

<MASTER>

58-05



U.S. ARMY BASE  
REALIGNMENT AND  
CLOSURE 95 PROGRAM

BRAC Cleanup Plan  
Report

[Site Name]

Prepared for



U.S. Army Corps of Engineers  
[District Name] District  
Seattle District

[month day.] 1996

**Woodward-Clyde** 

Woodward-Clyde Federal Services  
1500 Century Square, 1501 Fourth Avenue  
Seattle, WA 98101-1662

**DRAFT**  
**Version 1 Outline**  
**BRAC Cleanup Plan**  
**Sudbury Training Annex, Massachusetts**

Section	Source of Information/Guidance	Percent Complete
<b>EXECUTIVE SUMMARY</b>	BCP Fig 5-1	0%
<b>LIST OF ACRONYMS</b>	BCP (AL)	30%
<b>SECTION ONE INTRODUCTION AND SUMMARY</b>		
1.1 Environmental Response Objectives	BCP 6.0	0%
1.2 BCP Purpose, Updates, and Distribution	BCP 2.0	10%
1.3 BCT/Project Team	BCP 2.0	20%
1.4 Site Description and History of Installation		
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1.4.2 Installation History and Mission	EBS (Sections 3.1 and 3.2)	75%
1.5 Environmental Setting		
1.5.1 Physiography	EBS (Section 1.5.2)	90%
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1.5.3 Climatology	EBS (Section 1.5.3)	90%
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3.2.9 Oil/Water Separators	EBS (Section 4.1), Archives	50%
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**NOTES:**

BCP: BRAC Cleanup Plan (BCP) Guidebook, 1995

EBS: Environmental Baseline Survey Report, Sudbury Training Annex, Massachusetts

BUR: Bottom-up review.

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## LIST OF ACRONYMS

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ACM	Asbestos Containing Material
AST	Aboveground Storage Tank
BCP	BRAC Cleanup Plan
bgs	Below Ground Surface
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act, as amended
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CERFA	Comprehensive Environmental Response Facilitation Act
DOD	Department of Defense
EBS	Environmental Baseline Survey
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification System
FINDS	Facility Index System
GIS	Geographic Information System
IRP	Installation Restoration Program
LBP	Lead-Based Paint
LUST	Leaking Underground Storage Tank
MSL	Mean Seal Level
NMFS	National Marine Fisheries Service
NPL	National Priorities List
NRC	U.S. Nuclear Regulatory Commission
PCB	Polychlorinated Biphenyl
pCi/l	Picocuries Per Liter
PL	Public Law
POL	Petroleum, Oil, and Lubricants
ppb	Parts Per Billion
ppm	Parts Per Million
RCRA	Resource Conservation and Recovery Act
RCRIA	Resource Conservation and Recovery Information System

## LIST OF ACRONYMS

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RMIS	Resource Management Information System
ROTC	Reserve Officer's Training Corps
SI	Site Inspection (or Investigation)
TPH	Total Petroleum Hydrocarbon
TPHG	Total Petroleum Hydrocarbon as Gas
TSD	Treatment, Storage, and Disposal
USACE	U.S. Army Corps of Engineers
USACHPPM	U.S. Army Center for Health Promotion and Preventive Medicine
USAEHA	U.S. Army Environmental Hygiene Agency
USAR	U.S. Army Reserve
USGS	U.S. Geological Survey
UST	Underground Storage Tank
UXO	Unexploded Ordnance
WRR	Western Region Recruiting Command

## **EXECUTIVE SUMMARY**

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This Base Realignment and Closure (BRAC) Cleanup Plan (BCP) contains the status, management and response strategy, and action items related to the [site's name] ongoing environmental restoration and associated compliance programs. These programs support full restoration, where feasible, 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 BCP considers the following regulatory mechanisms: the BRAC Act; National Environmental Policy Act (NEPA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Community Environmental Response Facilitation Act (CERFA); Resource, Conservation, and Recovery Act (RCRA); and other applicable laws.

The BCP is a planning document, and the information and assumptions presented may not necessarily have complete approval from the base authorities and/or federal and state regulatory agencies. The BCP is a dynamic document that will be updated regulatory to reflect the current status and strategies of remedial actions. This document is the first in a series of updates/modifications and represents condition and strategies as of [Month] 1996.

### **STATUS OF DISPOSAL, REUSE, AND INTERIM LEASE PROCESS**

[Summary from Section 2.0 of the BCP]

### **STATUS OF ENVIRONMENTAL RESTORATION PROGRAM**

[Summary from Section 3.0 of the BCP]

### **KEY RESTORATION AND TRANSFERABILITY STRATEGIES AND SCHEDULES**

[Summary from Section 4.0 of the BCP]

### **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 for [site name].

**TABLE ES-1  
BCT/PROJECT TEAM ACTION ITEMS**

ACTION ITEM	PROGRAM REVIEW ITEM	STATUS	
		IN PROGRESS	TO BE PERFORMED
<b>Compliance Activities</b> UST Removal/Compliance  PCB Removal  Hazardous Waste/Materials Management  Wastewater Discharge  Air Emissions  Asbestos  NEPA  <b>CERCLA 120 (h)(3) Considerations</b> Environmental Condition of Property  Suitability of Property Transfer  <b>Community Relations</b>  <b>Management and Administrative Support Activities</b>			

<Information for the table to be provided by BCT>



## 1.0 INTRODUCTION

The BRAC Cleanup Plan for [site name] was prepared by Woodward-Clyde for the U.S. Army Corps of Engineers (USACE) under Contract No. DACA67-95-D-1001, Delivery Order No. \_\_\_\_\_. This section describes the objectives of the environmental restoration program, explains the purpose of the BCP, introduces the BRAC Cleanup Team (BCT) and Project Team formed to review the program, provides a brief history of the base, and summarizes the site environmental setting. As a result of past waste and resource management practices at [site name], some areas have become contaminated by [various hazardous substances, contaminants, or wastes]. In response, a number of environmental restoration programs [have been] initiated at the base. In addition, compliance with applicable environmental laws and regulations will ensure that present waste and resource management practices conducted by the [Component] [and property lessees] are carried out in a manner that protects human health and the environment.

