information is being scanned into a CD-ROM database so that anyone interested in property can review the file and determine if there are environmental concerns with that particular building.

The CD-ROM database will be used to support FOST/FOSL's determinations in a timely manner. All the information is available without time-consuming research.

6.3 Data Gaps

This section summarizes unresolved issues pertaining to the determination and collection of data needed to complete the environmental restoration program.

6.3.1 BRAC Cleanup Team Action Items

Data gaps will be identified by the BRAC Cleanup Project Team during the RFA and RFI process.

6.3.2 Rationale

Effective identification and filling of data gaps will permit the development of sampling strategies for the various investigative zones. Effective analysis of data gaps will also facilitate the completion of RFI efforts and selection of appropriate remedies in a timely manner. This information will also facilitate the identification of clean parcels.

6.3.3 Status/Strategy

- BCT Meetings will be used to resolve data gap issues prior to the execution of additional field work.

6.4 Background Levels

6.4.1 BRAC Cleanup Team Action Items

Establish background concentrations of elements in the environment at Naval Base Charleston for use in baseline risk assessment computations and developing cleanup levels.

6.4.2 Rationale

Background concentration values of elements in the soil, groundwater, surface water, and sediments need to be determined before risk assessments can be conducted. The values should be representative of what is naturally occurring and what is occurring due to anthropogenic sources. EPA and SCDHEC must concur with these values.

The current standard for cleanup is to cleanup to background, therefore these levels must be established.

6.4.3 Status/Strategy

- A large portion of the Naval Base Charleston is built on fill material and dredge spoil. Until the mid-1970s, all of the waste water (sanitary and industrial) was discharged into the Cooper River. The sediment from the river was dredged and used for fill. It will be difficult to establish background for the base.
- The BCT plans to host a workshop on risk assessment and background that will include working sessions to address these issues. The workshop will be given by EPA and SCDHEC. Attendees will include other DOD installations in the Charleston area, since we have similar problems in all restoration activities.
- After the workshop the BCT will develop a plan to determine what background level will be used.

6.5 Risk Assessments

6.5.1 BRAC Cleanup Team Action Items

Continue to evaluate the planned land use as a criterion in selecting assumptions in the exposure assessment.

6.5.2 Rationale

If cleanup to background is not possible, then a risk-based cleanup standard will be used. The assumptions used in exposure assessment should consider anticipated land uses.

6.5.3 Status/Strategy

- EPA guidelines on risk assessment will be followed.

- BCT and other project team members will receive training in risk assessment at the workshop described in Section 6.4.3.

6.6 Basewide Remedial Action Strategy

6.6.1 BRAC Cleanup Team Action Items

There are no identified Project Team action items for basewide remedial action strategy at this time.

6.6.2 Rationale

Basewide issues should be considered when developing strategies to provide a more cost-effective and timely approach to environmental restoration.

6.6.3 Status/Strategy

- Basewide plan has been developed for investigation.
- Possible remedial actions are being discussed on a basewide level in addition to site specific.

6.7 Interim Monitoring of Groundwater and Surface Water

6.7.1 BRAC Cleanup Team Action Items

There are no identified Project Team action items for interim monitoring of groundwater and surface water at this time.

6.7.2 Rationale

Interim monitoring of groundwater and surface water can be effective in filling data gaps and determining clean parcels.

6.7.3 Status/Strategy

- Surface water runoff has been sampled under the storm water program.

- Monitoring of existing wells under the on-going RFI process is continuing.

6.8 Excavation of Contaminated Materials

6.8.1 BRAC Cleanup Team Action Items

Contact EOD command to set removal of unexploded ordnance. Continue to pursue areas for early removal actions.

6.8.2 Rationale

There are areas at the base that can be addressed with removal actions without going through the regular RFI process.

6.8.3 Status/Strategy

- Early actions have been identified.
- BCT will continue to look for additional removal actions.

6.9 Protocols for Remedial Design Reviews

6.9.1 BRAC Cleanup Team Action Items

- BEC to establish process for SOUTHNAVFACENGCOM remedial design.
- BCT to develop process for remedial design reviews.

6.9.2 Rationale

Remedial designs need to have a prompt review in order for implementation to be accomplished sooner.

6.9.3 Status/Strategy

- SOUTHNAVFACENGCOM is developing an acquisition strategy for remedial design and implementation.

