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CORRECTIVE ACTION MANAGEMENT PLAN NAS KEY WEST FL
4/1/1995
ABB ENVIRONMENTAL SERVICES INC

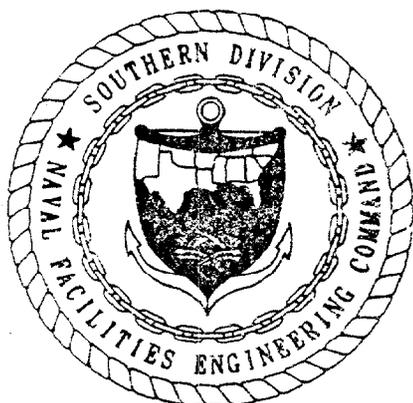


CORRECTIVE ACTION MANAGEMENT PLAN

**NAVAL AIR STATION KEY WEST
KEY WEST, FLORIDA**

**UNIT IDENTIFICATION CODE: N00213
CONTRACT NO. N62467-89-D-0317/114**

APRIL 1995



**SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORTH CHARLESTON, SOUTH CAROLINA
29419-9010**

CORRECTIVE ACTION MANAGEMENT PLAN

**NAVAL AIR STATION, KEY WEST
KEY WEST, FLORIDA**

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Prepared by:

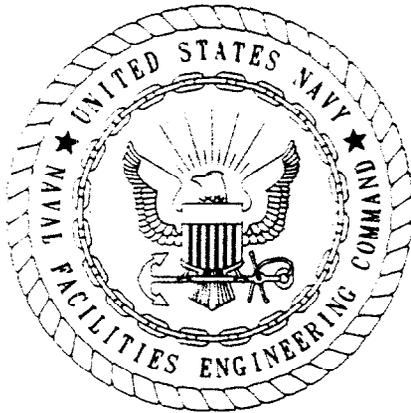
**ABB Environmental Services, Inc.
2590 Executive Center Circle, East
Tallahassee, Florida 32301**

Prepared for:

**Department of the Navy, Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
North Charleston, South Carolina 29418**

Dudley Patrick, Code 1858, Engineer-in-Charge

April 1995



CERTIFICATION OF TECHNICAL
DATA CONFORMITY (MAY 1987)

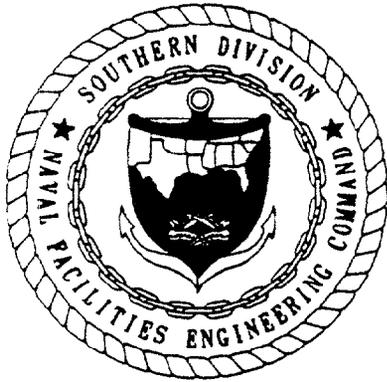
The Contractor, ABB Environmental Services, Inc., hereby certifies that, to the best of its knowledge and belief, the technical data delivered herewith under Contract No. N62467-89-D-0317/114 are complete and accurate and comply with all requirements of this contract.

DATE: April 6, 1995

NAME AND TITLE OF CERTIFYING OFFICIAL: Philip Georgariou
Project Manager

NAME AND TITLE OF CERTIFYING OFFICIAL: Robin S. Futch, P.G.
Technical Lead

(DFAR 252.227-7036)



FOREWORD

To meet its mission objectives, the U.S. Navy performs a variety of operations, some requiring the use, handling, storage, or disposal of hazardous materials. Through accidental spills and leaks and conventional methods of past disposal, hazardous materials may have entered the environment in ways unacceptable by today's standards. With growing knowledge of the long-term effects of hazardous materials on the environment, the Department of Defense (DOD) initiated various programs to investigate and remediate conditions related to suspected past releases of hazardous materials at their facilities.

One of these programs is the Installation Restoration (IR) program. This program complies with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA), the Resource Conservation and Recovery Act (RCRA), and the Hazardous and Solid Waste Amendments (HSWA) of 1984. These acts establish the means to assess and clean up hazardous waste sites for both private-sector and Federal facilities.

The program that has been adopted to address present hazardous material management is RCRA and the HSWA (RCRA/HSWA) corrective action program. RCRA ensures that solid and hazardous wastes are managed in an environmentally sound manner. The law applies to facilities generating or handling hazardous waste. The HSWA corrective action program is designed to identify and clean up releases of hazardous substances at RCRA-permitted facilities.

The RCRA/HSWA program is conducted in four stages as follows:

- RCRA Facility Assessment (RFA),
- RCRA Facility Investigation (RFI),
- Corrective Measures Study (CMS), and
- Corrective Measures Implementation (CMI).

