

BASE REALIGNMENT AND CLOSURE  
ENVIRONMENTAL RESTORATION PROGRAM  
MANAGEMENT PLAN

20000214 077

Prepared by the U.S. Army Environmental Center  
April 1999

Distribution Unlimited.  
approved for Public Release

DTIC QUALITY INSPECTED 1



DEPARTMENT OF THE ARMY  
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT  
600 ARMY PENTAGON  
WASHINGTON DC 20310-0600



REPLY TO  
ATTENTION OF

SFIM-AEC-ERP (200)

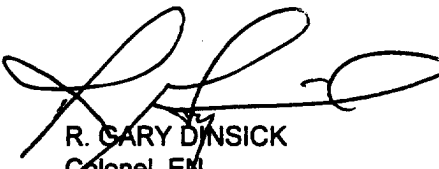
16 APR 1990

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Base Realignment and Closure (BRAC) Environmental Restoration Program Management Plan

1. Reference memorandum, OUSD, 17 Mar 98, subject: Management Guidance for the Defense Environmental Restoration Program.
2. Enclosed is a BRAC Management Plan that outlines the basic principles of the Army BRAC Environmental Restoration Program. It is intended for use at all levels of BRAC environmental restoration program management.
3. The main focus of the BRAC Management Plan is to provide information relevant to the management and execution of the restoration program and outline roles, responsibilities, and procedures. The basis for the BRAC Management Plan is the Management Guidance for the Defense Environmental Restoration Program (ref) which provides guidance, procedures, and responsibilities for the environmental restoration program at operating and closing installations, and formerly used defense sites.
4. Request that the enclosed guidance receives wide dissemination to those directly involved in the Army's BRAC Environmental Restoration Program. Comments regarding this BRAC Management Plan can be directed to the USAEC point of contact, Ms. Karen Wilson, (410) 436-3240/1525 (DSN 584).
5. "Reshaping Today for Tomorrow's Army."

Encl

  
R. GARY DINSICK  
Colonel, EM  
Chief, Base Realignment and  
Closure Office

## TABLE OF CONTENTS

1.0 PURPOSE.....	1
2.0 BACKGROUND.....	1
3.0 ROLES AND RESPONSIBILITIES.....	2
3.1 Department of Defense.....	2
3.2 Department of the Army.....	3
3.3 Local Community.....	5
4.0 BRAC ENVIRONMENTAL PROGRAM.....	5
4.1 Environmental Restoration (Cleanup, Compliance and Unexploded Ordnance).....	6
4.2 National Environmental Policy Act (NEPA) Documentation.....	9
4.3 Cultural/Natural Resource Considerations.....	9
5.0 PROGRAM DEVELOPMENT AND MANAGEMENT .....	10
5.1 Program Objectives.....	10
5.2 Environmental Baseline Surveys (EBS).....	11
5.3 BRAC Cleanup Plans (BCPs).....	13
5.4 Defense Sites Environmental Restoration Tracking System (DSERTS)	15
5.5 Relative Risk Site Evaluations (RRSEs).....	16
5.6 Cost-To-Complete (CTC).....	18
5.7 Budgeting.....	19
5.8 Funding.....	20
5.9 Execution Strategy.....	28
5.10 Performance Measures.....	28
5.11 Program Timelines.....	31
6.0 PROGRAM EXECUTION.....	32
6.1 Installation.....	32
6.2 BRAC Cleanup Team.....	34
6.3 Executor.....	34
6.4 MACOM.....	36
6.5 USAEC.....	36
6.6 BRACO.....	37

7.0 PROGRAM PROCEDURES.....	37
7.1 Record of Decision (ROD)/Decision Document (DD).....	38
7.2 Five Year Reviews.....	40
7.3 Off-Site Response Action.....	40
7.4 Independent Technical Review.....	41
7.5 Interagency Agreement (IAG)/Federal Facility Agreement (FFA).....	42
7.6 Implementation of the Federal Facilities Environmental Restoration Dialogue Committee (FFERDC) Recommendations.....	43
7.7 Regulatory Participation.....	44
7.8 Public Participation.....	44
7.9 Associated BRAC Property Transfer Requirements.....	46
7.10 Cleanup Responsibilities After Property Transfer.....	50
7.11 Close Out.....	51
 8.0 RELATED ISSUES.....	 52
 9.0 AVAILABLE GUIDANCE.....	 52
9.1 Defense Environmental Network and Information Exchange (DENIX)...	52
9.2 References.....	52
 ATTACHMENT A Major Army BRAC Installations	
ATTACHMENT B Examples of Activities Eligible and Ineligible for Funding	
ATTACHMENT C Decision Document Outline	
ATTACHMENT D Five Year Review Guidance	
ATTACHMENT E Related Issues	
Unexploded Ordnance	
Lead-Based Paint Hazards	
Land Use Controls	
Site Close Out	
Natural Resource Injuries	
Cost Recovery/Cost Sharing	
Radiological Surveys	
Chemical Warfare Agents	
ATTACHMENT F BRAC Related Environmental Guidance	

# BASE REALIGNMENT AND CLOSURE ENVIRONMENTAL RESTORATION PROGRAM MANAGEMENT PLAN

## **1.0 PURPOSE**

The Base Realignment and Closure (BRAC) Environmental Restoration Program Management Plan provides guidance on the management and execution of the Army BRAC Environmental Restoration Program and outlines roles, responsibilities, and procedures. The environmental restoration program at realigning and closing Army installations include cleanup activities and closure of sites necessary for property disposal and transfer.

This management plan implements the Army's BRAC Environmental Restoration Program in accordance with the Department of Defense's Management Guidance for the Defense Environmental Restoration Program (March 1998). It applies to activities that are located in the states of the U.S. and the District of Columbia. This document is not applicable to the BRAC Program outside the continental U.S., the Installation Restoration Program (IRP) as funded by the Environmental Restoration, Army transfer account or the Formerly Used Defense Sites (FUDS) restoration program.

## **2.0 BACKGROUND**

In May 1988, the Secretary of Defense chartered the *Defense Secretary's Commission on Base Realignment and Closure* to recommend military bases within the United States for realignment and closure. Congress passed Public Law 100-526 (Defense Authorization Amendments and Base Closure and Realignment Act) to create a process to close bases and realign the force infrastructure. The law addressed National Environmental Policy Act (NEPA) requirements; delegation of property disposal authority to the Department of Defense (DoD); and an expedited process of congressional review of BRAC recommendations. The first round of base closure and realignment (referred to as BRAC I) was conducted under this law.

The closure process was refined in November of 1990 when Congress passed and the President signed Public Law 101-510 (Defense Base Closure and Realignment Act of 1990). The law outlined a process identifying installations for closure and realignment based on eight criteria. Public Law 101-510 authorized independent Presidential BRAC commissions in 1991, 1993 and 1995 (referred to as BRAC 91, BRAC 93 and BRAC 95) and established initial direction to implement closures and realignments.

In 1993, the President announced a five-part program to speed economic recovery in communities where bases were to close with a single goal: rapid redevelopment and creation of new jobs in base closure communities. The five parts to this program include,

- 1) Jobs-Centered Property Disposal
- 2) Transition Coordinator
- 3) Fast Track Cleanup
- 4) Easy Access to Transition and Redevelopment Help, and
- 5) Larger Economic Development Planning Grants.

Based upon the President's announcement, DoD developed the Fast Track Cleanup Program. The Fast Track Cleanup Program directly affects the Army's BRAC Environmental Restoration Program by providing a framework, processes, and tools to expedite environmental cleanup at the installation level. DoD issued guidance on the Fast Track Cleanup Program in September 1993 that was updated in May 1996.

Over the years, Congress, in cooperation with DoD have made frequent efforts to improve the base closure process. Both the 1988 and 1990 base closure laws have been amended often, primarily through provisions contained in the National Defense Authorization Acts for Fiscal Years 1992 through 1997. Appendix A of the BRAC Reuse Implementation Manual (December 1997) lists the amendments to Public Laws 100-526 and 101-510.

*See Attachment A for a list of major Army BRAC installations.*

### **3.0 ROLES AND RESPONSIBILITIES**

#### **3.1 Department of Defense**

The *Office of the Deputy Under Secretary of Defense, Environmental Security* (ODUSD (ES)) establishes environmental restoration program policy and provides oversight for implementation by the DoD Components. The office sets goals and evaluates progress toward the goals. ODUSD (ES) leads initiatives to improve program effectiveness and efficiency.

The *Defense Environmental Security Cleanup Committee* (DESCC) is chaired by the Assistant Deputy Under Secretary of Defense for Environmental Security/Cleanup (ADUSD(ES/CL)) and is comprised of representatives from the Deputy Assistant Secretary of the Army (Environment, Safety and Occupational Health), the Deputy Assistant Secretary of the Navy (Environment and Safety) and Marine Corps, the Deputy Assistant Secretary of the Air Force (Environment, Safety and Occupational Health) and the Defense Special Weapons Agency. This committee is responsible for developing and recommending policy, management guidance, goals and metrics as well as legislation and regulations for the Defense Environmental Restoration Program.

The *Defense Environmental Restoration Task Force* (DERTF) was established in 1991 pursuant to Section 2923 of Public Law 101-510, and was reconvened in 1993 in accordance with Section 125 of Public Law 102-380. In addition to considering national policy and the challenges and opportunities facing all military installations under BRAC, the DERTF listens to local viewpoints. Briefings by BRAC environmental coordinators and BRAC Cleanup Teams, presentations by Local Redevelopment Authorities, discussions at Restoration Advisory Board meetings, and comments from the public provide information to the DERTF on the status of installation cleanup efforts, the integration of cleanup and reuse plans, and public participation.

The Base Closure and Transition Office (BCTO) is within the *Office of the Deputy Under Secretary of Defense for Industrial Affairs and Installations* (DUSD(IA&I)) and directly supports the President's Five Part Program for the rapid creation of new jobs through economic redevelopment in communities where military bases are slated to close. The BCTO is the single federal coordination agency for all matters pertaining to base closures and major realignments. The BCTO facilitates and expedites required government processes for converting military installations to civilian reuse.

The *Base Transition Coordinator* (BTC) is a position created by the President's five-part program for major BRAC installations. These coordinators are located on-site at certain bases selected for closure or major realignment. BTCs act as a liaison between the base, the local community, and the BCTO in such areas as community outreach, environmental cleanup, federal assistance programs, planning, and property disposal.

### **3.2 Department of the Army**

The *Assistant Secretary of the Army (Installations and Environment)* (ASA (I&E)) through the *Deputy Assistant Secretary of the Army (Environment, Safety, and Occupational Health)* (DASA (ESOH)) has ultimate responsibility for all Army environmental programs, and overall policy and guidance authority concerning all Army environmental matters.

The *Deputy Assistant Secretary of the Army (Installations and Housing)* (SAILE(I&H)) has overall responsibility for the Army's BRAC Program, and overall policy and guidance authority concerning all Army BRAC matters with the exception of Army environmental programs.

The *Assistant Chief of Staff for Installation Management* (ACSIM) serves as the Army Staff proponent of the Army's environmental programs. The *Base Realignment and Closure Office* (BRACO), and the *Director of Environmental Programs* (DEP) and his/her staff support the ACSIM. BRACO and the DEP review and provide recommendations to the ACSIM on all submissions and responses directed to the ACSIM concerning environmental policies, planning, programming, budgeting, and oversight of the Army's environmental programs and related matters. Additionally, the BRACO is the Army's program manager for the BRAC Program. As the program manager, BRACO develops Army BRAC related policy, manages the Base Closure Account and distributes funds to installations and executors.

The *U.S. Army Environmental Center (USAEC)* is a Field Operating Agency (FOA) of the ACSIM and supports the BRACO concerning the BRAC Environmental Restoration Program. The USAEC prepares the BRAC Work Plan, reports on progress to the DASA(ESOH) for ODUSD (ES) In-Progress Reviews, develops Army-wide guidance and coordinates program activities and requirements with major Army commands. USAEC oversees the execution of the BRAC Environmental Restoration Program.

The *U.S. Army Corps of Engineers (USACE) Real Estate Office* is the Army's disposal agent for real estate and is involved in all BRAC property disposal and transfer activities.

The *NEPA Support Team (NST)* is designated to perform the NEPA compliance technical review of Army BRAC NEPA documents for BRACO. The NST is responsible for determining whether Army BRAC NEPA documents comply technically and procedurally with NEPA, comply with current DoD and Army policy and guidance and meet Army expectations. This oversight role pertains to all BRAC NEPA actions (i.e., both realignments and disposal/reuse (lease, transfer, or deed)). The U.S. Army Corps of Engineers, Mobile District has been designated the lead for the Army's BRAC NEPA Support Team.

The *major Army commands (MACOMs)* and, if applicable, their *major subordinate commands (MSCs)* are responsible for direction and management of the BRAC Environmental Program for installations under their command. The MACOM prioritizes BRAC Environmental Program requirements, monitors project execution for obligation and reporting, consolidates and reports technical and financial installation data to the BRACO and USAEC and provides technical and financial guidance to all installations under their command.

The *Installation Commander* or other designated authority when there is no Installation Commander is responsible for executing BRAC environmental programs at his/her installation. Installations are responsible for tasking their BRAC Environmental Program Executor(s), reporting to their MACOM and coordinating regulatory and community involvement

The Fast Track Cleanup Program created the *BRAC Environmental Coordinator (BEC)* position to function as the coordinator of the numerous BRAC environmental activities that center on the interaction between the Army, the U.S. Environmental Protection Agency (EPA), the state and the local community. The BEC is responsible for maintaining contact with the installation BRAC and environmental offices, and keeping the BTC informed of environmental activities. The BEC has overall responsibility for environmental programs related to the transfer of real property at an installation. The BEC coordinates closely with the MACOM, BRACO and the USAEC.

The *Fast Track Coordinator Point of Contact (FTC POC)* is a position created by the Army where a full-time BEC is not required. The position is assigned by the MACOM in place of a BEC at BRAC installations where there will be no property available for reuse, there is a lack of reuse interest, environmental restoration requirements are minimal or property is in a remote location.

The *BRAC Cleanup Team* (BCT) is the key element of the Fast-Track Cleanup approach to cleanup at closing and realigning bases. A BCT includes an Army representative (the BEC), representatives of the state regulatory agency and the EPA regional office. Each closing installation where property will be made available for reuse has a BCT. The BCT is the primary forum for addressing cleanup planning and execution issues.