The purpose of this BCP is to summarize the current status of the [site name] environmental restoration programs and present 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 Restorations Program (IRP) and the associated environmental compliance programs to support full restoration of the base. 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 remedial actions (RAs). This BCP was prepared with information available as of [Month] 1996.

This BCP is a planning document. Information, schedules, and RAs presented in this BCP do not necessarily represent those that have been or will be approved by the [component] or federal and state regulatory agencies. It was necessary to make certain assumptions and implementation programs and cost estimates could be dramatically altered. Such changes would then be reflected in future updates to the BCP.

Section 2 provides a summary of the current status of the [site name] property disposal planning process and describes the relationship of the disposal process with other environmental programs. Section 3 provides a summary of the current status and past history of the [site name] IRP and associated environmental compliance programs, community relations activities that have occurred

to date, and the environmental condition of base property. Section 4 describes the base-wide strategy for environmental restoration, including the strategies for dealing with each operable unit (OU) on base, where applicable. The master schedules of planned and anticipated activities to be performed throughout the duration of the environmental restoration program, including associated compliance activities, are provided in Section 5. Section 6 describes specific technical and/or administrative issues to be resolved and present 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 cost for the environmental restoration program.
- **Appendix B:** Technical documents and data loading summary, listings of previous environmental restoration program deliverables by program and by site.
- **Appendix C:** Summaries of decision documents (DDs) for which an RA was selected.
- **Appendix D:** Summaries of each decision document for each site or operable unit for which a no further action (NFA) decision has been made.
- **Appendix E:** Working conceptual models for sites, zones, or OUs, where applicable.

## 1.1 ENVIRONMENTAL RESPONSE OBJECTIVES

The objectives of the base closure environmental restoration program at [site name] are as follows:

*<This section is to be provided by the BCT in bullet format. See Section 6 (example BCP Chp. 1.1, page 1-3)>*

## 1.2 BCP PURPOSE, UPDATES, AND DISTRIBUTIONS

This BCP presents, in summary fashion, the status of [site name]'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 [site name] BCP 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. **[Risk assessment protocols will incorporate further land use in exposure scenarios].**

The BCP is a “living” document; it will be updated on an annual basis. Updates of the BCP will be distributed to each member of the BCT, as well as additional parties identified in the distribution list provided in Appendix F as Table 5-1.

### **1.3 BCT/PROJECT TEAM**

The [site name] BCT has been established and is led by the BRAC Environmental Coordinator. BCT meetings are the means of conducting periodic program reviews and reaching consensus on decisions with federal and state regulators. The BCT includes representatives of the installation, the Environmental Protection Agency (EPA) Region, and the [state agency name]. The BCT is supported by a Project Team consisting of technical, operational, reuse, and administrative specialists, as needed. A list of the BCT and Project Team members and description of their roles and responsibilities is provided in Table 1-1.

*<The BCT will provide the list of team members and the descriptions of their roles and responsibilities>*

### **1.4 SITE DESCRIPTION AND HISTORY OF INSTALLATION**

This section provides a description of the site and operations history of the Hingham Annex.

*<This section is to be developed by WCFS from Sections 1.0 and 3.1 of the EBS>*

## 1.4.1 Site Description

## 1.4.2 Installation History and Mission

## 1.5 ENVIRONMENTAL SETTING

*<WCFS to insert Section 1.5 of the EBS>*

### 1.5.1 Physiography

### 1.5.2 Demographics

### 1.5.3 Climatology

### 1.5.4 Hydrology

### 1.5.6 Geology and Soils

### 1.5.5 Hydrogeology

## 1.6 HAZARDOUS SUBSTANCES AND WASTE MANAGEMENT PRACTICES

*<WCFS to insert Section 3.2 of the EBS>*

### 1.6.1 HAZARDOUS SUBSTANCE ACTIVITIES

### 1.6.2 WASTE MANAGEMENT ACTIVITIES

## 1.7 OFF-BASE PROPERTY/TENANTS

**TABLE 1-1  
BCT/PROJECT TEAM MEMBERS**

NAME	TITLE	AFFILIATION	TELEPHONE NUMBER	TELEFAX NUMBER	ROLE/RESPONSIBILITY
<b>BCT Members</b>					
<b>Project Team Members</b>					
<b>Other Participants</b>					

*<Information for this table to be provided by BCT.>*

**TABLE 1-2  
HISTORY OF INSTALLATION OPERATIONS**

PERIOD	TYPE OF OPERATION	HAZARDOUS SUBSTANCE ACTIVITIES	MAP REFERENCE

*<Information for this table to be completed by WCFS from Section 3. of the EBS >*

**TABLE 1-3  
SUMMARY OF HAZARDOUS WASTE GENERATING ACTIVITIES**

FACILITY (BLDG.)	UNIT	ACTIVITY	NAME OF WASTE MATERIALS	GENERATION RATE	DISPOSITION

*<Information for this table to be completed by WCFS from Section 3. of the EBS.>*

## 2.0 PROPERTY DISPOSAL AND REUSE

This section describes the status and strategy for real property disposal, as well as the relationship between environmental cleanup efforts and anticipated or known property transfer methods.