The Southern Division, Naval Facilities Engineering Command (SOUTHNAVFACENGCOM) manages and the U.S. Environmental Protection Agency (USEPA) and the Florida Department of Environmental Protection (FDEP; formerly Florida Department of Environmental Regulation [FDER]) oversee the Navy environmental program at Naval Air Station (NAS), Key West. All aspects of the program are conducted in compliance with State and Federal regulations, as ensured by the participation of these regulatory agencies.

Questions regarding the RCRA program at NAS Key West should be addressed to the Installation Restoration program Coordinator at (305) 293-2061.

EXECUTIVE SUMMARY

This Corrective Action Management Plan (CAMP) documents the proposed schedule and activities for continued implementation of the Corrective Action Program (CAP) at Naval Air Station (NAS), Key West, Florida. This CAMP has been completed by ABB Environmental Services, Inc. (ABB-ES), for the Southern Division, Naval Facilities Engineering Command (SOUTHNAVFACENGCOM) under Contract Number N62467-89-D-0317/114.

An Initial Assessment Study (IAS) was completed by Envirodyne Engineers, Inc., in 1985 and a Verification Study was completed by Geraghty & Miller, Inc., in 1987 under the Naval Assessment and Control of Installation Pollutants (NACIP) program. This work was completed before the facility obtained an RCRA Part B permit. Since receipt of that permit, IT Corporation (IT) has completed an RCRA Facility Investigation and Remedial Investigation (RFI/RI) at NAS Key West on behalf of the U.S. Navy.

This CAMP proposes a schedule of activities (Chapter 5.0) that begins with Interim Removal Actions at several Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) at NAS Key West and continues through completion of the RFI reports and baseline risk assessments for both human health and ecological receptors.

Eight SWMUs and two AOCs have been identified and investigated at NAS Key West. A ninth SWMU (Jet Engine Test Cell) has been investigated under the Navy's underground storage tank (UST) program and has recently been identified as an SWMU for further characterization. An SWMU Assessment Report is currently being prepared for SWMU 9. All of these sites are included in this CAMP for further investigation and corrective action as required. Where appropriate, a No further action (NFA) decision for sites will be made and no corrective action will be required. The schedule included in this CAMP outlines all proposed activities that will be conducted to complete the CAP at NAS Key West.

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Naval Air Station Key West
Key West, Florida

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Naval Air Station Key West
Key West, Florida

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GLOSSARY

ABB-ES	ABB Environmental Services, Inc.
AIMD	Aircraft Intermediate Maintenance Department
AOCs	Areas of Concern
CAMP	Corrective Action Management Plan
CAMU	Corrective Action Management Unit
CAP	Corrective Action Program
CLEAN	Comprehensive Long-Term Environmental Action, Navy
COMREL	Community Relations
CMS	Corrective Measures Study
DOD	Department of Defense
DDT	dichlorodiphenyl trichloroethane
FDEP	Florida Department of Environmental Protection
FDER	Florida Department of Environmental Regulation
HSWA	Hazardous and Solid Waste Amendments
HW	hazardous waste
HWS	hazardous waste storage
IAS	Initial Assessment Study
IR	Installation Restoration
IRA	Interim Remedial Action
IT	IT Corporation
NACIP	Naval Assessment and Control of Installation Pollutants
NAS	Naval Air Station
NFA	no further action
NOTI	Notice of Technical Inadequacy
QA/QC	quality assurance and quality control
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFA/VSI	RCRA Facility Assessment and Visual Site Inspection
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RPM	Remedial Project Management
SOUTHNAV-	
FACENCOM	Southern Division, Naval Facilities Engineering Command
SWMUs	Solid Waste Management Units
TRC	Technical Review Committee
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
VS	Verification Study
VSI	Visual Site Inspection

1.0 INTRODUCTION

ABB Environmental Services, Inc. (ABB-ES), under the Comprehensive Long-Term Environmental Action, Navy (CLEAN) Contract No. N62467-89-D-0317/114, is providing Corrective Action Program (CAP) support to Naval Air Station (NAS) Key West on behalf of the U.S. Navy. This document outlines the proposed Corrective Action Management Plan (CAMP) for NAS Key West (Figure 1-1).

The CAMP provides the overall management structure for implementing the CAP at NAS Key West, Florida. The CAP is required by the Hazardous and Solid Waste Amendments (HSWA) of 1984 part of Resource Conservation and Recovery Act (RCRA) Permit Number H044-144053 for NAS Key West, Florida. The HSWA part of the permit was issued by the U.S. Environmental Protection Agency (USEPA), Region IV on August 30, 1990, and has an expiration date of August 30, 2000. The CAMP includes a list of known Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) currently under investigation, the strategy for implementation of the CAP, and a schedule for implementing CAP activities.

When approved by the USEPA Region IV Regional Administrator the schedule included in the CAMP will become an enforceable schedule of compliance for submittal of workplans and reports.