The *BRAC Environmental Restoration Program Executor* conducts remedial responses (identification, investigation and cleanup of contamination) at BRAC installations at the direction of the installation. The *U.S. Army Corps of Engineers (USACE) Districts* execute the majority of Army restoration projects. Installations, MACOMs and the U.S. Army Center for Health Promotion and Preventive Medicine may also execute specific projects under the BRAC Environmental Restoration Program.

The *U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM)* provides oversight for the *Agency for Toxic Substances and Disease Registry (ATSDR)* activities. These activities include the preparation of Public Health Assessments, health consultations, health studies, responses to citizens' petitions and health education activities. USACHPPM reviews and concurs on human health risk assessments for the Army Surgeon General and also reviews ecological risk assessments.

### **3.3 Local Community**

The *Restoration Advisory Board (RAB)* consists of representatives of the local community, the Army, EPA, States, and tribes. A RAB should be established where there is sufficient and sustained community interest. Members provide individual views to the BCT concerning restoration activities at the installation. An installation representative and a member of the local community jointly chair a RAB.

The *Local Redevelopment Authority (LRA)* is a body established by a state or local government charged with developing a reuse plan that supports the interests of the community. The LRA is expected to provide leadership and build consensus for reuse of the installation and serves as the community's point of contact for all matters relating to reuse. The BRAC Transition Coordinator is the main interface between the LRA and the Army.

## **4.0 BRAC ENVIRONMENTAL PROGRAM**

The BRAC Program is charged with closing and realigning military installations and entails military construction, personnel relocation, environmental activities, and property transfer. Environmental requirements at realigning and closing Army installations include

- Restoration activities (cleanup, compliance, and unexploded ordnance),
- National Environmental Policy Act (NEPA) property reuse and transfer documentation, and
- Cultural and Natural Resource considerations

#### **4.1 Environmental Restoration (Cleanup, Compliance and Unexploded Ordnance)**

The Army's BRAC Environmental Restoration Program is a comprehensive program to identify, investigate and clean up contamination at closing and realigning Army installations. Restoration sites include those contaminated by past or closing defense activities and where a response is required by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA) and the Community Environmental Response Facilitation Act (CERFA); or the Resource Conservation Recovery Act (RCRA). CERFA directs federal agencies to identify uncontaminated parcels of land available for reuse and transfer at all base closure and realignment properties and allows for the transfer or lease of remediated parcels of land when the successful operation of an approved remedy is demonstrated.

The goals of the BRAC Environmental Restoration Program are to protect human health and the environment by cleaning up contaminated sites as quickly as resources permit, to facilitate disposal of excess Army properties for local reuse. The Army's BRAC Environmental Restoration Program is made up of "**Cleanup**", "**Compliance**" and "**Unexploded Ordnance (UXO)**". Cleanup, compliance and UXO activities are funded from the same BRAC account, but are identified and addressed separately for reporting purposes.

**Cleanup** at BRAC installations refers to studies, and where required, environmental cleanup of sites and reduction of risks to human health and the environment from contamination resulting from past Army activities on or emanating from the closed or realigning parcel. Eligible cleanup activities at BRAC installations are the same as those defined in the Defense Environmental Restoration Program (DERP) Management Guidance (March 1998) for the Installation Restoration Program at active/operating installations.

**Compliance** within the BRAC Environmental Restoration Program refers to **closure-related compliance activities** only. Closure-related compliance projects are associated with facilities and buildings requiring assessments or surveys, and abatement, if required for property transfer (i.e., closure of hazardous waste treatment, storage, and disposal facilities; radon surveys; abatement of asbestos and lead based paints; transformers with polychlorinated biphenyls; and removal and closure of underground storage tanks). Environmental compliance activities not in support of reuse and property transfer or not on the closed or realigning parcel require use of an installation's operations and maintenance (O&M) funds.

**Unexploded Ordnance (UXO)** at BRAC installations refers to the identification, investigation, and response to unexploded ordnance at closing/realigning installations **in support of reuse and property transfer** and is a restoration cost.

The BRAC Environmental Restoration Program is conducted consistent with CERCLA and the process described in the NCP, 40 CFR part 300, and, *if applicable*, consistent with the substantive requirements of the RCRA corrective action process. Identification, investigation, and cleanup of Solid Waste Management Units (SWMUs) under the RCRA corrective action process *may be eligible for BRAC funds if contamination at the SWMU resulted from past activities and the SWMU was inactive or closed prior to being subjected to RCRA requirements*. If an active SWMU is to be investigated and closed under the RCRA corrective action process and supports property transfer, BRAC funds are to be used.

Building Demolition/Debris Removal (BD/DR) is not an eligible BRAC restoration activity at closing/realigning installations. When a structure has been declared a safety or health hazard or when remediation necessitates demolition, BRAC funds can be used.

***Attachment B of this management plan presents specific activities eligible for funds under the Army BRAC Environmental Restoration Program.***

At each phase of response, appropriate coordination is conducted with federal, state, regional and local regulatory agencies. Consistent with recommendations of the Federal Facilities Environmental Restoration Dialogue Committee (FFERDC), installations should coordinate and consult with federal, state, regional, and local regulatory agencies and Native American tribes on BRAC Environmental Restoration Program planning and execution. Coordination should begin as early in the restoration process as possible, and should continue until site closeout. The Defense and State Memorandum of Agreement/Cooperative Agreement Program (DSMOA/CA) reimburses State environmental regulatory agencies for technical services provided in support of the Army's BRAC Environmental Restoration Program. There is a Memorandum of Understanding (MOU) between the U.S. Environmental Protection Agency (EPA) and the DoD that allows the Army to pay the EPA for additional technical assistance for restoration activities at installations where cleanup is accelerated in support of economic revitalization of surrounding communities. While fostering open communication between the Army and regulatory agencies, the DSMOA/CA Program and EPA/DoD MOU assist in expediting environmental restoration at Army BRAC installations.

Community involvement activities are an integral part of the Army's BRAC Environmental Restoration Program. BRAC installations should seek community involvement early and throughout the cleanup process. The public must be afforded an opportunity to review and comment on any proposed remedial action or non-time critical removal action at an installation.

The Agency for Toxic Substances and Disease Registry (ATSDR) is mandated under CERCLA section 104 (i) to evaluate all federal facilities on or proposed to the EPA's National Priorities List (NPL) for public health concerns. A public health assessment is required for all installations on or proposed for the NPL. The public health assessment determines whether there is an exposure pathway and if an effect on public health exists from a hazardous waste site.

## ***Fast Track Cleanup***

The objective of Fast Track Cleanup is to expedite restoration activities and facilitate the transfer or lease of property at closing and realigning installations. This includes improving the efficiency of the restoration process, partnering with Federal and State regulatory agencies, and working with local communities and other stakeholders.

The following are key requirements of the Fast Track Cleanup Program process to be accomplished at each major closing or realigning installation where property has been identified for transfer and significant cleanup is planned:

(1) The major Army command (MACOM) appoints a BRAC environmental coordinator (BEC) with responsibilities and implementation authority for all environmental restoration program requirements. Where the MACOM determines that a full-time BEC is not required, then a Fast Track Coordinator Point of Contact (FTC POC) is designated.

(2) A BRAC Cleanup Team (BCT) is comprised of representatives of DoD, the State environmental regulatory agency, and the EPA regional office, as appropriate. The BCT is to be designated at the time Congress acts on a BRAC list and is responsible for carrying out the cleanup of the installation to prepare it for transfer. The BCT develops and implements the BRAC Cleanup Plan.

(3) A "bottom-up" review of the installation's environmental program is initiated within two months of Congressional action on a BRAC list to identify opportunities to expedite conveyance of property. However before finalizing strategy and schedules for the "bottom-up" review, at a minimum, a draft Environmental Baseline Survey (EBS) should be completed. An EBS is the starting point to identify environmental sites/compliance activities at the installation, specifically identifying uncontaminated property as required by CERFA and categorizing the environmental condition of all property to be transferred. A request for approval of uncontaminated property is contained in a letter accompanying the EBS report that is submitted to EPA for NPL installations and the State regulatory agency for non-NPL installations.

(4) A BRAC Cleanup Plan (BCP) is developed after the draft EBS is available and brings together the results of the "bottom up" review. The BCP is a blueprint for cleanup and identifies contaminated sites, cleanup requirements, schedules, and costs. As the basis for developing work plans and budget submissions, it is to be developed in coordination with regulatory agencies and public stakeholders and is to be kept current. An updated BCP Abstract is prepared semi-annually to summarize BCP actions and convey key program management information.

(5) A Restoration Advisory Board (RAB) is established to act as a focal point for information exchange among stakeholders and offer opportunities for the community to provide input on the restoration process. The BCT should be the government members of the RAB.

***Updated Fast Track guidance is contained in a DoD memorandum "Fast Track Cleanup at Closing Installations" (18 May 96). Internet <http://www.dtic/envirodod/brac/reissued.html>***

#### **4.2 National Environmental Policy Act (NEPA) Documentation**

The NEPA documentation portion of the BRAC Environmental Program requires that all closing and realigning bases consider the environmental and socioeconomic effects of disposal and reuse resulting from a BRAC action.

Public Law 101-510 relieves DoD from the NEPA requirement to consider the need for closing, realigning, or transferring functions at BRAC installations. However, the DoD must still prepare environmental impact analyses during the property disposal process and during the process of relocating functions. The environmental impact analyses includes consideration of the direct and indirect environmental and socioeconomic effects of disposal and reuse and the cumulative impacts of other reasonably foreseeable actions to make military property available through the BRAC mandated closure process.

The NEPA Support Team (NST) is responsible for determining whether BRAC NEPA documents comply technically and procedurally with NEPA and applicable laws, regulations, policy and guidance. This pertains to all BRAC NEPA actions, i.e., realignment and disposal/reuse (lease, transfer, or deed). The Mobile District, U.S. Army Corps of Engineers is the designated Army NST. MACOMs should involve the NST early to assist and advise installations throughout the NEPA process.

***This Management Plan focuses on the BRAC Restoration Program. MACOMs and installations should refer to Army Regulation 200-2, Environmental Effects of Army Actions and see attachment F for a list of references concerning NEPA requirements under the Army's BRAC Environmental Program***

#### **4.3 Cultural/Natural Resource Considerations**

BRAC installations are not exempt from applicable cultural and natural resource regulatory requirements. The cultural and natural resource portion of the BRAC Environmental Program requires that all closing and realigning bases consider the effects of a BRAC action on man-made or natural environment resources and try to mitigate any adverse effects.

Cultural and natural resource considerations are separate from and may extend beyond the completion of the BRAC NEPA process. Requirements from associated cultural and natural resource statutes and regulations must be identified and met before BRAC actions are undertaken.

***This Management Plan focuses on the BRAC Restoration Program. MACOMs and installations should refer to Army Regulation 200-3 and 200-4, and see attachment F for a list of references concerning cultural and natural resource considerations under the Army's BRAC Environmental Program.***

## **5.0 PROGRAM DEVELOPMENT AND MANAGEMENT**

The Army programs to implement approved closures and realignments to transfer property to local communities for economic reuse in accordance with the President's Five-Part Plan for Community Reinvestment. Fast Track Cleanup, part of the President's plan, outlined an approach to accelerate environmental cleanup at closing bases to prepare property for community reuse, while ensuring that human health and the environment are protected.

### **5.1 Program Objectives**

The DoD developed cleanup objectives for BRAC installations and presented the objectives in the Defense Planning Guidance (DPG). The DPG outlines the DoD's commitment to the defense strategy and programmatic objectives identified in the Quadrennial Defense Review. The DoD's environmental programs are developed based on the direction in the DPG and accompanying fiscal guidance. The Army's programs (including environmental) are evaluated based on their compliance and consistency with this guidance at DoD In-Progress Reviews.

The DPG directs that the Army reduce risk to human health and the environment as well as comply with legally enforceable agreements, orders and laws while making property available for reuse to the maximum extent feasible. The DPG for FY98-01 includes the following BRAC environmental restoration goals:

#### **By the end of FY2001:**

- 75% of the acres in "Environmental Condition of Property" categories 5, 6, and 7 (identified in the FY96 baseline) will be suitable for transfer from an environmental restoration perspective. (Note: To expedite transfer or lease of effected areas, DoD developed 7 categories to classify all parcels of property at closing and realigning installations. These categories will be discussed in Section 5.2)
- 75% of installations will have *remedial systems in place* or *responses complete* for all sites.
- 90% of all sites will have *remedial systems in place* or *responses complete*.

**By the end of FY2005:**

- 100% of the acres in “Environmental Condition of Property” categories 5,6, and 7 (identified in the FY96 baseline) will be suitable for transfer from an environmental restoration perspective; and
- 100% of installations will have all sites with *remedial systems in place or responses complete*.

The DPG directs that as installations enter into new (or adjust existing) regulatory agreements, with flexible schedules and flexible sequencing of work. Sequencing should reflect reuse and relative risk site evaluations.

The DPG also directs that restoration activities support associated requirements for the Agency for Toxic Substances and Disease Registry (ATSDR), the Defense and State Memorandum of Agreements (DSMOA), and the U.S. Environmental Protection Agency (EPA).

To ensure consistency in the manner that the Army’s BRAC environmental program is implemented to meet these DPG goals, several documents and reports play key roles in the process. The Environmental Baseline Survey (EBS), the BRAC Cleanup Plan and the BCP Abstract, the Defense Site Environmental Restoration Tracking System (DSERTS), the Relative Risk Site Evaluation (RRSE), and the Cost-to-Complete (CTC), are all inter-related, require input from one another, and, in turn, provide output to each other. Each must be internally coordinated to ensure overall consistency within the Army’s BRAC Environmental Restoration Program.

## **5.2 Environmental Baseline Survey (EBS)**

An EBS is a study of the environmental conditions of Army controlled properties and proposed acquisitions, focusing on hazardous substances or other regulated hazards. The EBS is used to document existing environmental information related to the storage, release, treatment or disposal of hazardous substances or petroleum products on the property. This information is used to determine the presence or likely presence of a release or threatened release of any hazardous substance or petroleum product. The EBS is also used to determine whether a threat or hazard to human health or the environment is present, such as the presence of polychlorinated biphenyls (PCBs), petroleum products and their derivatives, asbestos, radon, lead-based paint, and unexploded ordnance (UXO).