6.10 Conceptual Models

6.10.1 BRAC Cleanup Team Action Items

There are no identified Project Team action items for developing conceptual models at this time.

6.10.2 Rationale

Models can be useful in developing a basewide strategy and selecting site-specific remedial actions.

6.10.3 Status/Strategy

- No conceptual models have been developed to date for Naval Base Charleston.
- As RFI work progresses information will be generated that can be used to develop conceptual models.

6.11 Cleanup Standards

In the absence of federal or state mandated cleanup standards for hazardous wastes or constituents in soil, the approach for providing remediation criteria for contaminated soils will be through the use of risk assessment and through discussions with EPA and SCDHEC. Part of the workshop discussed in Section 6.4.3 will examine "How Clean is Clean?". There will be decisions made regarding cleanup to reuse. SCDHEC has stated that Sub-Chapter S be used as a cleanup standard.

SCDHEC uses the Drinking Water Standards for remediation of groundwater. Since the groundwater is not used for drinking water, there may be negotiations on this criteria.

6.12 Remedial Actions

6.12.1 Status/Strategy

Remedial actions are to be in place within one year of completion of the Corrective Measures Study.

6.13 Review of Selected Technologies for Application of Expedited Solutions

6.13.1 Status/Strategy

The BCT has agreed to be open to innovative technologies. We are sharing resources that describe alternative solutions and examples of technology that is already proven.

Additional effort will be required as information becomes available from the RFI to select appropriate technologies to expedite remediation.

Where the extent of contamination and the specific contaminant is known, we will use presumptive remedies to expedite the restoration.

6.14 Hot Spot Removals

6.14.1 Status/Strategy

No *hot spots* have been identified to date. The BCT will develop a strategy to expedite these areas.

6.15 Identification of Clean Properties

6.15.1 Status/Strategy

The current environmental condition of property map does not show any *clean* contiguous parcels. This is because of uncertainty in migration of contaminants from other sources. The base has been operating for almost 100 years and the past practices (prior to environmental regulations) have contributed to the contamination.

As information is received from the RFI process, additional properties may be classified as *clean* without remediation if there has been no migration.

The BCT has chosen to take a conservative approach to this so that we would not have to change an area to contaminated that had been proposed to the community as *clean* after test results are received.

The plan established in Section 4.1.3 should provide many *clean* parcels prior to the formal CERFA notification requirement.

6.16 Overlapping Phases of the Cleanup Process

6.16.1 Status/Strategy

The BCT has proposed to do the RFI, CMS, and risk assessment concurrently in lieu of sequentially. The normal process is to complete the RFI then perform the CMS. These will be done overlapping as information is received.

6.17 Improved Contracting Procedures

6.17.1 Status/Strategy

The investigation effort is being accomplished under the existing CLEAN contract. There are concerns that the capacity may not be enough to complete the BRAC work. SOUTHNAVFACENGCOM is pursuing having the limit changed and also developing a plan for new contracts.

Contracting strategy for remediation will be done under Remedial Response Contract (RAC). This process is in the final stages of source selection and plans to be awarded by April 1994. The other avenue for remediation is utilizing qualified shipyard personnel to design and implement the remediation projects. A group is being formed and is developing their plan to do this work.

6.18 Interfacing with the Community Reuse Plan

6.18.1 Status/Strategy

The community reuse plan will be issued in June 1994. A member of the reuse committee in on the Restoration Advisory Board. The Base Transition Coordinator is our method to give and receive information on the reuse.

6.19 Bias for Cleanup Instead of Studies

6.19.1 Status/Strategy

Since an overall plan was developed to have remediation in place by the time of operational closure, the focus is on cleanup. By partnering with EPA and SCDHEC the study efforts and data gathering can focus on cleanup.

Areas that have enough information to make a decision on remediation that decision will be made without requiring additional study.

6.20 Expert Input on Contamination and Potential Remedial Actions

6.20.1 Status/Strategy

EPA and SCDHEC have offered their expert resources to be part of the project team. The BCT has also included other experts in the community as part of the project team.

6.21 Presumptive Remedies

6.21.1 Status/Strategy

The BCT has decided to make maximum use of presumptive remedies.