The schedule presented in Appendix A contains the anticipated sequences and durations of the major tasks for the NAS Key West CAP that are required to comply with the HSWA permit. Actual milestone dates may vary depending on unanticipated site conditions, investigative findings, and regulatory requirements. Workplans, which are required by the HSWA permit to accomplish the CAP, will also contain operational schedules that may modify and update milestones presented in the current CAMP schedule. Revisions to the current schedule in the CAMP will be made in accordance with Sections II.I. and II.K.2 of the HSWA permit. Revisions to the CAMP are subject to approval by the USEPA Region IV Regional Administrator.

The CAMP presents the following information for the CAP at NAS Key West:

- objectives of the program;
- background information on NAS Key West including the HSWA permit history, SWMU and AOC summaries, and the current status of the CAP;
- prioritization of SWMUs and AOCs for corrective action and/or interim remedial actions (IRAs); and
- schedule and assumptions to be used in the planning and implementation of corrective actions and IRA tasks.

2.0 OBJECTIVES

The goal of the NAS Key West CAP is to comply with the HSWA permit by effectively assessing the presence and concentration of suspected or known releases of hazardous waste or hazardous constituents from SWMUs and AOCs to determine corrective measures or appropriate IRAs to prevent adverse effects to human health and the environment. The following objectives support achievement of this goal:

- measure background contaminants and their concentrations to ensure the adequacy of investigative data and to appropriately identify contaminants of concern such as hazardous wastes or hazardous constituents that potentially emanate from SWMUs and AOCs,
- conduct additional characterization sampling at SWMUs and AOCs to confirm releases of hazardous wastes or hazardous constituents to the environment,
- characterize the lateral and vertical extent of hazardous waste or hazardous constituents that have been released from an SWMU or AOC,
- estimate risks to human health and the environment posed by the hazardous waste or hazardous constituents released from SWMUs and AOCs,
- implement IRAs where necessary to mitigate potential risks posed by known releases of hazardous waste or hazardous constituents from SWMUs and AOCs,
- conduct Corrective Measures Studies (CMSs) at SWMUs and AOCs determined to require corrective measures to reduce adverse risks posed by the hazardous waste or hazardous constituents, and
- implement approved corrective measures remedies.

To achieve these objectives, the CAMP provides the strategy and schedule to implement the CAP.

3.0 BACKGROUND

HSWA Permit History. Table 3-1 provides a chronology of the investigations and related activities that have been conducted at NAS Key West up to the present HSWA permit. HSWA permit Number H044-144053 was issued by USEPA, Region IV, to NAS Key West on August 20, 1990, with an expiration date of August 30, 2000 (USEPA, 1990). This HSWA permit, combined with the State of Florida hazardous waste storage facility permit (H044-230669) issued on June 28, 1994 with an expiration date of June 29, 1999, constitutes the complete RCRA Part B permit for NAS Key West. The HSWA permit identified six SWMUs that required corrective actions for known releases of hazardous wastes or hazardous constituents to the environment. Since that time an additional SWMU (SWMU 9, Jet Engine Test Cell) has been identified and reported to USEPA, Region IV. The locations of the SWMUs and AOCs are shown on Figure 3-1.

A Visual Site Inspection (VSI) was conducted by USEPA on April 12 through 14, 1988. Subsequent to the VSI, a draft RCRA Facility Assessment and Visual Site Inspection (RFA/VSI) report was completed for NAS Key West. According to a records review conducted at the Florida Department of Environmental Regulation (FDEP; since renamed Florida Department of Environmental Protection [FDEP]), the draft RFA/VSI was never issued as a final document.

In November 1991 a draft RCRA Facility Investigation (RFI) workplan was submitted to FDEP and USEPA for regulatory review. Subsequent to submittal of the RFI workplan, a draft RFI and Remedial Investigation (RI) workplan was prepared and submitted to FDEP and USEPA in February 1992.

Concurrent with the draft RFI/RI workplan, a Corrective Measures Study (CMS) workplan was submitted for the Boca Chica dichlorodiphenyl trichloroethane (DDT) Mixing Area (SWMU 2) in March 1992. The CMS workplan was approved by FDEP on June 15, 1992.

USEPA submitted comments on the draft RFI/RI workplan on September 22, 1992, and FDEP provided comments in November 1992. Once the RFI/RI workplan was finalized, the RFI/RI was conducted.

A draft RFI/RI report was submitted for regulatory review in October 1993. FDEP provided comments on the draft report in December 1993 and the final RFI/RI report was submitted for regulatory review on June 7, 1994.

On February 17, 1995 NAS Key West notified USEPA of the discovery of an additional SWMU, the Jet Engine Test Cell. This SWMU, designated SWMU 9, is currently being described in an SWMU Assessment Report which will be submitted to the USEPA by June 19, 1995.