### 2.1 STATUS OF DISPOSAL PLANNING PROCESS

*<To be prepared by the BCT. Work products from BCT include text, tables, maps. See discussion below, BCP Guidebook Sections 3 (Items 27-30, pages 3-15 to 3-16), 4.1 (pages 4-3 to 4-7), and 6 (Example BCP Chapter 2, pages 2-1 to 2-18).*

**Disposal and Reuse Planning Status** *Summarize the disposal decisions for the installation. Indicate the status of the following, if relevant: Local Redevelopment Authority, Community Reuse Plan, Component Disposal Plan, component identification of installation areas with transfer limitations due to health or safety concerns, and any disposal and Reuse RODs that have been issued or are pending. Include in Chp. 2.1 of BCP.*

*Summarize planned or final disposal decisions that have been made or will be made in the Disposal and Reuse ROD. Include information on the status of the EIS and transfer for each parcel of property, where applicable. Consider: base-wide EBS and procedure for keeping EBS current, procedure for keeping information on known limitations to parcel use (e.g., UXO, natural or cultural resources, etc.), future needs in order to prepare separate parcel-specific EBSs to support transfer to another government agency, flexibility required to restructure current EBS data to support future transfer determinations if the present configuration of disposal and reuse parcels is modified.*

**Anticipated Reuse Map/Suitability of Property for Transfer Map** *Prepare and/or provide a map showing known or anticipated reuse parcels.*

**Reuse Parcel Table** *Develop a table indicating for each reuse parcel: identifier or name, description, proposed land use, collocated contamination (e.g., site numbers), anticipated property transfer date, transfer method, anticipated property recipient, disposal priority (high, medium, low), and rationale for priority (see attached table template prepared by WCFS).>*



**2.2 RELATIONSHIP TO ENVIRONMENTAL PROGRAMS**

*<To be prepared by BCT. Work products from BCT include text. See discussion below, BCP Guidebook Sections 3 (Items 30-32, page 3-16), and 6 (Example BCP Chapter 2, pages 2-19 to 2-20).*

*Anticipated Remedial Response Process Impacts Identify opportunities to analyze environmental impacts of anticipated remedial response process (for each contaminated site or area) in the disposal and reuse EIS for the installation. Summarize any action items.*

*Integrating Disposal-Related Community Involvement In cooperation with Base Transition Coordinator, identify opportunities to combine community involvement requirements of disposal planning process with community involvement efforts required for or associated with environmental programs. Summarize status, strategy, or any action items.*

*Institutional Controls Evaluate the need and the mechanisms for implementing institutional controls or deed restrictions on parcels where residual contamination is likely after completion of remedial actions, or where other health and safety concerns may exist into the future. Recommend any needed measures and indicate mechanisms in place to implement these measures.*

*Land Reuse and Risk Assessment Identify anticipated land reuses for disposal and reuse parcels in Chp. 2 and ensure that these uses are considered during development of risk assessment protocols and cleanup objectives.*

Disposal and reuse activities at [site name] are intimately linked to environmental investigations, restoration, and compliance activities for two basic reasons:

- Federal property transfers to nonfederal parties are governed by CERCLA Section 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 Section 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 CERFA amendment to CERCLA provided clarification to the

phrase “have been taken.” This clarification states that all remedial actions have been taken if the construction and installation of approved remedial designs have been completed, and the remedies have 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 remedies have been demonstrated to the Administrator to be operating properly and successfully does not preclude the transfer of the property. This deed requirement applies only to property on which a hazardous substance 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 transfer to private parties can occur.

The requirement for complying with CERCLA 120(h) and the possibility of residual contamination are factored into the property disposal and reuse process at [site name]. Table 2-1 takes these two factors into considerations, presents summary information on parcels at the installation, and provides an approximate timetable for transfer by deed of each parcel at the [site name].

The strategy and schedule for [site name] presented in this document are designed to streamline and expedite the necessary response actions associated with the parcels identified at the installation 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, [site name] environmental group has developed an environmental-condition-of-property map for the [site name] using , data from the base-wide Environmental Baseline Survey (EBS) (see text and figures in Section 3.4). This environmental-condition-of-property map provides the visualization of both contaminated areas and areas of no suspected contamination. It also provides a graphic that shows the relationship of these areas to disposal and reuse parcels.

### 2.3 PROPERTY TRANSFER METHODS

This section contains a brief description of planned or final disposal decisions that have been made or will be made in the Disposal and Reuse Record of Decision of the parcels which have been previously described.

### 2.3.1 Federal Transfer of Property

The various transfer methods being utilized or considered in the disposal process at [site name] are described in this section. These transfer methods were identified from U.S. Army BRAC disposal protocols established by Public Law 100-526 the Federal Property and Administration Services Act, the Surplus Property Act, the Federal Property Management Regulations, and the 1994 Defense Authorization Act. The status of each of the transfer methods are identified. Transfer methods that are not currently being considered but that could be used in the future disposal planning actions at the installation have also been identified.