It is Army policy to prepare an Environmental Baseline Survey (EBS) to determine the environmental conditions of properties being considered for acquisition, outgrants, and disposals. Reassignments within the Army, permits, licenses, and easements do not require an EBS, however, an EBS may be performed if desired by the Army or where extraordinary circumstances exist. The EBS is used to identify potential environmental contamination liabilities associated with the real property transactions and to support a Finding of Suitability to Transfer (FOST), a Finding of Suitability to Lease (FOSL), or an Environmental Condition of Property (ECOP). Procedures for conducting an EBS and the review process is described in the draft DA PAM 200-1 (May 1998), Chapter 15.

Following the EBS, potential courses of action may include; (1) additional investigation required, (2) no further action, (3) institutional controls, or (4) remedial actions resulting in no restrictions on use when economically and technically feasible and when the recipient will accept the property only in an unrestricted use condition, or (4) combinations of the first three. In all cases, at a minimum, the Army will conduct actions to a level necessary to protect human health, safety, and the environment. The site-wide EBS is used as a multi-functional document providing required environmental data to identify CERFA parcels and to support NEPA actions. The EBS is the starting point for classifying property into the 7 DoD "*environmental condition of property*" categories and is used as the basis for the BRAC Cleanup Plan.

The DoD developed 7 "*environmental condition of property*" categories defined and described in the *BRAC Cleanup Plan Guidebook*. These categories were developed to identify the environmental condition of all parcels of property at closing and realigning installations to expedite transfer or lease of effected areas (Table 1). Parcels of property are categorized during the Environmental Baseline Survey (EBS) and used during development of the BCP. As cleanup occurs under the BRAC Environmental Restoration Program, the "*environmental condition of property*" classification changes and is used by ODUSD (ES) to track cleanup progress toward goals established in the DPG.

TABLE 1. Environmental Condition of Property Categories

<p><b><u>Category 1</u></b> - Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas)</p> <p><b><u>Category 2</u></b> - Areas where only release or disposal of petroleum products has occurred</p> <p><b><u>Category 3</u></b> - Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response</p> <p><b><u>Category 4</u></b> - Areas where release, disposal, and/or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken</p> <p><b><u>Category 5</u></b> - Areas where release, disposal, and/or migration of hazardous substances has occurred, and removal or remedial actions are under way, but all required remedial actions have not yet been taken</p> <p><b><u>Category 6</u></b> - Areas where release, disposal, and/or migration of hazardous substances has occurred, but required actions have not yet been implemented</p> <p><b><u>Category 7</u></b> - Areas that are not evaluated or require additional evaluation</p>
---

A BRAC Cleanup Plan (BCP) is developed after the draft EBS is available and brings together the results of the "bottom up" review. Using the EBS to support NEPA precludes the need to develop Preliminary Assessment Screening documents.

### **5.3 BRAC Cleanup Plans (BCPs)**

The BRAC Cleanup Plan (BCP) is the key document in the management and execution of the BRAC Environmental Program. The plan is a management tool that presents the entire environmental program for the installation and is used to expedite and improve environmental response actions for disposal and reuse of a BRAC installation, while protecting human health and the environment. The plan is intended to be a roadmap of environmental programs and the macro-level strategy and schedule for accelerating environmental cleanup activities. A BCP should provide the status of a BRAC installation's cleanup and compliance programs, the status of base disposal efforts, and the strategy, rationale, schedule and costs for future execution of all environmental programs.

A BRAC Cleanup Team (BCT) is assembled at most Army installations where property will be available for transfer to the community. Exceptions to this are made based upon MACOM input. The BCT meets to review the process underway to clean up property, to evaluate methods, to handle problems that develop, and to discuss how to integrate environmental cleanup priorities with reuse needs. The BCT is responsible for the preparation and implementation of the installation BCP. BCPs are prepared at those installations where BCTs have been established.

The BCP is intended to be a living document that helps the BCT to integrate reuse and restoration efforts. At the beginning of the fiscal year the BCT needs to review the BCP and update information as required. The review should focus on the BCT/Project Team, the Property Disposal and Reuse Plan, the Environmental Condition of Property, and the Environmental Restoration Program. The BCT may also determine that it is necessary to update the BCP, based upon this review. It is not necessary to reprint and recopy the entire BCP every time a change is made. Changes may be tracked by "pen and ink" or by reprinting the modified page.

BCTs should involve all stakeholders (local regulators, tribal governments, and community members of an installation's RAB) when reviewing and updating the BCP so they may participate in the planning process. BCTs are encouraged to make the BCP available on the installation's home page on the world-wide web, if available. BCTs should also make the BCP available in information repositories for public review.

If updates to the BCP occurred during the BCT's annual review, it must be annotated on the BCP abstract (i.e., Date of Last BCP Update). A statement on any community involvement during the review and update of the BCP must be included under the Fast Track Cleanup Summary section on the BCP abstract.

***For additional information on updating BCPs, see the Department of Defense BRAC Environmental Fact Sheet, Spring 1999, Updating the BRAC Cleanup Plan: A Living Tool for Integrating Reuse and Cleanup. Available on the internet at <http://www.dtic.mil/envirodod/brac/publish.html>***

The BCP Abstract is an Executive Summary of the BCP. The abstract facilitates BCP updates and conveys key program management information and summarizes the updated status of the installation's environmental program. The BCP Abstract is useful in focusing attention on the overlap between reuse and cleanup planning efforts. A BCP Abstract is required for every installation with a BRAC Cleanup Team (BCT) and all BRAC 95 installations with a Fast Track Coordinator Point of Contact (FTC POC). The BCP Abstract is used by the Army to support the DoD data call requirements, In-Progress Reviews and the Report to Congress. BCP Abstracts are updated twice a year, in April and October and are prepared within the Defense Sites Environmental Restoration Tracking System.

***Guidance for preparation of BCPs is contained in the DoD BRAC Cleanup Plan (BCP) Guidebook, revised 1996. Internet <http://www.dtic/envirodod/brac/publish.html>. Guidance for updating BCP Abstracts is contained in the DSERTS WEB Version User's Manual, Aug 1998 and DSERTS Web On-Line Help.***

## 5.4 Defense Sites Environmental Restoration Tracking System (DSERTS)

The DSERTS is a database of installations and sites that are included in the Army's environmental restoration programs. Used by installations, MACOMs, and program managers, DSERTS provides an automated WEB-based application to manage, track, and query data on activities conducted under the BRAC Environmental Restoration Program, as well as the Army's Installation Restoration Program.

DSERTS data are used to meet upward reporting requirements and DSERTS is also used to prepare BCP Abstracts. The DSERTS is a source of information for the following:

- DERP Annual Report to Congress
- Program Objective Memorandum
- President's Budget
- Site-level Cost-to-Complete
- Relative Risk Site Evaluations
- BRAC Environmental Program Work Plans
- DoD In-Progress-Reviews/Measures-of-Merit
- ACSIM BRAC Environmental Program Reviews
- BRAC Cleanup Plans and Abstracts

***Installation Responsibilities.*** Installation personnel maintain a current list of all sites at the installation in DSERTS that have "Completed", "Underway", or "Future" restoration activities. Site-level data includes Site Name/Description, Site Type, the BRAC round (BRAC1, ...BRAC 95), BRAC Program Sub-Code (Cleanup, Compliance or UXO) and Phase/Cleanup Action status.

As part of DSERTS, installations must evaluate all in-progress (excludes response complete, remedy-in-place, closure-related compliance and UXO sites) cleanup sites for relative risk. Additionally, installations must report key program status elements in DSERTS, such as information on Records of Decision/Decision Documents, Federal Facilities Agreements, and Restoration Advisory Boards. By the fall of 1999, installations will also report on Five-Year Reviews, Land Use Controls and Early Transfers through DSERTS. It is the installation's responsibility to ensure data is consistent with the most current *DSERTS Instruction and Guidance*, the Army's Cost-To-Complete database and to correct identified data gaps and inconsistencies.

***MACOM Responsibilities.*** The MACOMs provide quality assurance on the DSERTS data submitted by installations. Data must be updated in accordance with the *DSERTS Instruction and Guidance* and the MACOMs ensure installation data files on the WEB are available to the USAEC in a timely and accurate manner.

**USAEC Responsibilities.** The USAEC provides DSERTS access, user manuals, Army guidance, and training to installation and MACOM personnel as required by new versions and policy/guidance updates. The USAEC also provides on-site assistance as requested by MACOMs and installations.

USAEC reviews all MACOM data submissions for completeness and consistency with *DSERTS Instruction and Guidance*. Any necessary revisions will be coordinated with the MACOM and installation. The USAEC consolidates data files into an Army file for submittal to ODUSD (ES). USAEC provides DSERTS input to support the annual Report to Congress, DoD In-Progress Reviews, the Program Objective Memorandum, the Budget Estimate Submission (BES) and the President's Budget.

**Definition of a Site.** A discrete area where contamination has been verified, requiring further response action and has been or will be entered into the DSERTS database. For the BRAC Environmental Restoration Program, *cleanup*, *closure-related compliance* and *UXO* sites that require funds must first be in DSERTS before BRACO will release funds for any work to be completed at the site. For BRAC closure-related compliance and UXO sites, a project addressing multiple sites for a single contaminant (i.e., asbestos, lead-based paint, radon) is equivalent to a "site". Relative Risk Site Evaluations are not required for closure-related compliance and UXO sites.

**New Sites.** Eligible new sites are added to the DSERTS if the sites are identified in an Environmental Baseline Survey (EBS) conducted at installations undergoing realignment or closure. New sites are input to DSERTS when the Preliminary Assessment (PA) phase (EBS equivalent) status is completed and requires a follow-on action. Sites with a PA phase (EBS equivalent) status of "underway" or "future" cannot be input to DSERTS.

**Data Submittals.** The DSERTS is to be updated using WEB Version 4.0 and submitted through the MACOMs to USAEC on **April 15th** and **October 15th** of each FY. These submission dates will ensure that all installation-level execution data are available when DASA(ESOH) presents the Army's environmental restoration program at the semi-annual DoD In-Progress Reviews.

***For additional DSERTS information see the DSERTS software on-screen Help, the DSERTS WEB Version User's Manual, Aug. 1998 and the DSERTS Instruction and Guidance, Aug. 1998.***

## **5.5 Relative Risk Site Evaluations (RRSEs)**

The DoD established risk reduction as a program goal for the DERP that includes BRAC Environmental Restoration Program *cleanup* sites. The RRSE Framework is the foundation of DoD's risk management strategy. While DoD risk reduction goals must be met at BRAC installations, relative risk is secondary to making property available for reuse when making decisions to sequence work in BCPs.

The RRSE Framework uses common standards and rating definitions for all military Services to ensure uniform categorization DoD-wide. The categorization of DSERTS sites into relative risk groups is based on an evaluation of contaminant concentrations, migration pathways, and human and ecological receptors in ground water, surface water, sediment and surface soils. Evaluations of these factors at a site are combined to place the site in an overall category of "high", "medium" or "low" relative risk.

The RRSE should not be used to:

- (1) select a remedy,
- (2) determine whether or not response actions should be taken,
- (3) substitute for a baseline risk assessment or health assessment that identifies risks associated with the site(s) and potential health effects on the community,
- (4) determine whether a site should be classified as "response complete" or "no further action", or
- (5) avoid meeting legal requirements.

The RRSEs are required for all DSERTS sites with ongoing cleanup activities and should be performed with available site data. Using the RRSE module in DSERTS, BRAC installations evaluate available data for each DSERTS *cleanup* site. Note that RRSE is not required and should not be performed at the following sites:

- (1) sites classified as having all remedies in place (RIP), even though the sites may be in remedial action operation or long-term monitoring,
- (2) sites classified as "response complete" in DSERTS,
- (3) sites that only have BD/DR requirements,
- (4) BRAC closure-related compliance or UXO sites, and
- (5) sites where the Army is a potentially responsible party and is providing funding, but is not performing the cleanup action

Sites in DSERTS lacking information to conduct an RRSE are given a "not evaluated" (NE) designation. The Army directs that NE sites should be evaluated as soon as sufficient data is available. No work beyond a remedial investigation should be performed at these sites until the RRSE is updated.

Per DoD guidance and Army policy, installations are to solicit stakeholder involvement throughout the RRSE process. The BCPs together with the resultant relative risk evaluations can serve as the basis for dialogue with stakeholders (local community, restoration advisory boards, and regulator representatives) on sequencing work at sites.

Installations review and update RRSE data when DSERTS is updated in April and October of each FY.

***For detailed guidance on the RRSE, see the 1997 DoD Relative Risk Site Evaluation Primer and the Relative Risk Site Evaluation Quality Assurance Plan.***

***Available on the Internet at <http://www.dtic.mil/envirodod/relrisk/relrisk.html>, and <http://www.dtic.mil/envirodod/relrisk/qapage.html>***

## **5.6 Cost-To-Complete (CTC)**

In FY95, the DoD required that all component Services develop a comprehensive estimate, *by site*, of the total cost for completing all environmental restoration activities under the BRAC Environmental Restoration Program. The Army effort, referred to as the *Cost-To-Complete Study and Analysis*, was initially completed in June 1995 for all active and BRAC Army installations, and limited Army Reserve and Army National Guard installations. The *Cost-To-Complete Study and Analysis* was used to develop a comprehensive CTC database, by DSERTS site, for the BRAC Environmental Restoration Program, as well as the active Installation Restoration Program. CTC estimates are used to develop the BRAC Environmental Restoration Program budget in the Program Objectives Memorandum (POM). The CTC database is maintained and updated as a centralized effort through the USAEC. Installations, through their MACOM, provide information to support the centralized effort.

The DPG requires an annual update of this estimate of cost to complete. Each DSERTS site with any future planned cleanup activity must have an estimate of the cost to complete for those restoration activities. The estimates include:

- (1) the cost of completing all remaining studies, restoration, remedial action operations (including operations and maintenance of remedial systems),
- (2) long-term monitoring, 5-year reviews, maintenance of land use controls, and
- (3) Site closeout and deletion from the NPL, where appropriate.

The estimates will to the extent possible reflect site-specific considerations and realistic assumptions about cleanup levels and technology applied. Estimates will be adjusted to reflect new information.

Closure-related compliance and UXO DSERTS "sites"/projects also require a CTC estimate and are included in the CTC database. Cleanup, closure-related compliance, and UXO projects require an Environmental Program Requirement (EPR) report. The EPR reports are produced and submitted by the USAEC using DSERTS.