SWMU and AOC Summary and Status. Appendix A of the HSWA permit presents the permitted SWMUs (USEPA, 1990) currently identified at NAS Key West. In addition to the SWMUs listed in the HSWA permit, 3 additional SWMUs and two AOCs have been defined at the installation. Table 3-2 provides a summary of the SWMUs and AOCs that have currently been identified and a brief description of each unit.

Table 3-1
Resource Conservation and Recovery Act (RCRA)
Corrective Action Program Chronology

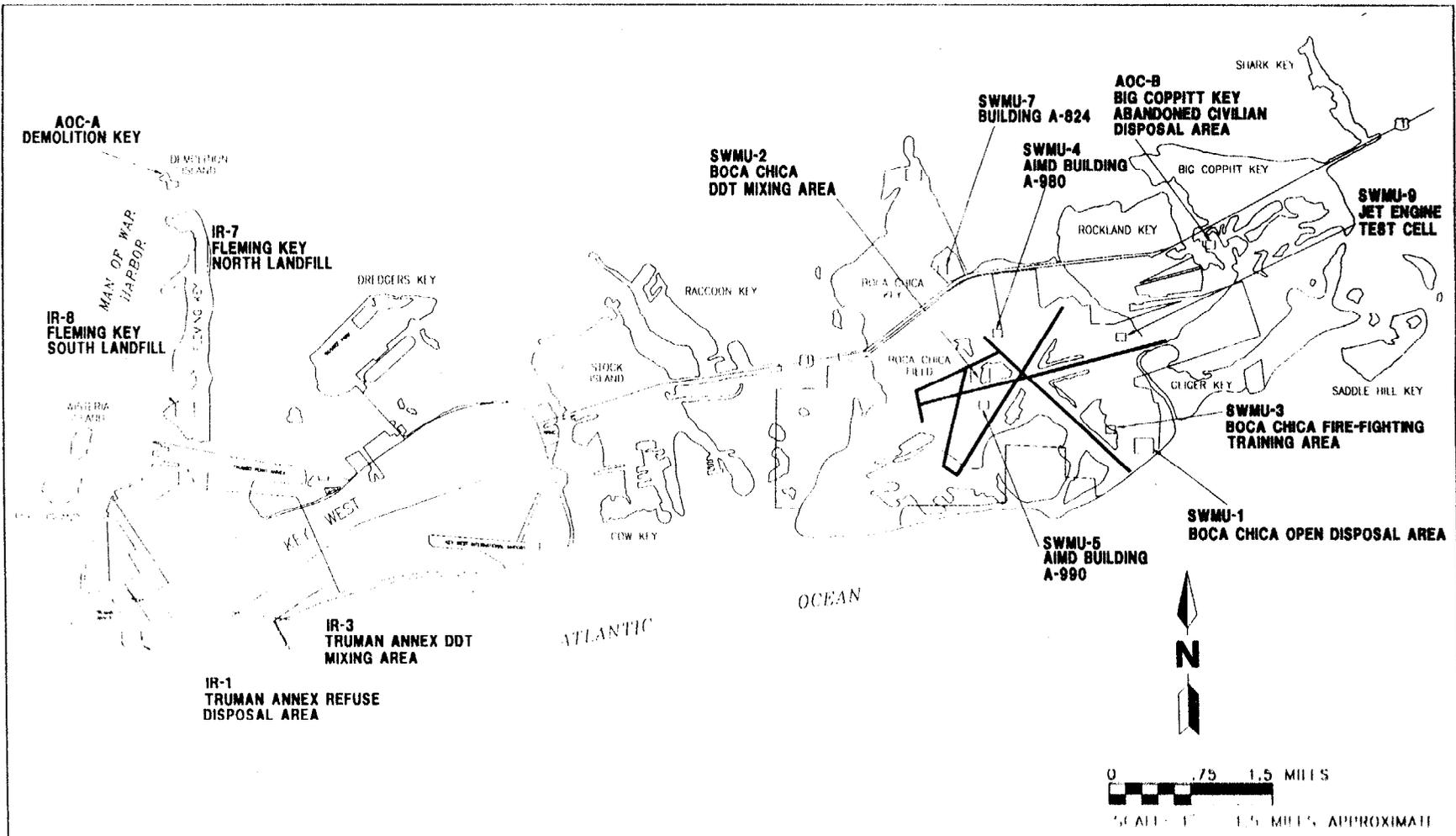
Corrective Action Management Plan
 NAS Key West
 Key West, Florida