6.22 Partnering

6.22.1 Status/Strategy

A partnering agreement has been signed by the BCT. A copy is given in Figure 1-1. Many BCT meetings have been held in Charleston as well as in Columbia (SCDHEC Headquarters) and conference calls are used. EPA has a BCT member that is on base every week. SCDHEC attends the meetings and has asked that we utilize the district office for short notice problems. The key to partnering is that we have a common objective. Our objective was stated in the partnering agreement.

Partnering was also used with the CLEAN contractors that SOUTHNAVFACENGCOM uses. Sessions began with them during the summer 1993. Their expertise from the private sector was utilized to develop a strategy for performing the baseline surveys and developing the BCP's. Additional communication has been needed with the CLEAN contractors. A conference has been set up utilizing the Base Transition Officer's Bulletin Board Service for better communication between the SOUTHNAVFACENGCOM BEC's and the contractors.

6.23 Updating the EBS and Natural/Cultural Resources Documentation

6.23.1 Status/Strategy

A strategy needs to be developed to update the EBS. There have been conversations as to whether the base-wide EBS will be updated or individual EBS's will be done for specific parcels.

The historical/cultural resources plan will not be updated once it is approved.

6.24 Implementing the Policy for Onsite Decision-Making

6.24.1 Status/Strategy

This is one area which thus far has been ineffectual. EPA has a representative onsite but there are limitations on his decision-making authority. The same is true for the Navy BECs. SCDHEC has stated that they cannot give decision-making authority to one person in the field because they have no single person with knowledge of all programs. Our strategy is to streamline the process of going through the home offices so that we can fast-track the process.

APPENDIX A

FISCAL YEAR FUNDING REQUIREMENTS/COSTS

This Appendix to be Developed

APPENDIX B

**INSTALLATION ENVIRONMENTAL RESTORATION DOCUMENTS
SUMMARY TABLES**

APPENDIX B. INSTALLATION ENVIRONMENTAL RESTORATION DOCUMENTS SUMMARY TABLES

Year	Project Title	Sites Examined	Contractor
1982	The Industrial Process and The Waste Treatment Investigation	Various Industrial Processes	More, Gardner, and Associates
1982	Assessment of Potential Oil and Hazardous Waste Contamination of Soil and Groundwater	SWMU 3,7,8,9,11,14	Geraghty & Miller, Inc.
1982	Confirmation Study for the Charleston Naval Base	SWMU 3,7,8,9,11,14 IR Site 4,5	Environmental Science and Engineering, Inc.
1983	Initial Assessment Study for the Charleston Naval Base	SWMU 3,7,8,9,11,14 IR Site 4,5	Environmental Science and Engineering, Inc.
1986	Contamination and Exposure Assessment of the Lead Contamination within the DRMO	SWMU 2	Environmental Science and Engineering, Inc.
1986	Evaluation of Soil Contamination of the Interim Status Storage Facility "Old Corral"	SWMU 6	EnSafe, Inc.
1987	Closure Plans for Interim Status Facilities	SWMU 1,5,6,21,22	EnSafe, Inc.
1987	Interim RFA of USN Charleston Naval Shipyard	SWMUs 1-24	Ebasco Services, Inc.
1987	DRMO Focused Field Study	SWMU 2	Environmental Science and Engineering, Inc.
1988	Report on Field Activities, Closure of Interim Status HW Facilities	SWMU 1,5,6,21,22	EnSafe, Inc.
1988	RFI Workplan for the Investigation of Ground Water Contamination at the DRMO, North Yard Site	SWMU 2	Environmental Science and Engineering, Inc.
1990	RFA Addendum	SWMUs 25-36	Southern Division, Naval Facilities Engineering Command
1991	Environmental Study of Building No. 44	SWMU 25	Davis and Floyd, Inc.
1991	Environmental Investigation — Fire Fighting Training Facility	SWMU 13	Westinghouse Environmental and Geotechnical Services
1991	Risk Assessment and Development of Health-Based Soil Clean-up	SWMUs 1,2,6,7	Gradient Corporation
1991	Draft RFI Workplan	SWMUs 1-36	Kemron
1992	Draft-Final RFI Workplan	SWMUs 1-36	EnSafe, Inc.
1993	Draft-Final, Preliminary RFI Field Activity (Soil Gas, Geophysics)	SWMUs 9 & 14	EnSafe, Inc.
1993	Interim-Final RFI Workplan	SWMUs 1-36	EnSafe, Inc.
1993	Focused Field Investigation	Zone H	EnSafe, Inc.
1993	RFA Addendum	SWMUs 37,38,39 and PAOCs 1-118	Ensafe, Inc.
1994	Certification of Clean Closure, Public Works Storage Yard (Old Corral)	SWMU 6	EnSafe, Inc.
1994	Certification of Clean Closure, DRMO Storage Shed	SWMU 1	EnSafe, Inc.