Updating the CTC database occurs annually in the spring and updates are due to the USAEC by July. This update of an installation's cost-to-complete for all sites is referred to as the "unconstrained" CTC and consists of an installation's total cleanup, closure-related compliance and UXO requirements.

In June, the MACOMs are advised of their annual funding program for the next fiscal year through FY+4 or until there are no requirements. Installations are notified by their MACOM of their annual environmental program in June and must then "constrain" their CTC estimates to meet their allocations. The "constrained" CTC, which consists of an installation's total programmed cleanup and closure-related compliance requirements, is submitted to the USAEC through DSERTS by October 15<sup>th</sup>. This "constrained" CTC is used by BRACO to support the BRAC environmental budget.

***For detailed guidance on CTC procedures, see memorandum on "Environmental Restoration Cost-To-Complete (CTC) Update" (28 Mar 98).***

## **5.7 Budgeting**

The DPG requires that the Army establish cost estimates for each site addressed by the BRAC Environmental Restoration Program through completion of remediation, including remedial operation activities and long-term monitoring. The Army's CTC has been completed for all known sites in the BRAC environmental program and the CTC database is updated annually. As BRAC environmental activities progress, the BRAC environmental budget is adjusted based on the CTC database and current reuse plans to meet the goals of the DPG.

In June, the MACOMs are advised of their annual funding program for the next fiscal year through FY+4 or until there are no requirements. Installations are notified by their MACOM of their environmental program in June and must then "constrain" their requirements (CTC estimates) to meet their program. The "constrained" CTC is submitted to the USAEC through their MACOM as part of the fall DSERTS submission. This "constrained" CTC is used to develop the Budget Estimate Submission (BES). The Army's BRAC Environmental Restoration Program requirements are presented in the Program Objective Memorandum (POM) that includes the budget years (FY+1 and FY+2) and future years (FY+3 through completion). The POM submission includes legal drivers and milestones for each site from DSERTS. This site-level data in turn is provided to ODUSD(ES) as back up to the Army's POM submission.

## **5.8 Funding**

BRAC funding is maintained in the Office of the Secretary of Defense, Military Construction Appropriation and is comprised of five (5) Budget Activities:

- 1) Construction
- 2) Family Housing
- 3) Operations and Maintenance
- 4) Procurement
- 5) Environmental.

BRAC environmental funding addresses cleanup, UXO, closure-related environmental compliance, environmental planning, and management costs. BRAC funding is provided in a five-year account and dollars are fundable within the account. This means that specific amounts are not appropriated for each budget activity and funds can be shifted among other BRAC requirements.

Environmental requirements at BRAC installations are funded through two different accounts:

- 1) the Base Realignment and Closure Account
  - a) All BRAC cleanup, UXO and compliance
  - b) Site Specific EBS (FOST/FOSL)
  - c) Cultural and Natural Resources
- 2) the Operations and Maintenance, Army Account
  - a) NEPA at disposal sites
  - b) program management – activities not attributable to one realignment/closure that benefits the entire program.

### **5.8.1 Funding Categories**

The BRAC accounts addressing environmental activities are apportioned into 9 categories:

- 1) Program Management
- 2) Cleanup Projects
- 3) Closure-related Compliance Projects
- 4) UXO Projects
- 5) DSMOA
- 6) ATSDR
- 7) EPA Support
- 8) Cultural/Natural Resources Projects
- 9) NEPA Documentation.

**Program Management.** Program management includes salaries, travel, supplies, legal support, public involvement support (Restoration Advisory Board (RAB) administrative costs, and Technical Assistance for Public Participation (TAPP) costs).

Public involvement activities related to restoration activities, such as the Community Relations Plans (CRP) and CRP implementation, public meetings, and fact sheets may be funded through the BCA. Public involvement requirements are **project costs** apportioned over all sites and must be identified in the BRAC Work Plan. The costs associated with RAB/TRC administrative support are funded from the BCA as **program management costs** and are identified separately in the BRAC Work Plan. The TAPP program provides community members of RABs/TRCs with access to independent technical support through the use of government purchase orders. When RABs/TRCs identify a need for technical assistance, the installation will program funds for TAPP support as **program management costs**. MACOMs submit individual RAB/TAPP Cost Worksheets when identifying program management costs for the upcoming fiscal year.

**Cleanup Projects.** Projects include costs, tracked by site, to execute remedial responses such as studies, removals, interim and final remedial actions, and long-term monitoring at cleanup sites. Contract administration costs (both prior and current year), in-house support, and any costs associated with execution of BRAC Environmental Restoration Program activities tracked by site are also project costs.

**Closure-related Compliance Projects.** Projects include costs to execute remedial responses such as studies, removals, interim and final remedial actions, and long-term monitoring of closure-related compliance projects that support property transfer. Contract administration costs (both prior and current year), in-house support, and any costs associated with execution of BRAC Environmental Restoration Program activities are also project costs.

**UXO Projects.** Projects include costs to execute remedial responses such as studies, removals, interim and final remedial actions, and long-term monitoring of UXO projects that support property transfer. Contract administration costs (both prior and current year), in-house support, and any costs associated with execution of BRAC Environmental Restoration Program activities are also project costs.

**DSMOA/CA.** Funds include support to the DSMOA/CA program for State regulatory BRAC Environmental Restoration Program services at Army installations. The U.S. Army Corps of Engineers (USACE) is DoD's Lead Agent for the DSMOA/CA. States propose DSMOA/CA eligible requirements for reimbursement to the Army through the USACE.

**ATSDR.** The U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) is the Army's liaison and DoD's Lead Agent for the ATSDR program. As the Lead Agent, USACHPPM reports on the status of the ATSDR program at the DoD In Progress Reviews. The USACHPPM provides the USAEC with the ATSDR draft Annual Plan of Work in June. USAEC reviews the proposed ATSDR budget for consistency with the approved BRAC Work Plan and eligibility for reimbursement. The USACHPPM provides MACOMs and installations with a schedule for site visits and document delivery by quarter. The USACHPPM will contact all installations prior to ATSDR activities at their installation.

**EPA Support.** Funds include support to the EPA for participation on BCT to expedite restoration activities in accordance with the President's Five-Part Plan for Community Reinvestment. EPA proposes eligible support requirements to BRACO for reimbursement.

**Cultural and Natural Resources.** Referred to as planning requirements, cultural and natural resource requirements ensure that base closures and realignments do not destroy significant parts of the nation's heritage, both man-made and the natural environment.

**NEPA Documentation.** Referred to as planning requirements, NEPA requirements document impacts, irreversible effects and alternatives to BRAC environmental actions that significantly affect the quality of the human environment.

### **5.8.2 Defense State Memorandum of Agreement (DSMOA) and Cooperative Agreement (CA) Program**

The Defense State Memorandum of Agreement/Cooperative Agreement (DSMOA/CA) Program funds State environmental regulatory agencies for technical services provided in support of the DoD's restoration programs. The goals of the DSMOA/CA Program are to expedite the cleanup process, to comply with state regulations, and to improve coordination and cooperation between DoD and state/territorial regulatory communities. The U.S. Army Corps of Engineers (USACE) is the executive agent of the DSMOA/CA program. Each Component Service is responsible for providing funds to USACE for disbursement to the States that have a signed DSMOA.

The DSMOA is the general agreement that the State will provide technical services and the DoD will provide funds for those services. The CA is the agreement on the specific services (considered short-term) to be provided and the costs of those services for two years. The CA also includes a narrative summary plan of long-term activities with reasonable estimates of cost for an additional 4 years, as necessary.

The Army is developing a process in accordance with USACE guidance for identifying each State's funding requirements that includes input from Army installations. Currently, implementing instructions including Army installation and MACOM responsibilities have six steps.

**Step 1:** A designated DSMOA/CA representative of the State contacts the appropriate installation representative (for BRAC the representative is the BEC) to indicate that the state is initiating the development of the two-year CA with a narrative summary for an additional 4-years, covering a total of 6 years.

**Step 2:** The BEC provides the State with a detailed schedule of deliverables and activities for the two-year CA and a narrative summary of activities planned for the four years subsequent to the 2 year CA. The purpose of this is to develop a two-year CA work plan (jointly signed by the state and the installation) and tentatively agree on the anticipated restoration activities for the 4 years beyond the CA.

**Step 3:** The designated State DSMOA/CA administrator, using the schedule developed by the installation, calculates the costs required to support the installation's restoration program for two years and prepare a draft CA.

**Step 4:** The installation, MACOM and the U.S. Army Environmental Center (USAEC) concurrently review the proposed costs and activities included in the draft CA. Once the MACOM and the USAEC agree on the draft CA, the USAEC and the State DSMOA/CA administrator discuss and agree on the reasonableness of the short-term and the long-term activities.

**Step 5:** The State completes its CA application for all installations and each Component Services, within the State and submits the application to USACE for processing and funding. The CA application includes the summary of costs, by Component Service and by funding source (BCA or ER), for each of the two years of the CA and presents an estimate of total costs for the additional 4 years (by service and by fund source). USACE transmits all CA applications to DoD for concurrence.

**Step 6:** Each Component Service provides its share of the first year's funding to USACE by February 1.

***For detailed guidance on the DSMOA/CA Program, see the USACE handbook "Working Together to Achieve Cleanup: A Guide to the Cooperative Agreement Process." 1996.***

***Available on the Internet at <http://www.mrd.usace.army.mil/mrded-h/access/DSMOA/dsmoa.html>***

### 5.8.3 BRAC Work Plan

The MACOMs and installations identify their BRAC requirements for a particular year in the BRAC Work Plan. The BRAC Work Plan is a prioritized listing of the Army's total BRAC environmental program requirements listed by installation. The Army uses the BRAC Work Plan to track execution of the BRAC Environmental program. The BRAC Work Plan includes cleanup, closure-related compliance and UXO projects and for BRAC 95 installations, cultural and natural resource requirements and NEPA requirements. The BRAC Work Plan also includes the proposed obligation of funds by month.

The USAEC prepares the BRAC Work Plan for the current year and the program year (FY+1). The Army uses (1) imminent threat to human health and the environment, (2) beneficial reuse, (3) legally enforceable requirements, (4) relative risk (5) earlier funding decisions noted in development of the BCP, and (6) other management factors (see Section 5.8.4) to prioritize BRAC program requirements. The BRAC authorization/appropriation amount is the baseline in determining which projects are funded. Installations are required to provide input to the BRAC Work Plans prior to the BRAC Work Plan Reviews held twice annually.

BRAC cultural and natural resource requirements and NEPA requirements for BRAC 95 installations require Environmental Program Requirements (EPR) reports. EPR reports are provided to the USAEC for input into the BRAC Work Plan.

***Additions to the BRAC Work Plan.*** When unforeseen issues arise that take precedence over approved line items on the BRAC Work Plan, an installation identifies new requirements to be added to the work plan and identifies a bill-payer from their approved program to pay for the new requirement to the USAEC and BRACO. MACOMs are responsible for ensuring that any new requirements executed by USACE are fully coordinated with the executing Corps District and HQUSACE. If an Army Management Structure (AMS) code does not exist for a project, the MACOM must provide BRACO with the new AMS code and title. BRACO will ensure new codes are entered into the DFAS-IN Pamphlet 37-100-XX at which time funds can be distributed. In turn, USAEC must provide an updated BRAC Work Plan to BRACO before funds will be released.

***BRAC Work Plan Reviews.*** The BRACO and USAEC will hold meetings semi-annually with the MACOMs to review execution of the BRAC Environmental Program and discuss BRAC Environmental Program issues. At these reviews, the MACOMs will brief BRACO and USAEC on its progress obligating their Annual Funding Program and any changes to the BRAC Work Plan.

#### **5.8.4 Priority Setting and Sequencing**

Prioritization and sequencing of BRAC activities to meet the DPG goals are accomplished using (1) imminent threat to human health and the environment, (2) beneficial reuse, (3) legally enforceable requirements, (4) relative risk (5) earlier funding decisions, and (6) other management factors. Factors other than reuse and risk to human health and the environment may influence the sequencing of work at sites and the site's priority for funding.

Other management factors include:

- program goals and initiatives,
- the ability to execute cleanup projects in a given year and the feasibility of carrying out the activity in relation to other activities at the facility,
- cultural, social and economic factors, including environmental justice considerations,
- short-term and long term ecological effects and environmental impacts in general, including damage to natural resources and lost use,
- acceptability of the action to regulators, tribes, and public stakeholders,
- availability of new and innovative technologies, and
- actual and anticipated funding availability.

#### **5.8.5 Funds Distribution**

Upon appropriation of funds by Congress, the Comptroller of the Office of the Secretary of Defense will release funds to the Army Budget Office (ABO). BRACO will release funds only after receipt of a funds request via the BRAC Automated Funds Request Software. Request where funds are to be executed by a MACOM can be submitted directly to BRACO. Requests that are to be executed by USACE must be submitted to USACE Headquarters for concurrence and forwarding to BRACO. All requests must be submitted to BRACO at least ten (10) working days prior to date required to allow adequate time for processing. Package and environmental codes for request submission can be found in DFAS-IN Pamphlet 37-100-XX, Chapter DO-510. Movement of funds between projects (AMSCOs) is prohibited without BRACO approval.

#### **5.8. 6 Tracking and Reporting**

**Obligation.** MACOMs must plan execution to meet the Army's obligation goals and ensure that funds are obligated only against sites and phases identified in BRAC Work Plan or approved changes. BRACO and USAEC track execution of the BRAC Environmental Restoration Program by using Defense Financial Accounting System (DFAS) reports and the BRAC Work Plan. BRACO and USAEC will perform a mid-year review and analyze each MACOM's execution and notify the MACOMs of any adjustments to their annual funding program.

Installation personnel through close coordination with the project management and resource management staff, must track execution of the BRAC Environmental Restoration Program. For BRAC, specific AMS codes are assigned for each installation. Project management staff must establish a mechanism whereby site level data can be tracked within projects for the BRAC Environmental Restoration Program with their resource management staff.

Installations report BRAC information through DFAS at the project-level. On a monthly basis, installation site level data must be reconciled to the 218 Report for project data. Discrepancies should be investigated and corrected so that subsequent 218 Reports are portraying an accurate execution status.

Obligation data (reconciled by installation to projects through the BRAC Work Plan) is reported to BRACO monthly. It is imperative that the installation's site level data is reconciled by site to project before submitting the information to the MACOM.