Date	Event
May 1985	Initial Assessment Study (IAS) submitted for regulatory review.
June 1985	Subsurface hydrocarbon investigation conducted at Trumbo Point Annex.
August 16, 1985	Florida Department of Environmental Regulation (FDER; since renamed Florida Department of Environmental Protection [FDEP]), comments on IAS.
August 26, 1985	U.S. Environmental Protection Agency (USEPA) comments on IAS.
December 1985	Plan of Action for Verification Study (VS) submitted for regulatory review.
March 1987	VS final report submitted for regulatory review.
April 12, 1987	Environmental audit conducted at Truman Annex.
June 17, 1987	VS final report approved by FDER.
April 12, 1988	USEPA conducts Visual Site Inspection (VSI).
August 25, 1988	Draft RCRA Facility Assessment (RFA) prepared by USEPA.
October 2, 1989	Technical Review Committee (TRC) meeting for NAS Key West held.
October 1989	Final Draft Community Relations (COMREL) Plan Outline submitted for regulatory review.
October 1989	Baseline Risk Assessment workplan (Site 3) submitted for regulatory review.
October 1989	Remedial Investigation (RI) workplan submitted for regulatory review.
1989	Contamination Investigation workplan for Sites 2 and 9 submitted for regulatory review.
January 17, 1990	FDER comments on RI workplan, COMREL plan, and Baseline Risk Assessment (Site 3).
February 1990	Final report of site inspections for Sites 2 and 9 submitted for regulatory review.
February 1990	Final report of Baseline Risk Assessment (Site 3) submitted for regulatory review.
February 1990	Final - Treatability Study Implementation Plan (Site 9) submitted for regulatory review.
May 30, 1990	FDER enters into Consent Order No. 90-0115 regarding waste minimization and employee training and education.
June 22, 1990	TRC meeting for NAS Key West Part B permit held
August 30, 1990	Federal Hazardous and Solid Waste Amendments (HSWA) permit No. H044-144053 issued.
December 1990	Comprehensive Hazardous Waste Minimization Survey conducted at NAS Key West by U.S. Navy.
March 26, 1991	TRC Meeting held at NAS Key West
May 1991	Final RI Phase I report submitted for regulatory review
July 1991	RCRA Facility Investigation (RFI) Health and Safety Plan submitted for regulatory review.
July 1991	Final Implementation of Pilot Study at Trumbo Point Fuel Farm report submitted for regulatory review.
November 1991	Draft RFI workplan submitted for regulatory review.
February 1992	Draft RFI/RI workplan submitted for regulatory review.
March 1992	Corrective Measures Study (CMS) plan for Boca Chica dichlorodiphenyl trichloroethane (DDT) Mixing Area submitted for regulatory review.
June 15, 1992	CMS plan for Boca Chica DDT Mixing Area approved by FDEP.
July 7, 1992	FDEP comments on draft RFI workplan.
September 22, 1992	USEPA comments on draft RFI/RI workplan.

Table 3-1 (Continued)
Resource Conservation and Recovery Act (RCRA)
Corrective Action Program Chronology

Corrective Action Management Plan
 NAS Key West
 Key West, Florida

Date	Event
November 25, 1992	FDEP comments on draft RFI/RI workplan.
1992	FDEP enters into Consent Order No. 92-0867 for RCRA violations and wastewater treatment plan violations.
October 1993	Draft RFI/RI report submitted for regulatory review.
December 1993	FDEP comments on draft RFI/RI report
June 7, 1994	Final RFI/RI report submitted for regulatory review.
June 28, 1994	Florida hazardous waste (HW) storage facility permit No. H044-230669 issued.



**FIGURE 3-1
LOCATION OF SOLID WASTE MANAGEMENT UNITS,
AREAS OF CONCERN, AND INSTALLATION
RESTORATION SITES**



**CORRECTIVE ACTION
MANAGEMENT PLAN**

**NAVAL AIR STATION KEY WEST
KEY WEST, FLORIDA**

**Table 3-2
Solid Waste Management Unit (SWMU) and Area of
Concern (AOC) Summary**

Corrective Action Management Plan
NAS Key West
Key West, Florida

Activity	SWMU or AOC	Description
RFI	1	Boca Chica Open Disposal Area
RFI	2	Boca Chica DDT Mixing Area
RFI	3	Boca Chica Fire-Fighting Training Area
RFI	4	AIMD Building (A-980)
RFI	5	AIMD Building (A-990)
RFI	6	Waste Water Treatment Plant
RFI	7	Building A-824
RFI	8	HSW Storage Building
	'9	Jet Engine Test Cell (A-969)
RFI	A	Demolition Key
RFI	B	Big Coppitt Key Abandoned Civilian Disposal Area

'Newly identified SWMU.

Notes: RFI = Resource Conservation and Recovery Act (RCRA) Facility Investigation.

DDT = dichlorodiphenyl trichloroethane.

AIMD = Aircraft Intermediate Maintenance Department.

HSW = hazardous and solid waste.