*< The BCT is to provide text discussion the appropriate transfer methods for each installation. The following transfer methods, as applicable, are examples:*

- Federal transfer of property*
- No-cost public benefit conveyance*
- Economic development conveyance*
- Negotiated sale*
- Competitive public sale Widening of Public Highways*
- Donated property*
- Interim leases*
- Caretaker of property until disposal*

*Prepare a table of Existing Legal Agreements/Interim Leases, if appropriate (see attached Table 2-2 format prepared by WCFS)>*

**TABLE 2-1  
SUMMARY OF PARCEL REUSE**

<b>PARCEL</b>	<b>AREA (ACRES)</b>	<b>PRIORITY</b>	<b>PARCEL DESCRIPTION</b>	<b>POTENTIAL REUSE DESIGNATION</b>	<b>PROJECTED TRANSFER DATE</b>	<b>TRANSFER MECHANISM</b>	<b>RECIPIENT</b>

*<Information for this table to be completed by the BCT.>*

**TABLE 2-2  
EXISTING LEGAL AGREEMENTS/INTERIM LEASES**

<b>TITLE OF INTERIM LEASE /LEGAL AGREEMENT</b>	<b>BUILDING NUMBER/AREAS</b>	<b>DATE OF AGREEMENT</b>	<b>REUSE PARCEL</b>

*<Information for this table to be provided by the BCT>*

## **SECTION THREE      INSTALLATION-WIDE ENVIRONMENTAL PROGRAM STATUS**

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### **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 [site name]. It also summarizes the status of community involvement to date and describes the environmental condition and suitability for transfer of the BRAC parcels.

*<To be prepared by BCT with input from WCFS based on information gathered during EBS (EBS Section 4.0 and Table 4-1). Work products include text, tables, maps. See discussion below, BCP Guidebook Sections 3 (Items 3, 5, and 6, page 3-9 to 3-11), 4.2 (pages 4-8 to 4-13), and 6 (example BCP Chapter 3, pages 3-1 to 3-21, 3-52 to 3-67).*

### **3.1    ENVIRONMENTAL PROGRAM STATUS**

*Account for all contaminated sites requiring restoration. Clearly define the appropriate regulatory program and process under which each is being addressed.*

*Site Summary Table See attached table 3-1 template prepared by WCFS*

*Environmental Restoration Sites Map Prepare a map showing the location of all contaminated sites being addressed by IRP. The map should show: site numbers, defined or anticipated zones, OUs, or other designations, and any other pertinent information.*

*Status of Early Actions Table Summarize the status of early actions (including removal or other interim response actions) already taken at installation. Indicate the sites addressed, the type of action, purpose, and status of action. See attached Table 3-2 template prepared by WCFS.*

*Summarize installation-wide source discovery and assessment status. Summarize status of all efforts to ensure that all contaminated sites have been identified. Discuss any action items needed to address sites that have not been identified, if any are suspected.*

*Summarize the status of any related environmental programs (e.g., USTs, POL, asbestos, Lead-Based Paint, Radon, UXO, PCBs, Pesticides) that may constrain land use or otherwise impact cleanup activities.>*

## **SECTION THREE**

## **INSTALLATION-WIDE ENVIRONMENTAL PROGRAM STATUS**

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### **3.1.1 Restoration Sites**

### **3.1.2 Installation-Wide Source Discovery and Assessment Status**

### **3.1.3 Other Environmental Concerns (POL, Asbestos, Lead-Based Paint, Radon, UXO, PCBs, Pesticides)**

## **3.2 COMPLIANCE PROGRAM STATUS**

*<To be prepared by BCT with input from WCFS based on information gathered during EBS (EBS Section 4.0 and Table 4-1). Work products include text and tables. Summarize the status of the installation's environmental compliance programs, identifying USTs and above-ground storage tanks in separate table (see attached Tables 3-3 and 3-4 prepared by WCFS). See BCP Guidebook Sections 4.9 (Items 7, 16, and 18, pages 4-44 to 4-46) and 6 (example BCP Section 3.2.>*

## **SECTION THREE      INSTALLATION-WIDE ENVIRONMENTAL PROGRAM STATUS**

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**3.2.1 Storage Tanks**

**3.2.2 Hazardous Materials/Waste Management**

**3.2.3 Solid Waste Management**

**3.2.4 Polychlorinated Biphenyls (PCBs)**

**3.2.5 Asbestos**

**3.2.6 Radon**

**3.2.7 RCRA Facilities (SWMUs)**

**3.2.8 NPDES Permits**

**3.2.9 Oil/Water Separators**

**3.2.10 Unexploded Ordnance**

**3.2.11 Pesticides**

**3.2.12 Lead-Based Paint**

**3.2.13 Other**

### **3.3 STATUS OF NATURAL AND CULTURAL RESOURCES**

The status of the identification of the following natural and cultural resources programs are summarized in this section: threatened and endangered species; Native American resources; paleontological resources; wetland; surface waters; and flood plains.



## **SECTION THREE      INSTALLATION-WIDE ENVIRONMENTAL PROGRAM STATUS**

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*<To be provided by the BCT with input from WCFS based on limited information on T&E species in Section 3.4 of the EBS.>*

*Summarize the status of installation natural and cultural resources program(s), which may constrain land use or otherwise impact cleanup activities. Include, if applicable, separate chapters on archaeological resources, historic structures and resources, Native American resources, threatened and endangered species (state and federal), sensitive habitats, wetlands, surface waters, flood plains, and paleontological resources. Identify status of any agreements pertaining to these resources. Identify the status of any mitigation measures that must be adopted.>*