**Work Plan Reviews.** MACOMs report planned obligations by installation, project (site & phase), and month. At the semi-annual Work Plan Reviews, the MACOMs brief BRACO and the USAEC on its obligation progress, explaining any discrepancies. Deviations in funding levels per site are updated at the Work Plan Reviews.

### **5.8.7 Funding Outlays**

Recently, the Army has been focusing on tracking "*outlays*" in addition to "*obligations*" with respect to its environmental restoration accounts. Within the U.S. Government financial system, the term "*outlays*" refers to the actual disbursement of funds or the payment of a bill, where obligations establish the legal reservation of funds.

Funds are "approved" for restoration projects when included in the approved FY BRAC Work Plan. However, funds are not "*obligated*" until an authorized agent of the government (e.g., Contracting Officer) signs (awards) a contract and commits the U.S. Government to pay a set amount for a prescribed work effort or product over a determined period of time and entered into the appropriate accounting system. While "approved" projects are subject to change in the BRAC Work Plan, "*obligated*" funds must be reserved in their entirety to pay a bill until all work is completed.

In the case of payment of government employee salaries or the purchase of materials or equipment, funds must be "*approved*" to pay the salary or purchase the equipment. "*Obligation*" occurs when the work is performed or the contract for the purchase of the equipment is awarded. Funds are considered disbursed when the U.S. Government issues the check.

When the U.S. Government awards a large, multi-year contract, the government does not pay the contractor until the work is actually performed. In the case of many environmental contracts the project may extend for two to three years or more. Normally the contract has provisions to reimburse the contractor on a monthly basis for work performed within the given month. The contractor submits a monthly Cost and Performance Report on the work effort and the amount of

funds (labor costs, overhead, and material costs) that the contractor has expended during the month. When the Contracting Officer and the Contracting Officer's Representative verify that the work effort and costs are valid, the appropriate Disbursement Office "pays the bill" and the applicable portion of the "*obligated*" funds are reported as "*outlays*."

Operations and Maintenance, Army (OMA) funds traditionally have been used to pay Army employees or contractors for on-going work. The one-year OMA funds are normally "*obligated*" and disbursed or "*outlayed*" in the year that the funds are appropriated. Any OMA funds not "*outlayed*" in the initial year warrant close inspection, audits, and procedural reviews.

Environmental accounts in an OMA carrier challenge the traditional financial accounting process because funds often are not disbursed for two to three years following "*obligation*." This delayed disbursement has resulted in an apparent credibility problem. Congress is told that it is imperative to provide funds in a given fiscal year to fund high priority, critical projects and therefore appropriates and "*authorizes*" BCA funds. The contracts are awarded and the funds are "*obligated*," but there is limited disbursement.

The General Accounting Office (assuming that bona fide needs rule was not being adhered to in the program) questions the rate at which outlays are being processed and reported. Congress sees limited "*outlays*" for a year and incorrectly assumes that no work is being performed or that the Army is forward funding workloads on previously declared "*critical*" projects. This view that the level of funds appropriated for environmental cleanup are not really needed makes the unobligated prior year funds of environmental accounts susceptible to "raids" when other high priority requirements (such as troop deployments) require immediate, but unbudgeted funding.

### **5.8.8 Reimbursement for Non-Army Activities**

While highly discouraged, an Interagency Agreement/Federal Facilities Agreement may include language that the Army will reimburse other Federal agencies (outside of the Army) for services associated with cleanup. These services must be those that the Army does not have the capability of providing and are incidental to cleanup.

The outside agency to be reimbursed, submits a proposed annual budget to the installation prior to development of the upcoming fiscal year budget. The proposed annual budget is categorized into tasks developed in accordance with the scope of work contained in the agreement. Subsequently, the Army only reimburses the outside agency for those specifically approved tasks.

All requests for reimbursement of services to Federal agencies outside the Army are processed in accordance with the Economy Act (31 USC 1538). The Army certifies that use of funds is legal under the Economy Act. The Army approves and reimburses only those costs that directly support the Army's environmental mission and is not part of the supporting agency's Congressionally funded mission. Installations and MACOMs should contact their resource management and legal offices with any questions concerning the Economy Act and reimbursement of services provided by agencies outside the Army.

## 5.9 Execution Strategy

DoD and the Army establish various goals for the BRAC Environmental Restoration Program that must be met during program execution.

**Obligation Goal.** The DoD goal for obligation of funds is 28% by first quarter, 55% by second quarter, 80% by third quarter and 100% by fourth quarter.

**DPG Goal.** The Army must meet the goals of the Defense Planning Guidance (DPG) including (1) by the end of FY2001, 75% of the acres in Environmental Condition of Property categories 5, 6, and 7 identified in the FY96 baseline will be environmentally suitable for transfer: 75% of installations will have remedial systems in place or responses complete for all sites; and 90% of all sites will have remedial systems in place or responses complete, and (2) by the end of FY2005, 100% of the acres in categories 5,6, and 7 identified in the end-of-FY 1996 baseline will be environmentally suitable for transfer: and 100% of installations will have all sites with remedial systems in place or responses complete.

**Disbursement Goal.** To ensure that all BCA funds are disbursed in a timely fashion, the following goals have been established by DoD for BRAC Environmental Restoration funds:

	ANNUAL		CUMULATIVE
Initial year of Obligation	22%	22%	Disbursement of Funds
Second Year of Obligation	45%	67%	Disbursement of Funds
Third year of Obligation	22%	89%	Disbursement of Funds
Fourth year of Obligation	6%	95%	Disbursement of Funds
Fifth year of Obligation	5%	100%	Disbursement of Funds

**Program Management Goal.** The Army's execution strategy is to limit total Army program management funds to 10% of the BRAC Environmental Restoration Program budget.

## 5.10 Performance Measures

**Work Plan Review.** The BRACO and the USAEC will hold meetings with the MACOMs to review execution of the BRAC Environmental Restoration Program and discuss issues on a semi-annual basis. At these reviews, the MACOMs will brief BRACO and the USAEC of its progress towards obligation of their Annual Funding Plan and any additions to the BRAC Work Plan.

**DoD In-Progress Review.** ODUSD (ES) requires that DoD Components monitor program progress and report semi-annually in June and December/January. The Army uses BCPs and BCP Abstracts, DSERTS data, RRSE data, budget data, and CTC information to report DERP status in support of the Army BRAC Environmental Restoration Program.

**Measures of Merit (MOMs).** MOMs are the tools used by ODUSD (ES) to measure the Army's progress toward goals set forth in its planning guidance, the DPG. There are five MOMs for BRAC environmental cleanup that the Army reports to OSUSD (ES) semi-annually at the In-Progress Review.

### **1. Relative Risk Reduction**

This MOM tracks both site counts and funding for each relative risk category. Progress of sites in each relative risk category for each fiscal year is used to indicate progress toward the DPG goals of relative risk reduction. The desired trend is toward a lower number of sites in the "High" relative risk category.

### **2. Phase Progress**

This MOM tracks the number of sites in study, cleanup, and response complete/no further action required categories. Progress is indicated as sites go from the investigation phase and cleanup phase to the response complete or no further action required categories. The desired trend is toward an increasing number of sites going from investigation to cleanup to closeout.

### **3. Milestones Accomplished**

This MOM tracks the number of sites where the milestones "Actions Taken", "Work Initiated", "Remedy in Place", and "Response Complete" have been achieved. The desired trend is toward an increasing number of sites in the "Remedy in Place" and "Response Complete" categories.

### **4. Installations Achieving Final Remedy in Place/Response Complete**

This MOM tracks the number of installations that have all sites in the "Remedy in Place" or "Response Complete" categories. The desired trend is toward an increasing number of sites in the "Remedy in Place" and "Response Complete" categories.

## 5. Acres suitable for transfer under CERCLA

This MOM tracks the number of acres based on the environmental condition of property categories 1-7 defined and described in the BRAC Cleanup Plan Guidebook. The desired trend is for the number of acres in categories 2 through 4 to increase over time as properties are remediated or remedies are in-place and are operating properly and successfully. All categories 5, 6, 7 acres should be categories 2 through 4 by the end of FY2005.

*The Defense Environmental Restoration Program Annual Report to Congress.* The DoD is required to submit an annual Report to Congress that describes the BRAC Environmental Restoration Program accomplishments during the previous FY. The report is required by section 120(e)(5) of SARA that applies to all Federal facilities and section 211 of SARA, as amended on 10 Nov. 93, that pertains to the DERP. The report outlines progress made in carrying out environmental restoration activities at military installations. The report includes success stories highlighting significant DERP activities and initiatives, narrative summaries for NPL, proposed NPL, and major BRAC installations, and the status of the cleanup at installations with sites in the DERP.

At the end of each FY, the USAEC requests that installations and MACOMs submit success story candidates and to prepare and review narrative summaries.

The DSERTS Fall Data submission is a critical source of information for the report to Congress. Therefore, installations and MACOMs should ensure that the DSERTS data is updated and submitted as required. Preparation of the report begins in September of each year, with a requirement to submit the report to Congress and the public by 31 Mar. Copies of the report are eventually distributed to MACOMs, Installations, and Project Executors. The Annual Report to Congress is available on the world-wide web at [www.dtic.mil/envirodod/](http://www.dtic.mil/envirodod/).

## 5.11 Program Timelines

- Oct. Report to Congress Draft Narratives
- Oct. 15 DSERTS Fall Data Submission including programmed CTC requirements  
Semi-Annual BCP Abstract Submission
  
- Nov. Fall DSERTS/BCP Abstracts forwarded to DoD
  
- Dec. DoD Semi-annual In-Progress Review
  
- Jan. Work Plan Review Meeting  
President's Budget Submitted to DoD
  
- Feb. DSERTS Spring Data Call Begins  
Begin POM Process
  
- Mar. 31 Annual DERP Report to Congress is complete
  
- Apr. 15 DSERTS Spring Data Submission  
Semi-Annual BCP Abstract Submission
  
- May Work Plan Review Meeting
  
- June Begin update of CTC requirements  
DoD Semi-annual In-Progress Review  
Draft FY+1 Work Plan  
Spring DSERTS forwarded to DoD  
POM Submission
  
- July CTC requirements due to AEC
  
- Aug. Final FY+1 Work Plan  
DSERTS Fall Data Call Begins
  
- Sept. Installations program CTC requirements  
Budget Estimate Submission (BES) to DoD  
Report to Congress Success Stories Narratives

## **6.0 PROGRAM EXECUTION**

The BRAC Environmental Restoration Program is executed at the installation level, and the Installation Commander, or other designated authority where there is no Installation Commander is accountable for the BRAC Environmental Program at his/her installation. The BRAC Environmental Coordinator (BEC), BRAC Cleanup Team (BCT), the designated executor of Army restoration projects, the MACOMs, USAEC and BRACO all play a role in the execution of the Army's BRAC Environmental Restoration Program.

### **6.1 Installation**

The Installation Commander is responsible for execution of the restoration program. Where there is no Installation Commander at a BRAC installation, the MACOM designates an alternative authority.

- The Installation Commander or other designated authority through the MACOM assigns a BRAC Environmental Coordinator (BEC), to ensure all work is accomplished in accordance with regulatory, DoD and Army policy. If the MACOM determines a full-time BEC is not required, a Fast Track Coordinator Point of Contact (FTC POC) is appointed. The BEC/FTC POC is the installation's primary restoration point of contact with the installation BCT, Base Transition Coordinator (BTC), the BRAC Environmental Restoration Program Executor, the MACOM, ATSDR, USACHPPM, USAEC, BRACO, and the public.
- The BEC/FTC POC communicates and negotiates with regulators and is the sole point of interface with all regulators.
- The BEC/FTC POC executes the environmental restoration Community Relations Program; including determining interest and if appropriate, developing a Restoration Advisory Board (RAB) or chairing a Technical Review Committee, establishing and maintaining the public repository and administrative record.
- The BEC/FTC POC prepares and submits BCPs/BCP Abstracts, DSERTS and CTC updates, BRAC Work Plan input, appropriate EPR reports, and related changes to the MACOM.
- As appropriate, the BEC/FTC POC is responsible for including ATSDR recommendations from the Public Health Assessment into the BCP/BCP Abstracts. A Public Health Assessment, (conducted by ATSDR) is required when an installation is proposed to the NPL. Upon proposal to the NPL, the installation is contacted by USACHPPM. USACHPPM instructs the installation on the requirements for a Public Health Assessment, the role of ATSDR, and negotiates a schedule for an initial ATSDR site visit within 18 months of proposal to the NPL.

- The BEC/FTC POC implements projects, including identification of funding and reporting requirements and programs necessary BRAC Environmental Program funds through work plans, CTC and DSERTS with estimates of cost and time requirements for performance of specific tasks.
- The BEC/FTC POC selects a BRAC Environmental Restoration Program executor to conduct environmental restoration projects.
- The BEC/FTC POC assigns tasks to their BRAC Environmental Restoration Program Executor describing the general scope of activities and provide project criteria, goals and general milestones for restoration work. Installations should obtain maximum competition when selecting project management services.
- The BEC/FTC POC will provide appropriate funds, in coordination with their MACOM, to their BRAC Environmental Restoration Program Executor for all work required. The BEC/FTC POC ensures that funds are allocated to eligible projects only. The last resource management office (installation or BRAC Environmental Program Executor) to receive restoration funds follows standard resource management practices to input obligation information by installation and phase to the DFAS. The installation or BRAC Environmental Program Executor ensures that their resource management office account for restoration funds in accordance with DFAS-IN Manual 37-100-XX.
- The BEC/FTC POC approves proposed schedules and deadlines for all tasks and deliverables and provides comments and approvals to the BRAC Environmental Program Executor on items such as scopes of work and project documents in accordance with approved schedules.
- The BEC/FTC POC provides guidance to the BRAC Environmental Program Executor concerning all interpretations of statutes and regulations that may effect performance of a task and document any deviations from DoD or Army policy. The BEC/FTC POC is responsible for obtaining concurrence from their MACOM of any deviations from policy and guidance.
- The BEC/FTC POC coordinates with the BRAC Environmental Program Executor to resolve any impediment to completion of the task on or before the stated deadlines and at or below the stated costs. If the BRAC Environmental Program Executor fails to meet a deadline resulting in a penalty to the Army, the installation BEC/FTC POC is responsible for notifying the MACOM and the BRACO of the penalty and any associated costs.
- The BEC/FTC POC provides copies of project documents for review and comment to appropriate Army proponents of the BRAC Environmental Program such as their MACOM, the USAEC, USACHPPM, and ATSDR (when appropriate).
- The BEC/FTC POC provides copies of all RODs/DDs for review and concurrence to their MACOM/MS, USAEC and USACHPPM prior to release of funds for removal/interim/remedial action contracts.