4.0 SUMMARY OF CORRECTIVE ACTION PROGRAM STRATEGY

This CAMP outlines the strategy that has been developed to implement the CAP at NAS Key West. The strategy establishes a systematic approach to addressing the SWMUs and AOCs based on the results of the final RFI (IT, 1994). It establishes a schedule of priorities by SWMU and/or AOC and has been based on a qualitative assessment of the potential relative risks posed by the SWMUs and AOCs based on existing site knowledge. The qualitative assessment considered the following factors:

- potential types of contaminants,
- potentially affected media and migration pathways,
- potential volume of contaminated media,
- anticipated scope of additional corrective action investigations (for example, the type, frequency, and analyses of samples), and
- relationship of SWMUs to other environmental management programs.

The following SWMUs and AOCs, SWMUs 3, 7, 9, and AOCs A & B, are scheduled to undergo IRAs. These SWMUs and AOCs are perceived to have a variety of possible types of contaminants potentially affecting large areas and volumes of soil and groundwater. Because of the proximity of the SWMUs and AOCs to sensitive marine environments, these sites potentially impact sensitive environmental receptors by groundwater, surface water, or soil migration pathways. Phase I RFI findings characterized soil, sediment, and groundwater contamination at these specific SWMUs and AOCs (IT, 1994) and recommended that IRAs be conducted. Following the IRAs, Phase II RFI investigations will be conducted to confirm source removal and/or remediation below risk based concentration levels. Concurrent with the Phase II RFI, baseline risk assessments, both human health and ecological, will be completed.

Sufficient data have been collected during the Phase I RFI to begin a Corrective Measures Study (CMS) in parallel with subsequent Phase II RFI investigative rounds and planned IRAs if required. The first step in the CMS would begin by assessing the technologies and alternative remedies likely to be applied at the SWMUs and AOCs. A preliminary CMS remedy screening assessment would then be prepared to present the alternative remedies that would be applicable for these sites. This assessment would be presented as part of the CMS Workplan, if required. This would permit early initiation of the CMS process while site characterization is being completed.

SWMUs 1 and 2 are perceived to be good candidates for designation as a corrective action management unit (CAMU) for remedial purposes. The CAMU petition will be prepared and submitted to USEPA for approval prior to implementation of an IRA. The IRA is being implemented due to the proximity of the SWMUs to sensitive marine environments and potential impacts to sensitive environmental receptors by groundwater or soil migration pathways. Following the IRAs, Phase II RFI investigations will be conducted to confirm source removal and/or remediation below risk based concentration levels. Concurrent with the Phase II RFI, baseline risk assessments, both human health and ecological, will be completed.

If required a CMS will be prepared in parallel with the subsequent Phase II RFI investigative round and risk assessments. The first step in the CMS would begin by assessing the technologies and alternative remedies likely to be applied at the SWMUs. A preliminary CMS remedy screening assessment will be prepared to present the alternative remedies applicable for these sites. This assessment will be presented in the CMS Workplan if required. This will permit early initiation of the CMS process while site characterization is being completed.

Following completion of the IRAs at the SWMUs and AOCs outlined above, Phase II RFI investigations will be conducted to confirm source removal and/or remediation below risk based concentration levels. Concurrent with the Phase II RFI, baseline risk assessments, both human health and ecological, will be completed. In addition, any newly identified SWMUs or AOCs that have been identified will also be characterized in compliance with HSWA CAP requirements.

5.0 CORRECTIVE ACTION MANAGEMENT PLAN (CAMP) SCHEDULE

5.1 SCHEDULING ASSUMPTIONS. The basis of the CAMP schedule (Appendix A) is the schedule of compliance specified in the current HSWA permit (USEPA 1990; Appendix D). Additional details are presented in the CAMP schedule to show the tasks and durations anticipated for completing assessment of SWMUs and implementing IRAs as planned. This schedule is idealized and is based on the following assumptions.

- Timely and adequate resources will be available to the Navy to carry out the required tasks.
- RCRA Facility Investigation (RFI) workplans, RFI reports, CMS workplans, and CMS reports will be considered "primary" documents.
- Confirmatory sampling workplans, confirmatory sampling reports, IRA workplans, and IRA reports will be considered "secondary" documents. Workplan addenda, report addenda, or technical memoranda will also be considered secondary documents.
- All draft documents (primary or secondary) will require a minimum of 60 days (calendar) for regulatory review.
- All draft documents (primary or secondary) will require a minimum of 30 days (calendar) to revise in response to regulatory review comments prior to final publication.
- Final primary documents will require an additional 20 days (total of 80 days) for regulatory review.
- Final primary documents will require an additional 20 days (total of 50 calendar days) to revise in response to regulatory review prior to final publication.
- Workplans will contain operational schedules for implementation of their specific scope of work. The final approved workplan schedules will have precedence over the CAMP schedule.
- All revised final documents will require a minimum of 30 days for regulatory agencies to issue approvals or notices of technical inadequacy.
- Remedial Project Management (RPM) meetings will be scheduled on a quarterly basis or as needed depending on CAP and/or IRA activities.
- Restoration Advisory Board (RAB) meetings will be scheduled on a bi-monthly basis or as needed depending on CAP and/or IRA activities.
- The scope of corrective actions may be revised in response to new information gathered during field investigations, confirmatory sampling, and IRAs or corrective measures. Applicable schedule revisions will be made to the CAMP due to scope changes in accordance with the HSWA permit conditions.