### **3.4 ENVIRONMENTAL CONDITION OF PROPERTY**

*<To be provided by WCFS based on EBS>*

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

*<Insert Section 5.1.1 of the EBS.>*

#### **3.4.2 Areas Where Only Storage Has Occurred**

*<Insert Section 5.1.2 of the EBS.>*

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

*<Insert Section 5.1.3 of the EBS.>*

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

*<Insert Section 5.1.4 of the EBS.>*

## **SECTION THREE      INSTALLATION-WIDE ENVIRONMENTAL PROGRAM STATUS**

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

*<Insert Section 5.1.5 of the EBS.>*

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

*<Insert Section 5.1.6 of the EBS.>*

### **3.4.7 Unevaluated Areas or Areas Requiring Additional Evaluation**

*<Insert Section 5.1.7 of the EBS.>*

### **3.4.8 Qualified Parcels**

*<Insert Section 5.1.8 of the EBS.>*

### **3.4.9 Suitability of Installation Property for Transfer by Deed**

*<Insert Section 5.1.8 of the EBS.>*

## **3.5 STATUS OF COMMUNITY INVOLVEMENT**

*<To be provided by BCT*

*Summarize the history and status of community involvement. Indicate the status of Community Relations Plan (or indicate if none exists), and highlight what community meetings have occurred. Specify the status of the installation Administrative Record (or other central repository), your TRC, and other program elements. >*

**TABLE 3-1  
SITE SUMMARY**

STUDY AREA NO. , CURRENT SITE NAME, AND DESCRIPTION	SITE CLASS (E.G., IRP, RCRA)	MATERIALS DISPOSED OF	DATES OF OPERATION	CONTAMINANTS OF CONCERN	SOURCE	MEDIUM OF CONCERN	STATUS OF RESPONSE	RISK TO HUMAN HEALTH AND THE ENVIRONMENT	REGULATOR PROGRAM/ PROCESS

*<To be prepared by WCFS from MEP>*

**TABLE 3-2  
REMEDIAL ACTIONS STATUS**

STUDY AREA NO. AND DESCRIPTION	ANNEX NO.	REMEDIAL IMPLEMENTED	PURPOSE	CLEAN CLOSURE APPROVED BY [REG. AGENCY NAME] (Y/N)	REGULATORY AGENCY	CURRENT IRP PHASE	FUTURE IRP PHASE

*<To be prepared by WCFS from information in MEP>*

**TABLE 3-3  
UNDERGROUND STORAGE TANK SUMMARY**

STUDY AREA NO.	LOCATION	UST NO.	YEAR INSTALLED	SIZE (GALS)/TYPE	SUBSTANCE STORED	STATUS	FUTURE ACTIONS

*<To be prepared by WCFS from EBS.>*

**TABLE 3-4  
ABOVEGROUND STORAGE TANK SUMMARY**

STUDY AREA NO.	LOCATION	UST NO.	YEAR INSTALLED	SIZE (GALS)/TYPE	SUBSTANCE STORED	STATUS	FUTURE ACTIONS

*<To be prepared by WCFS from EBS.>*

**TABLE 3-5  
RARE, THREATENED, OR ENDANGERED PLANT OR ANIMAL SPECIES**

*<To be prepared by WCFS from EBS.>*

## **4.0 INSTALLATION-WIDE STRATEGY FOR ENVIRONMENTAL RESTORATION**

This chapter describes and summarizes the installation-wide environmental restoration and compliance strategy for [site name].

*<To be prepared by BCT. Work products include text, tables, figures. See discussion below, BCP Guidebook Sections 3 (Items 10-16, pages 3-11 to 3-13), 4.3 and 4.4 (pages 4-14 to 4-19), and 6 (example BCP Chapter , pages 4-1 to 4-21).*

### **4.1 ZONE/OU/OTHER DESIGNATION STRATEGY**

This section reflects the relationship between contaminated sites, [zones/OUs/other], and reuse parcel. The priorities and sequence for cleanup that reflect a balance between risk to human health and the environment and the reuse priority of a parcel awaiting remedial action were determined by the BRAC Cleanup Team.

#### **4.1.1 Zone/OU/Other Designations**

*<To be provided by the BCT*

*Review the adequacy of existing investigative zones or other areas. Determine if other approaches (e.g., zones) should be used to optimize field management efforts and the integration of technical data that are being collected. Determine if OUs would enhance the restoration program. Summarize the study areas, the basis on which they are defined, and the sites encompassed by each.*

#### **4.1.2 Sequence of Zones/OUs/Other**

*Review the current planned sequence of zones/OUs/other to ensure optimal management approaches to decision making. Describe your zone/OU/other strategy. Prepare Table 4-1 summarizing cleanup sequence. For each zone/OU/other, provide a list of primary deliverables and associated deliverable dates. >*



## **SECTION FOUR**      **INSTALLATION-WIDE STRATEGY FOR ENVIRONMENTAL RESTORATION**

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### **4.1.3 Early Actions Strategy**

*Evaluate contaminated sites/areas for possible early actions, including immediate removal actions of “hot spots” while investigation, treatability studies, or other response actions continue. Reflect planned or anticipated early actions in a table and describe the early action strategy.*

### **4.1.4 Remedy Selection Approach**

*<Explicitly incorporate the following into the remedy selection approach:*

- *review of selected technology for application of expedited solutions*
- *identification of opportunities for application of presumptive remedies*
- *focused FSS*
- *ARARs*
- *risk- and technology-based restoration*
- *ACLs*
- *future land use*
- *NCP criteria*

*Summarize the approach to remediation of POL sites separately.*

*Indicate the status and strategy of any initiatives for accelerating cleanup.*

*Create one- or two-page summaries of the decision documents or RODs that have been prepared for all zones/OUs/other. Use the format specified in Section 4.8.2 of the BCP Guidebook. Develop two separate categories of summaries:*