- If the BEC/FTC POC believes the executor's performance is unsatisfactory, the Installation Commander or other designated authority contacts the commander of the executing agency and attempts to resolve the issues. Performance should be judged on the executor's ability to meet schedules, communicate with the installation staff, provide quality reports, effectively use available funding resources, etc. If the quality of performance by the executor continues to be unsatisfactory, the Installation Commander or other designated authority, in concurrence with the MACOM, may transfer execution to another performer. Appropriate notifications shall be made to the executor and the MACOM so that funds can be recovered and redirected to the new performer.

## **6.2 BRAC Cleanup Team (BCT)**

Under Fast Track Cleanup, each installation where property will be made available for transfer to the community assembles a BCT, unless the MACOM determines a full-time BEC is not required. In that case a Fast Track Coordinator Point of Contact (FTC POC) is appointed. At installations where there is no BEC, a BCT is not formed.

The BRAC Cleanup Team is made up of the BEC (representing the Army), EPA and State environmental regulatory agency representatives and acts as the primary forum in which issues affecting the execution of cleanup to facilitate reuse will be addressed. Among DoD, EPA, and the states, and with input at the community level from stakeholders such as LRAs and RABs, BRAC Cleanup Teams have the technical expertise to engage in real-time decision making, reduce unnecessary documentation, and identify innovative ways to accomplish cleanup.

The BCT responsibilities include management of the five-step BRAC Cleanup Plan process and the preparation of the installation's BCP. The BCT conducts a "bottom up" program review of the installation's environmental programs to facilitate preparation of the BCP. This team approach is designed to accelerate cleanup to make property available for transfer while ensuring protection of human health and the environment. However, the BCT does not replace the need to use the Army Chain-of-Command, nor can the BCT commit the Army to spend funds. It is the BEC's responsibility to work with the Installation Commander and the MACOM on these issues.

The BCT meets routinely to review the cleanup process underway, to evaluate methods, to handle problems that develop, and to discuss how to integrate environmental cleanup priorities with reuse needs.

## **6.3 Executor**

The U.S. Army Corps of Engineers (USACE) executes the majority of Army restoration projects. The USACE established Hazardous, Toxic and Radiological Waste (HTRW) Design Districts for executing environmental cleanup activities, including those of the Army BRAC Environmental Program. Each HTRW Design District works within specific geographic boundaries. Approval must be obtained from the Director of Military Programs at headquarters USACE if the installation prefers using a USACE District outside of the designated geographic boundary.

Installations and MACOMs also execute BRAC Environmental Program projects. USACHPPM is available to execute specific projects under the BRAC Environmental Program such as specialized risk assessment and initial site assessment projects, particularly preliminary assessments, site inspections, and relative risk site evaluations.

Use of government agencies outside of the Army to execute the BRAC Environmental Program is discouraged except under unusual circumstances. As appropriate, Economy Act procedures will be followed. Installations should contact their resource management and legal offices concerning Economy Act procedures. ATSDR (not an Army agency) through a Memorandum of Understanding (MOU) with DoD performs Public Health Assessments for all installations on or proposed for the NPL. The MOA also authorizes ATSDR to perform Public Health Consultations as requested by any installation.

- The BRAC Environmental Program Executor assigns a Project Manager to be the primary point of contact for the installation Environmental Coordinator. The Project Manager serves under the authority and direction of the installation BEC/FTC POC in accordance with specific tasks.
- The Project Manager provides estimates of costs and time requirements for performance of specific tasks forwarded by the installation. The estimates include in-house costs, specific contract and pricing data, and costs charged for contract supervisory and administrative services applicable to each FY for the contract administration. The Project Manager utilizes historical cost data from analytical laboratories to ensure the executor can negotiate the lowest available price. The Project Manager also plans laboratory analyses to minimize higher cost growth turnaround time requirements.
- The BRAC Environmental Program Executor proposes schedules for all deliverables and accomplishes all tasks within time deadlines set forth by the installation. Tasks will not be considered complete until reviews are prepared for all work performed and accepted by the installation BEC/FTC POC.
- The BRAC Environmental Program Executor recognizes the installation BEC/FTC POC as the sole point of interface with all environmental regulators, reports any contacts by regulators immediately and attends all meetings as requested by the installation BEC/FTC POC.
- The BRAC Environmental Program Executor will request specific approval from the installation BEC/FTC POC before release for publication of any information gathered. The BRAC Environmental Program Executor will not release any information concerning the installation's restoration program without approval from the installation BEC/FTC POC.
- The BRAC Environmental Program Executor must use existing contracts before initiating new contracts for environmental work.

## **6.4 MACOM**

The MACOMs are responsible for direction and management of the BRAC Environmental Program for installations under their command. The MACOMs provide quality assurance on the data provided by installations for use in reporting Army requirements. All requirements must meet Army criteria for eligibility and must have relative risk site evaluations completed in accordance with current Army guidance.

- The MACOMs consolidate installation requirements for FY+1 execution and ensure all requirements identified are provided in a timely and accurate manner.
- MACOMs maintain a plan for obligation of the funds currently identified in the MACOM program. MACOM resource managers require parts of this plan for planning continuing resolution authority (CRA) and subsequent funds distribution.
- MACOMs insure funds are obligated only against sites identified on the approved work plan and are in accordance with Army quarterly goals (28%, 55%, 90% and 100%).
- MACOMs report on current obligation by installation, project and quarter to the BRACO for consolidation and reporting.
- Using the goals of the DPG, the MACOMs distribute funds to support identified BRAC Environmental Program projects.
- The MACOMs submit BCPs/BCP Abstracts, DSERTS updates, BRAC Work Plan input, related EPR reports and related changes to the USAEC.
- MACOMs review and staff DDs/RODs for approval signature.
- MACOMs distribute to their installations restoration guidance received from USAEC.
- MACOMs retain responsibility for management of Administrative Records after an installation closes.

## **6.5 USAEC**

The USAEC is a Field Operating Agency under the direction of the ACSIM. The USAEC provides support to BRACO for the BRAC Environmental Restoration Program and provides a broad range of program management and oversight services in support of BRACO, MACOMs, and installations.

In support of BRACO, the USAEC conducts the Army initiated environmental Independent Technical Review Program. The USAEC compiles teams of independent technical experts that review specific remediation projects for installations and provide recommendations concerning the technical feasibility of the projects. The USAEC also conducts an evaluation of the effectiveness of groundwater pump and treat systems.

The USAEC also has an oversight function for all BRAC Army installations. In addition to overseeing execution of the BRAC environmental program for BRACO, USAEC provides technical assistance with DSERTS updates revisions including BCP Abstracts, CTC updates and guidance in the overall BRAC Environmental Program process. The BCPs/BCP Abstracts are used by USAEC , in conjunction with the installation BRAC Work Plans, to oversee and track the progress of the BRAC Environmental Program at each installation.

USAEC oversight personnel coordinate with MACOMs prior to any site visits and also notify MACOMs of any issues that arise from the site visit. As necessary, BRAC Environmental Program project documents should be provided to the USAEC Restoration Oversight Manager. The USAEC will submit copies of completed documents to the Army's Technical Information Center (TIC), a library of all Army environmental documents. The TIC is located at the USAEC at Aberdeen Proving Ground, MD.

If an installation or MACOM/MSA is not aware of their USAEC restoration oversight manager, contact the Restoration Program Oversight Branch of USAEC, Environmental Restoration Division DSN 584-3261 or commercial (410) 436-3261.

## **6.6 BRACO**

The BRAC Office under the direction of the ACSIM is the Army's program manager for all BRAC activities. BRACO provides guidance to the MACOMs and installations on the execution of program requirements and directs distribution of all BCA funds for the BRAC Environmental Program.

## **7.0 PROGRAM PROCEDURES**

The BRAC Environmental Restoration Program was implemented to address the Army's cleanup responsibilities under CERCLA. There are several program procedures required under the BRAC Environmental Restoration Program, such as property transfer environmental requirements, that must be addressed. The following sections address various select program procedures required under the BRAC Environmental Restoration Program.

## **7.1 Record of Decision (ROD)/Decision Document (DD)**

**ROD.** Under CERCLA , a remedy is selected and documented in a ROD following receipt of Proposed Plan public comments and any final comments from the regulators.. The ROD serves as legal certification that the remedy was selected in accordance with the requirements of CERCLA and the NCP. After receiving appropriate concurrences the ROD is forwarded through command channels for Army approval. Regulators should not sign the ROD prior to all Army command channel concurrence. The ROD is also not to be submitted for approval prior to approval of the final Feasibility Study report.

Per the NCP (Section 300,430 (f)(6)), after the ROD is signed, the Army shall:

- 1) Publish a notice of the availability of the ROD in a major local newspaper of general circulation (the EPA will publish the notice in the Federal Register), and
- 2) Make the ROD available for public inspection and copying at the information repositories at or near the facility prior to the commencement of any remedial action.

Per SARA 120 (e)(2), the remedial action must commence within 15 months of signing the ROD.

A signed ROD may be re-evaluated at any point during the remedial action process (i.e., during remedial design, before or after operations are in place, when the selected remedy is found to be ineffective or if recently developed technology may be more beneficial towards cleanup). If, after re-evaluation, the selected remedy changes, the ROD will have to be amended or "re-opened" before the changes can be implemented.

**DD.** The Army has adopted the term "decision document" for the documentation of 1) removal (REM) or interim remedial action (IRA) and remedial action (RA) decisions at non-NPL installations and 2) sites at NPL installations at which REM/IRA decisions have been made. The DD consists of six parts:

1. Purpose
2. Site Risk
3. Remedial Alternatives
4. Public/Community Involvement
5. Declaration
6. Approval and Signature

The DD for sites which are not covered by an IAG/FFA need not be an elaborate document and in most cases will only be two to three pages in length for simple projects. The DD represents the Declaration Section of a ROD. All DDs will be maintained in the installation Administrative Record and the installation's permanent environmental files.

*For an outline format and DD example, see Attachment C of this management plan.*

### ***ROD/DD Review and Approval Procedures.***

***Responsibilities.*** Installations and MACOMs ensure that DDs or RODs that commit the Army to future expenses are (1) eligible for BCA funding, (2) on the BRAC Environmental Program Work Plan, and (3) conform with priorities for reuse/risk reduction. The Army will not support funding ineligible BCA actions with BRAC Environmental Program funds. Installations will fund those projects with installation operating funds. Projects not complying with the above may require re-negotiation of agreements with regulators.

Installations prepare RODs/DDs, staff the RODs/DDs for review and concurrence of the selected action, and obtain the appropriate approvals prior to requesting the release of funds for award of a REM/IRA/RA contract. Projects awarded prior to development and approval of RODs/DDs are subject to contract modification and will be reported to the BRACO during BRAC Environmental Program reviews.

***Review Procedures.*** After an installation has prepared a ROD/DD, and prior to submittal for appropriate approval signature, all documents are staffed through the installation chain-of-command (the BEC, and servicing public affairs and legal offices). Copies of the draft document are sent to the appropriate environmental MACOM representative and review includes legal and public affairs at the MACOM. Draft copies of the ROD/DD are also provided to the appropriate USAEC and USACHPPM representative for review and concurrence with the selected action.

***Approvals.*** Once the draft DD/ROD has been reviewed and concurrences have been received from the installation BEC and servicing public affairs and legal offices, MACOM, USAEC and USACHPPM, the document should be forwarded, with concurrences, for signature by the appropriate authority. Signature authority for NPL RODs shall not be delegated below a general officer (GO) or Senior Executive Service (SES) official. The only exception is that an Installation Commander or other designated authority, regardless of grade/rank, may sign NPL RODs selecting the no action alternative.

a. The ACSIM approves all DDs, including NPL RODs, greater than \$6 million. MACOMs should submit 5 copies of final RODs/DDs with concurrence, needing ACSIM approval for staffing to BRACO (DAIM-BO).

b. The MACOM commander approves DDs, including NPL RODs, between \$2 million and \$6 million.

c. The Installation Commander approves DDs, including NPL RODs, less than \$2 million.

***Timelines.*** After preparing the ROD/DD, installations must allow sufficient time for staffing at each level in the chain-of-command.

a. Review and Concurrence -- Army policy for staffing RODs/DDs suggests that 60 to 90 days be allowed for technical review and concurrence to the installation staff, MACOM, USAEC, USACHPPM and the regulators if appropriate.

b. Approval and Signature -- Army policy for staffing RODs/DDs suggests that 20 to 45 days be allowed for administrative staffing to ICs, MACOM commanders, and the ACSIM for approval and signature.

*Copies.* Copies of signed DDs, including RODs, at a minimum should be provided to each level in the chain-of-command below the approval authority and to the USAEC. The approving organization should also provide a copy of signed RODs to BRACO (DAIM-BO) and the DASA (ESOH). All signed RODs/DDs are to be reported in the DSERTS.

***Policy for staffing and approving DDs including NPL RODs is contained in the 16 Nov 95 memorandum from the ACSIM, subject: Revised Interim Policy for Staffing and Approving Decision Documents (DDs). Available on the Internet at <http://www.denix.osd.mil/denix/Public/Policy/Army/Intpol/dds1.html>***

***Staffing and approval procedures are also in the draft final DA PAM 200-1 (May 1998) Section 11-15. Available on the Internet at <http://denix.cecer.army.mil/denix/DOD/Policy/component.html>.***

## **7.2 Five Year Reviews**

In accordance with the National Contingency Plan, if hazardous substances, pollutants, or contaminants remain at a site after the remedial action, at levels that do not allow for unrestricted use, the Installation Commander will review the remedial action (long term monitoring results, ARARs, etc.) to ensure that human health and the environment are being protected.

This review will be made every five years, or in accordance with the ROD/DD. The first review will be conducted five years after the initiation of on-site construction for the first operable unit (OU) requiring a five-year review. All OUs will be included in the first review regardless of their phase of cleanup unless they have already been cleaned up for unrestricted use. Five-year reviews will continue until contaminants are below levels which allow for unrestricted use for all OUs. MACOMs will be responsible for designating a five-year review executor. The U.S. Army Environmental Center is in the process of developing specific guidance for conducting five-year reviews.