5.2 DELIVERABLE SCHEDULE. Appendix B presents the milestone deliverable dates for primary and secondary documents. The schedule was developed based on the assumptions described in Section 5.1. Primary deliverables (e.g., applicable workplans, reports, and addenda described below) will be submitted to the USEPA Regional Administrator as draft documents. Regulatory comments will be incorporated into the document and resubmitted to the USEPA Regional Administrator as a final document. The USEPA Regional Administrator will then approve the document or issue Notice of Technical Inadequacy (NOTI) as appropriate. If no response from the USEPA Regional Administrator is received within 30 calendar days of the final submittal, the document will be considered final and ready to be implemented in accordance with the CAMP or applicable workplan schedule, as appropriate.

Reasonable attempts will be made by NAS Key West to comply with the deliverable dates. When a deliverable deadline cannot be achieved, NAS Key West will notify the USEPA Regional Administrator as soon as it is known, but no later than 14 calendar days before the deliverable date. The notification will describe the reason for the delay and request a revision to the deliverable date. This notification will be subject to the USEPA Regional Administrator's approval. In addition, the CAMP schedule will be updated on an annual basis to reflect existing conditions found at NAS Key West. Revision of the CAMP will be subject to the USEPA Regional Administrator's approval.

Two families of deliverables deserve special note, workplan addenda for IRA and reporting of IRA confirmatory results.

Workplan Addenda for Investigative Rounds. The scope of work for subsequent investigative rounds will be presented in workplan addenda that will serve as attachments to the existing approved RFI workplan (IT, 1994). The workplan addenda will describe SWMU-specific sampling activities and refer to applicable quality assurance and quality control (QA/QC) requirements and standard operating procedures described in the approved RFI workplan (IT, 1994).

Workplan addenda for confirmatory sampling will be titled "RCRA Facility Investigation workplan, Phase II" for the applicable SWMUs or AOCs. Workplan revisions for confirmatory sampling will be considered secondary documents.

The scope of the subsequent workplan will be designed to achieve a preliminary level of exposure pathway characterization so that a risk assessment screening can be accomplished. This will provide a greater degree of confidence in determining if no further action (NFA) is appropriate at this time for the applicable SWMUs and AOCs. The confirmatory sampling will also include collecting the majority of data needed for resolution of outstanding data gap issues discovered during confirmatory sampling, which will permit timely progress to the CMS stage as required.

Reporting of Investigative Round Results. Confirmatory sampling results obtained from implementation of the RFI workplan, Phase II, will be presented in an RFI Phase II report. The RFI Phase II report will be considered a primary document and will present investigative findings, conclusions, and recommendations. The RFI Phase II report will include baseline risk assessments for both human health and ecological receptors. Recommendations of NFA would also be proposed at this time for applicable SWMUs and AOCs based on this analysis.

REFERENCES

IT Corporation, 1994, RCRA Facility Investigation/Remedial Investigation Final Report, NAS Key West, Florida: June.

USEPA, 1990, HSWA Permit Number H044-144053: USEPA Region IV, August 30.

USEPA, 1994, HSWA Permit Number H044-230669: FDEP, June 28.