- *Site for which No Further Response Action is Planned*
- *All other sites>*

## **SECTION FOUR      INSTALLATION-WIDE STRATEGY FOR ENVIRONMENTAL RESTORATION**

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### **4.1.5 Strategy for Other Environmental Concerns (POL, Asbestos, Lead-Based Paint, Radon, UXO, PCBs, Pesticides)**

## **4.2 COMPLIANCE STRATEGY**

*<To be provided by the BCT. Work products include text, tables, if appropriate, and figures. See BCP Guidebook Section 4.9 (pages 4-44 to 4-46) and Section 6 (example BCP Section 4.2).>*

*Refer to the EBS to develop an overall compliance strategy. Review the relationships between installation's environmental compliance and restoration programs to ensure any releases from active (mission/operational-related compliance) units are fully addressed during concurrent restoration efforts (or if the site is inactive, explain this). This section should include text and tables for each closure-related compliance program strategy and for each mission/operational-related compliance strategy (refer to WCFS example Table 4-3).>*

## **SECTION FOUR**

## **INSTALLATION-WIDE STRATEGY FOR ENVIRONMENTAL RESTORATION**

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4.2.1 Storage Tanks

4.2.2 Hazardous Materials/Waste Management

4.2.3 Solid Waste Management

4.2.4 Polychlorinated Biphenyls (PCBs)

4.2.5 Asbestos

4.2.6 Radon

4.2.7 RCRA Facilities (SWMUs)

4.2.8 NPDES Permits

4.2.9 Oil/Water Separators

4.2.10 Unexploded Ordnance

4.2.11 Pesticides

4.2.12 Lead-Based Paint

4.2.13 Other

### **4.3 NATURAL AND CULTURAL RESOURCES STRATEGY(IES)**

*<Summarize the strategy for the installation natural and cultural resources program(s), which may constrain land use or otherwise impact cleanup activities. Include, if applicable, separate chapters on archaeological resources, historic structures and resources, Native American*

## **SECTION FOUR      INSTALLATION-WIDE STRATEGY FOR ENVIRONMENTAL RESTORATION**

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*resources, threatened and endangered species (state and federal), sensitive habitats, wetlands, surface waters, flood plains, and paleontological resources. Identify the strategy for preserving these resources, and for determining any mitigation measures that must be adopted.>*

### **4.4 COMMUNITY INVOLVEMENT/STRATEGY**

[\_\_\_\_\_, dated **Month, year**] has been implemented to facilitate communication among the Component; other federal, state, or local agencies; and interested groups and other community residents concerning IRP activities at **[site name]**. This communication ensures that all parties involved or interested are provided accurate, consistent information in a timely manner concerning related cleanup activities, contaminants, and possible effects of any contamination. It provides mechanisms for all parties to provide input into the decision-making process of the IRP.

The **[site name]** BRAC Cleanup Team has adopted the following strategy to support a proactive community relations program in accordance with the CERCLA requirements:

*<Describe the primary elements of the installation Community Relations Plan>*

**TABLE 4-1  
CLEANUP SEQUENCE**

PARCEL	STUDY AREA	ENVIRONMENTAL RISK	REUSE PRIORITY	CLEANUP SEQUENCE	RECONCILE COMMENTS

*<Information for this table to be completed by the BCT. See example BCP Table 4-2>*

**TABLE 4-2  
ENVIRONMENTAL RESTORATION PLANNED EARLY ACTIONS**

<b>STUDY AREA OR SITE</b>	<b>OTHER UNIT IDENTIFIER</b>	<b>ACTION</b>	<b>OBJECTIVE</b>	<b>TIME FRAME</b>

*<Information for this table to be completed by the BCT. See example BCP Table 4-3.>*

**TABLE 4-3  
ENVIRONMENTAL COMPLIANCE PLANNED EARLY ACTIONS**

SITE	UST NUMBER	ACTION	OBJECTIVE	TIME FRAME

*<Information for this table to be completed by the BCT. See example BCP Table 4-4>*

## 5.0 ENVIRONMENTAL PROGRAM MASTER SCHEDULES

This section presents the [site name] Master Schedule of anticipated activities in the installations' environmental programs. These schedules are simplified from detailed network and operational schedules developed to support site/zone-specific work plans and compliance agreements. IRP activities are graphically summarized in Figure 5-1. Compliance activities are summarized in Figure 5-2. Natural and cultural resource activities are summarized in Figure 5-4.

*<During the preparation, review, or modification of the installation master schedules, the BCT should attempt to reconcile parcel reuse priorities with the need to protect human health and the environment>*

## 5.1 ENVIRONMENTAL RESTORATION PROGRAM

This section provides the response schedules and fiscal year requirements for the environmental restoration program for [site name].