***See Attachment D for the latest guidance concerning the Army's CERCLA Five-Year Review Requirements at Army Installations, 17 Jul 98.***

## **7.3 Off-Site Response Action**

To fulfill its CERCLA responsibilities per EO 12580, the Army has the authority to conduct response actions outside of the installation boundaries, where the installation is reasonably considered the sole or the major source of the release. Off-site actions are complex and require extensive coordination because of the lack of Army control over the off-site property and the necessity for increased interaction with the public.

Army Regulation 200-1 states that the DASA (ESOH) will approve all off-site response actions. However, since publication of the February 1997 AR-200-1, the DASA(ESOH) has designated authority to the Installation Commander to approve off-site data collection to determine contamination migration and any off-post monitoring to ensure that contamination has not migrated off-site. If there is an actual or high potential health threat to personnel on or off the installation, the DASA (ESOH) will be immediately notified by the Installation Commander through the chain of command. The DASA (ESOH) approves off-post response actions to start or stop a provision for bottled water, alternative water supplies, well head treatment devices or connection to a municipal water system.

The installation must provide a response plan through the command chain (with information directly to USAEC) to the DASA (ESOH) for any off-site response actions.

***Requirements for notification procedures and the response plan can be obtained from the draft final DA PAM 200-1 (May 1998) Section 11-15. Available on the Internet at <http://denix.cecer.army.mil/denix/DOD/Policy/component.html>.***

#### **7.4 Independent Technical Review**

In 1997, the Army initiated an Environmental Independent Technical Review Program for both the BRAC Environmental Restoration Program and the Installation Restoration Program. A team of independent technical experts review specific remediation projects for installations and provide recommendations concerning the technical feasibility of the projects. The Army Independent Technical Review Program ensures that the remedial response for a site will reduce risk to an appropriate level and will be an effective and efficient use of the Army's environmental restoration funds. In the future, selected installations must be prepared to participate in the Army's Independent Technical Review Program.

The Independent Technical Review process involves three phases.

***Phase 1 – Project Selection.*** FY+1 and FY+2 cleanup projects from the investigation phase through remedial action operation and monitoring that have an estimated CTC in excess of \$2 million are reviewed for Independent Technical Review consideration. The installation, MACOM, USAEC, or the ACSIM may recommend other projects not meeting this criteria be reviewed, if the project could benefit from the Environmental Independent Technical Review process. After projects are selected for Independent Technical Review, the installation BRAC Environmental Coordinator completes and submits information for each project to the Independent Technical Review Team prior to commencement of the review.

**Phase 2 – Technical Review.** The composition of the Independent Technical Review Team includes technical personnel who have a broad knowledge of all aspects of CERCLA/SARA, RCRA, and other environmental programs. The team members can be technical experts from private consultants, EPA and state regulatory agencies, academia, USAEC, USACHPPM, USACE, and appropriate USACE and Army laboratories. Participation by regulatory agency project managers is encouraged for both EPA and state project personnel. An appropriate review structure is established for each installation selected for Independent Technical Review based on the number of major projects. Reviews are conducted at either the installation or a designated off-site location or may be conducted via telephone conference.

**Phase 3 – Recommendations/Results.** The Independent Technical Review Team provides advice and recommendations to the installation, MACOM, USAEC, and BRACO focusing on the technical merits of the project in a draft report that summarizes the results of the review. Although technical merit is the primary goal of the review, other factors may have a significant role in the decision making process. For example, interpretation of regulations, state requirements or guidance policies generally have a large impact on decisions. Independent Technical Review recommendations specify technical issues, identify other factors controlling the decision making process, and predict the impact these factors have on risk management, and cost-benefit balance. The review team's recommendations are to be consistent with Army policy.

The Independent Technical Review will provide a rationale as to why the recommendation is being made, the assumptions on which the recommendations is based, and options that the installation can consider to help implement the recommendation. The installation prepares a written response to the draft report. The MACOM, USAEC, and BRACO may provide written comments as appropriate. If the installation does not feel that the recommendation can be carried out, the rationale must be provided. After issues have been resolved the final report is distributed to the installation, MACOM, USAEC, and BRACO.

## **7.5 Interagency Agreement (IAG)/Federal Facility Agreement (FFA)**

Per SARA, Sec. 120, within 180 days after EPA's review of the final RI/FS for NPL sites, the EPA and the installation must enter into an IAG/FFA for the cleanup effort. All signed IAG/FFA information (parties and dates) are reported in the DSERTS. A copy of the final IAG/FFA must be furnished to the USAEC. Although CERCLA/SARA does not require an IAG/FFA until after the RI/FS phase, as a general practice, the Army has entered into these agreements early in the investigative phase to ensure adequate regulatory participation in the steps leading to remedy selection.

Upon nomination to the NPL, EPA Regions will request that the installation and State regulator enter into an IAG/FFA. The IAG/FFA addresses the completion of all necessary remedial actions at the installation. The Installation Commander and the DASA (ESOH) will both sign the IAG/FFA for the Army. DoD and EPA developed model language that forms the basis for negotiations. Deviations to the model language must be approved by ODUSD(ES). The concept of flexible schedules, funding constraints and relative risk must be incorporated into IAGs/FFAs.

For re-negotiated agreements, the DoD and the Army, again, strongly support incorporation of the concept of flexible schedules.

The installation's servicing legal office has the lead in IAG/FFA negotiations; however, the legal chain of command may designate another lead should the installation/MACOM request assistance. When the IAG/FFA is sent to DASA (ESOH) through the command chain for signature, the ACSIM requests concurrence from the USAEC. The installation should provide USAEC with copies of the draft IAG/FFA for review and concurrence prior to sending the IAG/FFA to DASA (ESOH) for signature.

Reimbursement for non-Army Activities. While highly discouraged, an IAG/FFA may include language that the Army will reimburse other agencies (outside of the Army) for services associated with cleanup. These services must be those that the Army does not have the capability of providing and therefore are incidental to cleanup.

*For the IAG/FFA model language, see Appendix A, "U.S. Army Environmental Restoration Programs Guidance Manual", U.S. Army Environmental Center, April 1998. Available on the Internet at <http://www.denix.osd.mil/denix/Public/Policy/policy.html>*

## **7.6 Implementation of the Federal Facilities Environmental Restoration Dialogue Committee (FFERDC) Recommendations**

The FFERDC was a federal advisory committee that made recommendations to federal agencies for improving their restoration programs. The Army and the other DoD Components participated in the FFERDC along with representatives of other federal agencies, states, local governments and citizen and environmental interest groups. Recommendations of the committee are listed in a 1996 final report, and primarily involve consultation with stakeholders such as regulatory agencies, other federal, state, and local agencies, Native American tribes and the local community.

The Army supports the FFERDC recommendations regarding consultation with stakeholders, and implementation will be accomplished in the following ways:

1. Installations will consult with stakeholders throughout the BRAC Environmental Restoration Program planning and execution process. Consultation involves providing information and seeking feedback/input before decisions are made. The Army retains final decision authority as lead agency, however. Consultation should begin in the program formulation phase, and continue to site closeout. The extent of consultation may vary over the life of the program and should be commensurate with the level of restoration activity and stakeholder interest. The RAB, comprised of representatives of the installation, regulatory agencies and the local community, shall be the primary forum for consultation. (See section 7.8, Public Participation and Community Relations). RAB members should be involved by providing input on activities/projects, including scope, timing, schedule and overall environmental restoration

funding at the installation. Installations shall inform RAB members of the existence of fiscal controls, and identify priorities so that, should budget reductions or program adjustment become necessary, RAB members can provide informed input.

2. When changes to the program become necessary, installations will consult with stakeholders, to the extent possible, before final decisions are made. When time does not allow stakeholder participation in the decision process, installations should inform RAB members as soon as possible on what actions were taken and why they were taken.

*The Final Report of the Federal Facilities Environmental Restoration Dialogue Committee (FFERDC), April 1996 is available on the Internet at [http:// www.epa.gov/swerffrr/ferdcrypt /toc.htm](http://www.epa.gov/swerffrr/ferdcrypt/toc.htm)*

## **7.7 Regulatory Participation**

It is the Army's intent to work cooperatively with regulatory agencies so that Army's restoration goals can be accomplished cost effectively, in accordance with applicable laws and regulations. Under BRAC this is usually accomplished through the BCT. If a BRAC installation does not have a BCT, BRAC installations identify points of contact in regulatory agencies, determine communication channels, and establish cooperative relationships. Installations should provide regulators with ready access to program information, including draft data and documents and establish procedures for obtaining pertinent information from regulators on a timely basis.

Installations should involve regulatory agencies in (1) project planning, budgeting, and implementation, (2) work plan development and site and project prioritization, (3) site close-out determinations, and (4) Restoration Advisory Boards (RABs) and other community involvement initiatives.

## **7.8 Public Participation**

Local communities are interested in the results of environmental studies conducted under the BRAC Environmental Program because of the potential impact on their health, environment, and economic well being. The Army fully supports public involvement programs that require the Army to solicit and consider the comments of the interested individuals, groups, and government bodies before selecting a remedial alternative.

**Community Relations Plan.** A community relations plan is required for all Army properties on or proposed to the NPL. Installations that are not on or proposed to the NPL, are strongly encouraged to establish a community relations plan. The community relations plan provides the guidelines for future community relations activities for an installation.

**Environmental Justice.** Army installations will address and consider environmental justice concerns and issues in its restoration programs. On February 11, 1994, the President issued Executive Order 12898 entitled *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. The executive order measure requires Federal Agencies to identify and address disproportionately high and adverse human health and environmental effects of Federal programs, policies, and activities on minority and low-income populations. Environmental justice issues within a community will be identified as part of the process of developing the community relations plan. A primary mechanism for input from the environmental justice community on restoration issues will be from Restoration Advisory Boards.

*For additional information on Environmental Justice see the Department of Defense Strategy on Environmental Justice, 24 Mar 95. Available on the internet at [http://www.denix.osd.mil/denix/DOD/Webnotes/get\\_text.cgi/denix/DOD/Working/Closure/ARMY/army.html?dod.closure.general/29/0](http://www.denix.osd.mil/denix/DOD/Webnotes/get_text.cgi/denix/DOD/Working/Closure/ARMY/army.html?dod.closure.general/29/0)*

**Technical Review Committee (TRC).** Per 10 USC 2705(C), a TRC is established to review and comment on the Army's actions with respect to releases or threatened releases of hazardous substances at installations. TRC meetings serve as working sessions for exchanging information and organizational viewpoints. Members of a TRC include at least one representative from the Army, and appropriate EPA, state and local authorities, and a public representative(s) of the community(s). The Installation Commander is responsible for establishing and chairing or designating an installation/Army chairperson for the TRC.

**Restoration Advisory Board (RAB).** To facilitate public involvement, the Army strongly recommends the establishment of RABs. RABs are a forum between governmental decision-makers and the affected community providing the opportunity for meaningful community input to the decision making process. Every installation participating in the BRAC Environmental Program *must determine community interest* in establishing and participating in a RAB. TRCs will be converted to RABs at installations with TRCs that are interested in establishing RABs. RABs meet the requirement of 10 USC 2705(C).

The installation must keep the RAB apprised of program funding status, and possible impact of any cuts prior to and during program execution. The installation should, at a minimum, make copies of the BCP available to the RAB. Project work plans should also be provided to the RAB to ensure they are knowledgeable of the plans, including any changes.

**Technical Assistance for Public Participation (TAPP).** There may be times when community RAB/TRC members may require some level of independent technical support. The Army may seek independent technical assistance for community RAB/TRC members to contribute to the public's ability to participate in the restoration program. To obtain funding, community members of RABs/TRCs must apply for TAPP. The installation reviews the application for eligibility and approval before developing appropriate TAPP funding requirements.

***Policy on the role of RABs is contained in the 7 May 96 memorandum from the ASA (IL&E), subject: Issuance of Army Policy - The Role of Restoration Advisory Boards (RAB) s in Environmental Cleanup.***

***For additional RAB guidance and information on TAPP, see U.S. Army Restoration Advisory Board and Technical Assistance for Public Participation Guidance, April 1998. Available on the Internet at <http://www.denix.osd.mil/denix/Public/Policy/policy.html>***

## **7.9 Associated BRAC Property Transfer Requirements**

Under Fast Track Cleanup, the following BRAC property transfer requirements are to be accomplished within the BRAC Environmental Program.

- (1) Identify uncontaminated property that can be made available for transfer or reuse within 18 months after congressional action on a BRAC list, as required under CERFA, and obtain regulatory concurrence on those properties. The BCT may readdress this issue later than 18 months after congressional action on a BRAC list if the Army deems it necessary and it will facilitate the expeditious transfer of property. Identification of CERFA uncontaminated property is performed during the Environmental Baseline Survey
- (2) Conduct environmental baseline surveys (EBS), prepare findings of suitability to lease (FOSLs) and findings of suitability to transfer (FOSTs), and demonstrate compliance with the notification, covenant, and regulatory and public involvement requirements of the process.
- (3) Conduct all environmental analyses required under NEPA, to the extent practicable, within 12 months of receiving a Local Redevelopment Authority's (LRA) final reuse plan. In the event that the LRA does not submit a reuse plan by the time the Army needs to initiate the NEPA analysis necessary to support a disposition decision, the Army will begin preparation of its NEPA analysis using reasonable assumptions as to the likely reuse scenario and its reasonable alternatives.
- (4) Develop future land use assumptions based on the LRA reuse plan and in close coordination with the local community.

(5) Consider reuse and the RRSE framework in sequencing restoration activities at BRAC installations. In instances where reuse plans are being implemented, or are likely to be implemented, reuse should be the primary consideration for sequencing activities.

***Determination of Operating Properly and Successfully (OPS)***

As part of SARA, Congress added section 120(h) to CERCLA, that placed certain requirements on the deed transfer of U.S. Government owned property to other parties. The primary purpose of section 120 (h) is to ensure that property contaminated by the federal government is environmentally restored before being conveyed outside the federal government. CERCLA section 120(h)(3) requires that deeds transferring property where hazardous substances have been stored, released or disposed of have a covenant warranting that “all remedial action necessary to protect human health and the environment with respect to any hazardous substance remaining on the property has been taken before the date of such transfer.” When Congress enacted CERFA, CERCLA section 120 (h)(3) was amended to clarify that all necessary actions at a site allow for property transfer “if the construction and installation of an approved remedial design has been completed and the remedy has been demonstrated to the EPA Administrator to be operating properly and successfully”.