APPENDIX C

DECISION DOCUMENT SUMMARIES

None as Yet

APPENDIX D

NO FURTHER RESPONSE ACTION PLANNED (NFRAP) SUMMARIES

None as Yet

APPENDIX E

CONCEPTUAL SITE MODEL DATA SUMMARIES

None as Yet

APPENDIX F

EBS FILE STRUCTURE INDEX

BRAC INDEX SYSTEM

1.0 Historical Information

- 1.1 Historical site information
- 1.2 Real Estate Records
- 1.3 Chain of Occupancy
- 1.4 Aerial Photographs
- 1.5 Historical Maps, Topographical maps, Utility maps

2.0 Base Master Plan

3.0 Environmental Documents

- 3.1 Correspondence
- 3.2 Preliminary Assessment Documents
- 3.3 Site Investigation Documents
- 3.4 Copies of Environmental Permits
- 3.5 Removal Response Reports
- 3.6 CERCLA Removal Site Records
- 3.7 Sampling and Analysis Data (from CERCLA investigation)
- 3.8 Work Plans (including FSAP and QAPP)
- 3.9 Interagency or Federal Facility Agreements
- 3.10 ARARs
- 3.11 Remedial Investigation (RI) Report
- 3.12 Health Assessments
- 3.13 Endangerment/Risk Assessments
- 3.14 Treatability Studies/Site Characterizations, if applicable
- 3.15 Feasibility Study (FS) Reports
- 3.16 Plans for Remedial Action
- 3.17 Record of Decision (ROD)
- 3.18 SPCC Plan
- 3.19 Contingency Plan

4.0 Legislative Documents

- 4.1 Correspondence - documentation of state involvement
- 4.2 State Enforcement Records/Violations
- 4.3 Environmental compliance evaluation
- 4.4 Pollution prevention plan
- 4.5 SARA Reports
- 4.6 Biennial Hazardous Waste inventory reports
- 4.7 Storm Water Pollution Prevention Plan
- 4.8 Environmental Impact Statement
- 4.9

5.0 Resource Conservation and Recovery Act (RCRA) Records

- 5.1 Correspondence
- 5.2 Notification/Part A
- 5.3 RCRA Part B
- 5.4 RCRA Closure documentation
- 5.5 RCRA Facility Assessment (RFA) Report
- 5.6 Corrective Measures Study/ Implementation
- 5.7 RCRA Facility Investigation (RFI) Report
- 5.8 RCRA Enforcement Action

6.0 Underground and Above-ground Storage Tanks

- 6.1 Storage Tank and pipeline Inventory (Above-ground and USTs, assessment and closure reports)
- 6.2 Tank Notification
- 6.3 Leak test results
- 6.4 Corrective action plan/report
- 6.5 Tank abandonment/removal

7.0 Media Addressed

- 7.1 MSDS
- 7.2 Hazardous materials use and storage areas
- 7.3 Solid and hazardous waste disposal
- 7.4 PCB—containing electrical equipment
- 7.5 Soil contamination
- 7.6 Groundwater
- 7.7 Asbestos—containing buildings
- 7.8 Surface water and wetlands
- 7.10 Wastewater treatment and discharge
- 7.11 Lead (Lead-based paint, lead in drinking water)
- 7.11 Air Emissions (Quantities, emission allowances)
- 7.12 Other issues (e.g., Radon)

8.0 Building Checklist

- 8.1 Interview Notes
- 8.2 Adjoining Building/Land-use Information
- 8.3 Photographs
- 8.4 EDI Report
- 8.5 Summary and final checklist

9.0 Building Drawings

- 9.1 Site plans
- 9.2 Location Plans
- 9.3 Utility plans

10.0 Process Closure Requirements

- 10.1 Pollution Control Equipment to be closed
- 10.2 Process equipment
- 10.3 Decontamination procedures