APPENDIX A
CORRECTIVE ACTION MANAGEMENT PLAN SCHEDULE

ACTIVITY DESCRIPTION	EARLY START	EARLY FINISH	ORIG DUR	1994 1995 1996 1997																															
				J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J
				ACTIVITIES REGULATORY REQUIREMENTS																															
PHASE I RFI REPORT		7JUN94A	0	◆																															
NOTIFICATION OF NEWLY IDENTIFIED SWMU	1FEB95A	17FEB95A	13	■																															
SWMU ASSESSMENT REPORT	10APR95	19JUN95	51	▬																															
DRAFT PHASE II RFI WORK PLAN	17APR95	7JUN95	38	▬																															
DRAFT RISK ASSESSMENT WORK PLAN	17APR95	7JUN95	38	▬																															
REGULATORY REVIEW DRAFT PH II RFI/RI/RA WRKPLANS	8JUN95	30AUG95	60	▬																															
RESPONSE TO COMMENTS	31AUG95	11OCT95	30	▬																															
FINAL PHASE II RFI WORK PLAN	12OCT95	22NOV95	30	▬																															
FINAL RISK ASSESSMENT WORK PLAN	12OCT95	22NOV95	30	▬																															
REGULATORY REVIEW OF FINAL PH II RFI/RI/RA WPs	23NOV95	20DEC95	20	▬																															
PHASE II RFI FIELD WORK	21DEC95	28MAR96	70	▬																															
DRAFT PHASE II RFI REPORT	29MAR96	30CT96	135	▬																															
REGULATORY REVIEW DRAFT PH II RFI REPORT	4OCT96	27DEC96	60	▬																															
RESPONSE TO COMMENTS	30DEC96	7FEB97	30	▬																															
FINALIZE PH II RFI REPORT	10FEB97	21MAR97	30	▬																															
REGULATORY REVIEW OF FINAL PH II RFI/RI/RA RPT	24MAR97	18APR97	20	▬																															
DRAFT CMS WORKPLAN	1JUN95	9AUG95	50	▬																															
REGULATORY REVIEW DRAFT CMS WORKPLAN	10AUG95	1NOV95	60	▬																															
RESPONSE TO COMMENTS	2NOV95	13DEC95	30	▬																															
FINAL CMS WORKPLAN	14DEC95	28DEC95	10	▬																															
REGULATORY REVIEW FINAL CMS WORKPLAN	29DEC95	25JAN96	20	▬																															
DRAFT CMS REPORT	4NOV96	24FEB97	80	▬																															
REGULATORY REVIEW DRAFT CMS REPORT	25FEB97	19MAY97	60	▬																															
RESPONSE TO COMMENTS	20MAY97	30JUN97	30	▬																															
FINAL CMS REPORT	1JUL97	11AUG97	30	▬																															
REGULATORY REVIEW FINAL CMS REPORT	12AUG97	8SEP97	20	▬																															
RFI COMPLETE		31OCT97	0	◆																															
				INTERIM REMOVAL ACTIONS																															
IRA WORK PLAN	30JAN95A	17FEB95A	15	■																															
PRE-CONSTRUCTION SAMPLING	13FEB95A	17MAR95A	25	■																															
PERFORM REMEDIAL ACTIONS	12JUN95	29SEP95	80	▬																															
PUBLIC COMMENT PERIOD	20CT95	10NOV95	30	▬																															

Plot Date 7APR95
 Data Date 1JUN94
 Project Start 1JUN94
 Project Finish 2FEB98

Activity Bar/Early Dates
 Critical Activity
 Progress Bar
 Milestone/Flag Activity

KYMC

ABB E.S. INC. / NAVY CLEAN
 NAS KEY WEST - CAMP
 PROJECTED SCHEDULE

Sheet 2 of 2

Date	Revision	Checked	Approved

APPENDIX B
DELIVERABLE SCHEDULE

NAS Key West CAMP

Deliverable Schedule – Revised 04/95

	Primary/ Secondary	Completion Date	Approval Date
NAS Key West RFI/RI Workplan			
Submit Draft Phase II RFI/RI Workplan	Primary	7 June 95	
Submit Draft Phase II Risk Assessment Workplan		7 June 95	
Regulatory Review and Comment		30 Aug 95	
Response to Regulatory Comments on Draft Phase II RFI/RI Workplans		11 Oct 95	
Submit Final Phase II RFI/RI Workplan		22 Nov 95	
Submit Final Phase II Risk Assessment Workplan		22 Nov 95	
Regulatory Review and Approval	Primary	20 Dec 95	
NAS Key West RFI/RI Report			
Submit Draft Phase II RFI/RI/RA Report	Primary	3 Oct 96	
Regulatory Review and Comment		27 Dec 96	
Response to Regulatory Comments		7 Feb 97	
Submit Final Phase II RFI/RI/RA Report		21 March 97	
Regulatory Review and Approval	Primary	18 Apr 97	
NAS Key West CMS Workplan			
Submit Draft CMS Workplan	Primary	9 Aug 95	
Regulatory Review and Comment		1 Nov 95	
Response to Regulatory Comments		13 Dec 95	
Submit Final CMS Workplan		28 Dec 95	
Regulatory Review and Approval	Primary	25 Jan 96	
NAS Key West CMS Report			
Submit Draft CMS Report	Primary	24 Feb 97	
Regulatory Review and Comment		19 May 97	
Response to Regulatory Comments		30 June 97	
Submit Final CMS Report		11 Aug 97	
Regulatory Review and Approval	Primary	8 Sep 97	
NAS Key West Permit Requirements			
Notification of Newly Identified SWMU	Secondary	17 Feb 95	17 Feb 95
SWMU Assessment Report	Secondary	19 June 95	