### 5.1.1 Response Schedules

*<This schedule is to be provided by the BCT. Work products include text, tables, if appropriate, and figures. See discussion below, BCP Guidebook Sections 3 (Items 17-19, page 3-13), 4.5 (pages 4-21 to 4-27), and 6 (example BCP Chapter 5, pages 5-1-5-21).>*

**Master Restoration Schedule** *Develop or modify the installation Master Restoration Schedule of all anticipated activities in the restoration program. This schedule should reflect the BCT and Project Team's best estimate. It should also be based on long-range strategic planning, and supported on a more detailed level by optimized critical path and/or network planning documentation. The schedule will reflect all base-wide restoration activities, regardless of the funding source. If non-BRAC funds are being utilized, annotate this when preparing the funding requirements. A macro-level schedule that indicates all removal and remedial*



*response actions required. A Gantt-type format is appropriate (see examples in example BCP, Section 5, pages 5-3 to 5-19).*

*As a separate section, discuss whether any agreements (e.g., FFAs, IAGs, etc.) will require modification in order to accommodate the dates proposed in the Master Restoration Schedule.*

*Prepare a separate schedule showing all past executed environmental response efforts or actions taken at the installation. Include all past primary document deliverable dates from any FFA, IAG, or other negotiated agreements. Include this in Appendix B of the BCP.*

*Program Review Checklist As a recommended approach to the Program Review, do the following:*

- *Using the existing zone/OU/Other and other restoration-related schedules as a basis, construct a Master Restoration Schedule.*
- *Evaluate the sequence of operations in the critical path for each zone/OU/other.*
- *Indicate the sequence of zones/OUs/others in Chapter 4.1.3 of the BCP; indicate the schedules for all zones/OUs/others as part of the Master Restoration Schedule in Chapter 5.1.1 of the BCP.*
- *Evaluate the sequence of operations in the critical path for each zone/OU/other and determine schedules; incorporate these schedules into the Master Restoration Schedule.*
- *Integrate scheduling elements from other Program Review Items, including schedules for zone/OU/other investigations, early actions, and remedy selection into the Master Restoration Schedule in Chapter 5.1.1 of the BCP. Be sure to include all assumptions that were made in developing the Master Restoration Schedule.*
- *Review established deadlines and commitments in FFAs, permits, compliance agreements or orders, and other documents for incorporation into the Master Restoration Schedule.*

- *Examine the impact of early actions and acceleration of selected elements of the program on the schedules and resources available for completion of the remaining elements of the program.*
- *Attempt to resolve any schedule -related issues that arise as a result of developing the installation Master Restoration Schedule at a BCT meeting or indicate the status and strategy for their resolution in chapter 6 of the BCP.*

*Once the macro-level Master Restoration Schedule has been laid-out, use it as a tool to determine when submissions, field activities, and other items may conflict or overlap. Examine the effects of major milestones required by agreements, permits, or orders that govern the restoration program. Use the Master Restorations Schedule to examine the impact of any initiatives the BCT develops to accelerate cleanup and reuse activities, as well as other anticipated changes in the Master Restoration Schedule.*

### **5.1.2 Requirements by Fiscal Year**

*<See Appendix A of the example BCP in Chapter 6 of the BCP Guidebook for example of funding requirements presentation.>*

## **5.2 COMPLIANCE PROGRAMS**

This section provides the master schedules and fiscal year requirements for environmental compliance at [site name].

*<Review all existing compliance schedules. Develop or modify the installation Master Schedule to all compliance programs and ensure the schedules are consistent with strategies developed in Section 4 of the BCP. Develop separate Gantt-type schedules for closure-related and mission/operational-related compliance activities.>*

### 5.2.1 Master Compliance Programs

The compliance schedule for [site name] is provided in Figure 5-3.

### 5.2.2 Requirements by Fiscal Year

## 5.3 NATURAL AND CULTURAL RESOURCES

This section includes [a schedule or schedules] for completing the following natural and cultural resources evaluation: threatened and endangered species; sensitive habitats; archaeological resources; historic structures and resources; Native American resources; paleontological resources; and wetlands, surface waters and floodplains, as applicable.

### 5.3.1 Natural and Cultural Resources Schedule(s)

*<Compile the installation Natural and Cultural Resources Program(s) Schedule of all anticipated activities in the Natural and Cultural Resources Program. This composite schedule should reflect any separate schedules for all natural and cultural resources surveys, EBSs, EAs, EISs, wetlands determinations, and other required activities. It should also indicate the installation schedule for CERFA compliance. Provide one or more Gantt-type schedules.>*

### 5.3.2 Requirements by Fiscal Year

*<See Appendix A of the example BCP in Chapter 6 of the BCP Guidebook for example of funding requirements presentation.>*

## 5.4 BCT/PROJECT TEAM/RAB MEETING SCHEDULE

*<Provide, in table format, at least a three-month schedule of BCT/Project Team/RAB meetings. Include meeting dates, locations, and specific technical, operational, or administrative issues to be resolved at the meetings.>*

**TABLE 5-1  
BCT/PROJECT TEAM MEETING SCHEDULE**

MEETING TITLE	ATTENDEES	TOPIC	LOCATION	DATE

*<To be prepared by BCT>*

## 6.0 TECHNICAL AND OTHER ISSUES TO BE RESOLVED

This section summarizes technical and other issues that are yet to be resolved. These issues include information management; the usability of historical data; data gaps; natural (background) levels of elements and compounds in soil, groundwater, surface water, and sediments; risk assessment; state cleanup standards; and program initiatives to complete cleanup requirements as required to meet property transfer schedules.

*<In this section, the BCT needs to assess the issues identified in the following subsections and determine whether they are relevant outstanding issues for this installation. If so, address them. If not, state that they are not applicable. Also, the BCT should add and address any other outstanding issues of concern for this installation. Work products include text, tables, and maps or figures, if appropriate. See discussion below, BCP Guidebook Sections 3 (Items 20-26, pages 3-14 to 3-15), 4.11 to 41.16 (pages 4-53 to 4-74), and 6 (example BCP Chapter 6, pages 6-1 to 6-26).*

## 6.1 DATA USABILITY

This section summarized issues that need to be resolved with regard to managing information gathered and use in the base environmental restoration and compliance programs. The objective of this section is to provide the following:

*<Assess investigative data collected to date for adequacy for environmental restoration decision making. Issues to be considered include: QA/QC review, validation, DQOs, DQM, etc.>*

**6.1.1 BRAC Cleanup Team Action Items****6.1.2 Rationale****6.1.3 Status/Strategy****6.2 DATA INTEGRATION AND MANAGEMENT**

This section summarizes unresolved issues pertaining to the validity of using historical data sets in the base environmental restoration program.

*<Account for all past project deliverables; summarize the information chronologically in a table (oldest documents first). See Item 21 of Chapter 3 in BCP Guidebook for table format. Items to consider: Are there data deficiencies?, Is there an electronic database?, Can the system be made into a Master Database that can support all future environmental decision making?>*

*Specify the status of the installation data management efforts, including Project Team action items and data management needs.*

**6.3 DATA GAPS**

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

*<Based on the conceptual model developed in 6.10 below, determine what data gaps still exist and what efforts must be made to fill them. Indicate the status, strategy, and action items for filling any identified data gaps.>*

**6.3.1 BRAC Cleanup Team Action Items****6.3.2 Rationale**

Effective identification and filling of data gaps will permit the development of comprehensive conceptual zone or site models for site characterization and risk assessment. Effective analysis of data gaps will also facilitate the completion of Remedial Investigation (RI) efforts so that appropriate remedial action can be identified and evaluated. This information will also facilitate the identification of clean areas at [site name].

**6.3.3 Status/Strategy****6.4 BACKGROUND LEVELS**

*<Assess the extent to which background levels have been established for the various environmental media. Assess any outstanding issues and indicate status, strategy, and action items necessary to resolve outstanding issues.>*

**6.5 RISK ASSESSMENT**

*<Assess adequacy of existing risk assessment protocols. Report risk assessment status, strategy, and action items.>*

**6.6 BASE-WIDE REMEDIAL ACTION STRATEGY****6.7 INTERIM MONITORING OF GROUNDWATER AND SURFACE WATER****6.8 EXCAVATION OF CONTAMINATED MATERIALS****6.9 PROTOCOLS FOR REMEDIAL DESIGN REVIEWS****6.10 CONCEPTUAL MODELS**

*<Examine existing data in relevant databases or documents to prepare working conceptual data summaries for complex sites. The conceptual model data summaries should reflect the installation's specific program management approach. The conceptual model summaries should consist of the Study Area map, one or more cross-sections, and a supporting data table that summarizes the following: current site identification, site description and source characterization, background concentrations, pathway descriptions, potential receptors, contaminants, chemical standards, exceedences, and potential restoration goals.*

**6.11 CLEANUP STANDARDS**

*<Assess adequacy of existing ARARs. Indicate status, strategy, and action items for establishing chemical- location-, and action-specific ARARs for response actions. Where available, prepare in table format the chemical-specific ARARs.*

**6.12 INITIATIVES FOR ACCELERATING CLEANUP**

The following initiatives have been implemented by the Project Team for expediting response actions at the installation:



**6.13 REMEDIAL ACTIONS****6.14 REVIEW OF SELECTED TECHNOLOGIES FOR APPLICATION OF EXPEDITED SOLUTIONS****6.15 HOT SPOT REMOVALS****6.16 IDENTIFICATION OF CLEAN PROPERTIES****6.17 OVERLAPPING PHASES OF THE CLEANUP PROCESS****6.18 IMPROVED CONTRACTING PROCEDURES**

*<Assess whether installation has a contracting strategy in place that will facilitate the execution of the entire environmental restoration program. Assess the potential for improved contracting procedures. Include the status of contracting strategy development and any action items.*

## **SECTION SIX**

## **TECHNICAL AND OTHER ISSUES TO BE RESOLVED**

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**6.19 INTERFACING WITH THE COMMUNITY REUSE PLAN**

**6.20 BIAS FOR CLEANUP INSTEAD OF STUDIES**

**6.21 EXPERT INPUT ON CONTAMINATION AND POTENTIAL REMEDIAL ACTIONS**

**6.22 PRESUMPTIVE REMEDIES**

**6.23 PARTNERING (USING INNOVATIVE MANAGEMENT, COORDINATION, AND COMMUNICATION TECHNIQUES)**

**6.24 UPDATING THE EBS AND NATURAL/CULTURAL RESOURCES DOCUMENTATION**

**6.25 IMPLEMENTING THE POLICY FOR ON-SITE DECISION MAKING**

**TABLE 6-1  
FUTURE LAND USE RISK ASSESSMENT FOR DEVELOPMENT OF REMEDY SELECTIONS**

SITE ID	RISKS*	CONTAMINANTS			CURRENT USE	ADJACENT USES	ANTICIPATED USES
		GROUNDWATER	SOIL	SURFACE WATER/ SEDIMENT			

*<Information for this section will be provided by the BCT.>*

**TABLE 6-2  
ENVIRONMENTAL CRITERIA**

<b>CHEMICAL</b>	<b>ENVIRONMENTAL CRITERIA</b>			
	<b>GROUNDWATER (<math>\mu\text{g/l}</math>)</b>	<b>SOIL (<math>\text{mg/kg}</math>)</b>	<b>SURFACE SEDIMENT (<math>\text{mg/kg}</math>)</b>	<b>SURFACE WATER (<math>\mu\text{g/l}</math>)</b>

*<Information for this section will be provided by the BCT.>*