A remedial action is operating “properly” if it is operating as designed. That same system is operating “successfully” if its operation will achieve the cleanup levels or performance goals delineated in the decision document. Additionally, in order to be successful, that remedy must be protective of human health and the environment. The success of a particular remedial action is to be evaluated based on whether it successfully addresses the particular contaminant(s) it was designed to remediate. Where more than one remedial action is required for a parcel, all such actions must operate properly and successfully, and EPA must evaluate all the actions comprehensively prior to making the determination that the property is suitable for transfer.

***Additional guidance on the determination of operating properly and successfully can be found in the EPA guidance “Guidance for Evaluation of Federal Agency Demonstrations that Remedial Actions are Operating Properly and Successfully Under CERCLA Section 120(h)(3), August 1996. Available on the internet at <http://www.epa.gov/swerffrr/doc/896mm.htm>.***

***Finding of Suitability to Transfer (FOST).*** The FOST is a document that presents the environmental condition of the property and associated land/use restrictions, covenants, and warranties, required by law, regulation, or guidance to ensure the public, regulators, and DoD that the property is suitable for transfer. Specifically, the FOST is a disclosure document to inform people to limit future risk and liability. The FOST is used by the real estate community to place stated restrictions, notice, covenants, and access clauses into a deed, contract, or Memorandum of Agreement/Memorandum of Understanding (MOA/MOU).

After completion of the EBS, the intended use analysis, and the local community reuse plan (if available) evaluation, a FOST is prepared. The Army will sign a FOST once the determination is made that the property is suitable for transfer by deed for the intended purpose. Signature authority for all FOSTs is delegated to the MACOMs.

The FOST process develops restrictions necessary to safeguard human health and the environment, and ensures the effectiveness of future cleanup activities and remedies. Regulatory agencies will be notified at the initiation of the EBS and the FOST. The process of EBS and FOST development will ensure regulators are provided an opportunity to express their views. Regulators will be provided draft EBSs and FOSTs. The public will be notified of the intent to sign the FOST and the regulators will be formally notified of the intent by letter.

There are two types of FOSTs: (1) Property where no release or disposal has occurred, or (2) Property where release or disposal has occurred. The environmental review process for both types of FOSTs are the same except for the conditions that are required in the FOST and transfer deed to meet the requirements of CERCLA. Procedures for conducting an FOST and the review process is described in the draft DA PAM 200-1 (May 1998), Chapter 15.

***Finding of Suitability to Lease (FOSL).*** The FOSL process is almost identical to the FOST process. Signature authority for all FOSLs has been delegated to the MACOMs. For BRAC installations, notification to the EPA and State regulators is required prior to entering into any lease that will encumber the property beyond the date of termination of Army operations.

Upon termination of the lease the Army and the lessee will jointly conduct a final EBS in order to determine if there are any changes to the environmental condition of the property. In the case of lease renewal, the Army must determine if there are any changes in the use or environmental conditions on the subject property from those originally documented in the EBS. Procedures for conducting an FOSL and the review process is described in the draft DA PAM 200-1 (May 1998), Chapter 15.

***Environmental Condition of Property (ECOP).*** An ECOP is required when the Army is transferring property to another federal agency. The environmental condition of the property is documented in an ECOP, which is similar to a FOST, except for the following:

- (1) Regulatory participation/review should parallel FOSL guidance that does not require mandatory review.
- (2) All ECOPs are signed by the MACOM.
- (3) CERCLA covenant and warrantee are not required.
- (4) Transfer prior to all cleanups being completed is allowed.

Responsibility for environmental cleanup and compliance requirements can and should be negotiated with the federal agency acquiring the property. Any property transfers must clearly assign continuing responsibility for cleanup after the transfer. In all cases, the transferring Component is responsible for providing the gaining Component with all reports and a history of restoration actions taken prior to the transfer of the property. A DoD Component that accepts

real property from another DoD Component shall normally be responsible for managing restoration actions at the property. The responsibility will be transferred at a time mutually agreed upon by both Components. The transferring Component shall normally be responsible for transferring the cleanup funding as planned for the property in the Future Years Defense Program (FYDP). The total obligation authority (TOA) will be transferred at a time mutually agreed upon by both Components. This policy does not preclude Components from making separate agreements regarding restoration for particular properties. In some cases the transferring Component may desire to continue to manage the restoration program. In other cases the cost of cleanup may be divided between Components. The Army will not accept property from another Federal agency unless the agency certifies that the requirements of CERCLA Section 120(h) have been met and provides supporting reports and documentation. Procedures for conducting an ECOP and the review process is described in the draft DA PAM 200-1 (May 1998), Chapter 15.

***Finding of Suitability to Early Transfer (FOSET).*** A FOSET is required for early transfer of contaminated property prior to having a remedy in place. With the emphasis on early transfer of property, a document referred to as a Finding of Suitability to Early Transfer (FOSET) has been established. The Army will evaluate and use DoD's early transfer authority (ETA) as provided by Section 334 of the FY 1997 Defense Authorization Act (Public Law 104-201) on a case by case basis.

The authority is codified at CERCLA Section 120(h)(3)(C) and is to be used only when there are advantages to early transfer, considering the following conditions:

- (1) the Governor of the State, or EPA Administrator and Governor, as appropriate, concur with the transfer,
- (2) property is suitable for the use intended by the transferee,
- (3) the intended use is consistent with protection of human health and the environment,
- (4) there has been public notice and an opportunity for public comment, and
- (5) deferral of the CERCLA Section 120(h)(3)(B) covenant requirements will not delay any necessary response action at the property.

The FOSET is primarily used where the property to be transferred is contaminated. The MACOM will sign all FOSETs. On completion of an ETA transfer, the Army will provide a statement to ODUSD (ES) regarding availability of funding to complete environmental restoration activities. The Army will notify ODUSD (ES) regarding availability of funding to complete environmental restoration activities. The Army will notify ODUSD (ES) when a transfer using ETA is initiated.

***Additional guidance on early transfer authority can be found in the ODUSD(ES) memorandum "Environmental Review Process to Obtain the Finds of Suitability Required for Use of Early Transfer Authority for Property Not on the National Priorities List", 24 Apr 1998.***

## **7.10 Cleanup Responsibilities After Property Transfer**

DoD policy outlines the circumstances under which the Army would perform additional cleanup of Army property that was transferred by deed to any entity outside of the DoD. DoD policy requires the integration of the land use planning and environmental restoration process and coordination with the local community.

If a remedy put in place prior to property transfer is no longer protective of human health and the environment, the Army is responsible for additional environmental restoration if the land use has not changed. If additional contamination that is inconsistent with the established remedy and is attributable to Army activities is discovered after transfer, the Army is also responsible for additional restoration response. The Army retains responsibility for contaminated property and that responsibility does not transfer to the Formerly Used Defense Sites Program.

Additional restoration necessary to address contamination attributable to Army activities and consistent with the land use assumptions used to determine the original remedy will be performed consistent with CERCLA Section 120(h). In cases where there is a need for continuing environmental restoration activities (such as monitoring, operation and maintenance of remedial systems, and five year operational reviews) after transfer to communities and other non-DoD entities, the Army will fund the most efficient, cost effective approach on a case by case basis. The Army will not conduct additional restoration to accommodate changes in land use after transfer if land use assumptions used for remedy selection were based on input from the LRA or other appropriate planning agency, and the remedy selection process included the community.

The Army will make full disclosure to communities and the transferee regarding property being transferred. This shall include the basis for the Army's decision to consider a particular land use in formulating remedial alternatives, any land use controls relied upon to support the selected remedy, and the finality of the remedy selection decision, including DoD's policy on additional restoration after transfer contained in the July 25, 1997, USD (A&T) Memorandum, Responsibility for Additional Environmental Cleanup after Transfer of Real Property.

The U.S. Army Corps of Engineers Real Estate Office is the Army property disposal agent. The Army property disposal agent ensures that the property transfer documents reflect use restrictions and enforcement mechanisms specified in the remedy decision document. The Army reserves the right to take appropriate cleanup actions to protect human health and the environment due to action or inaction of any future landowner, and seek to recover costs of the cleanup under the terms of the transfer document.

After the property transfer, the Army will conduct additional cleanup under the following conditions:

- The selected remedy fails and is no longer protective of human health and the environment.
- Additional contamination is found that is attributable to Army activities.
- Regulatory requirements are revised to reflect new scientific/health data establishing the remedy in effect to be ineffective.

After the property transfer, the Army will not conduct nor pay for additional cleanup when the additional cleanup facilitates a land use prohibited by deed restrictions or other appropriate land use controls. Moreover, the Army's obligation to indemnify transferees of closing base property under Section 330 (of the Fiscal Year 1993 Defense Authorization Act) would not be applicable to any claim arising from any use of the property prohibited by an enforceable deed restriction or other appropriate institutional control.

The Army will initiate actions to revise deed restrictions or other land use controls as appropriate when the remedy has achieved cleanup level and restrictions are no longer required. The Army will cooperate with the transferee to revise and remove restrictions to facilitate a broader range of land uses when the transferee undertakes and pays for efforts required which fully demonstrate the continuance of protection of human health and the environment. The transferee must apply to the Army disposal agent for revision or removal of deed restrictions.

The Army will disclose to the community or Local Reuse Authority the Army's intent to consider land use expectations in the remedy selection process. Public notifications ordinarily made throughout the restoration process will also include full disclosure of the assumed land use used in the remedy selection process.

### **7.11 Close Out**

Components should plan and complete all environmental restoration activities in accordance with DPG goals. BCTs will be closed out when the following requirements and activities have been accomplished:

- a. the final remedial action for the installation is in place (construction and installation of an approved remedial design) and the remedy has been demonstrated to be operating properly and successfully,
- b. a reuse has been approved for all properties identified for transfer,
- c. all environmental analyses required by NEPA have been completed and no further restoration is required, and
- d. all FOSTs have been completed.

Site closure under BRAC reflects the requirements associated with real property transfer. In order to facilitate reuse-planning efforts, "uncontaminated" installation property must be identified as defined by the Community Environmental Response Facilitation Act (CERFA). No property can be conveyed by deed or can be leased until a Finding of Suitability to Transfer (FOST) or a Finding of Suitability to Lease (FOSL) has been signed. With the recent emphasis on early transfer of property, a document referred as a Finding of Suitability to Early Transfer (FOSET) has been established, where contamination may exist on the transferred property.

## **8.0 RELATED ISSUES**

As cleanup at closing and realigning installations continues to address contamination, new challenges resulting from changing regulations and additional cleanup requirements are confronted. The Army has recognized these challenges and is developing clarifying guidance to address the ramifications to budgeting, scheduling, and accomplishment of BRAC environmental goals. Several of the issues being examined include:

- Unexploded Ordnance
- Lead-based Paint Hazards
- Land Use Controls
- Site Close-Out
- Natural Resources Injuries
- Cost Recovery/Cost Sharing
- Radiological Surveys
- Chemical Warfare Agents

*Attachment E presents additional information on each of these issues.*

## **9.0 AVAILABLE GUIDANCE**

### **9.1 Defense Environmental Network and Information Exchange (DENIX)**

As part of the DoD effort to consolidate environmental information management, a DoD-wide electronic bulletin board system was created to facilitate and support communications and environmental awareness. This system, DENIX is a World-Wide Web site and incorporates the data, information, and requirements of the DoD, Army, Navy, and Air Force. DENIX provides DoD personnel with a central communications platform that allows timely access to environmental related legislative, compliance, restoration, and DoD guidance information.

### **9.2 References**

For a list of available Army BRAC Environmental Program guidance, see Attachment F of this management plan.

**ATTACHMENT A**

**MAJOR ARMY BRAC INSTALLATIONS**

## ATTACHMENT A

### MAJOR ARMY BRAC INSTALLATIONS

#### BRAC 1

Alabama AAP, AL  
ARL-Watertown, MA  
Bennett ARNG Training Site, CO  
Cameron Station, VA  
Camp Navajo, AZ  
Cape St. George, FL  
Coosa River Storage Annex, AL  
Defense Mapping Agency-Herndon, VA  
Fort Des Moines, IA  
Fort Douglas, UT  
Fort George G. Meade, MD  
Fort Holabird, MD  
Fort Sheridan, IL  
Fort Wingate, NM  
Gaithersburg Research Facility, MD  
Hamilton Army Air Field, CA  
Indiana AAP, IN  
Jefferson Proving Ground, IN  
Kapalama Military Reservation, HI  
Lexington Facility-LBAD, KY  
Military Ocean Term. New Orleans, LA  
Nike Aberdeen, MD  
Nike Kansas City 30, MO  
Pontiac Storage Activity, MI  
Presidio of San Francisco, CA  
Pueblo Chemical Depot, CO  
Tacony Warehouse, PA  
Umatilla Chemical Depot, OR  
53 Family Housing Sites

#### BRAC 91

ARL-Woodbridge, VA  
Fort Benjamin Harrison, IN  
Fort Devens, MA  
Presidio of Monterey, CA  
Sacramento Army Depot, CA

#### BRAC 93

Fort Monmouth, NJ  
Tooele Army Depot, UT  
Vint Hill Farms Station, VA

#### BRAC 95

Big Coppitt Key, FL  
C.E. Kelly Support Facility BRAC, PA  
Camp Bonneville, WA  
Camp Kilmer, NJ  
Camp Pedricktown, NJ  
Detroit Arsenal Tank Plant, MI  
East Fort Baker, CA  
Fitzsimmons Army Medical Center, CO  
Fort Bragg Recreation Center #2, NC  
Fort Buchanan, PR  
Fort Chaffee, AR  
Fort Dix, NJ  
Fort Greely, AK  
Fort Holabird, MD  
Fort Hunter Liggett, CA  
Fort Indiantown Gap, PA  
Fort McClellan, AL  
Fort Missoula, MT  
Fort Pickett, VA  
Fort Ritchie, MD  
Fort Totten, NY  
Hingham Annex, MA  
Letterkenny Army Depot, PA  
Lompoc Disciplinary Barracks, CA  
Military Ocean Terminal, Bayonne, NJ  
Oakland Army Base, CA  
Red River Army Depot, TX  
Rio Vista Reserve Training Area, CA  
Savanna Depot Activity, IL  
Seneca Army Depot, NY  
Sierra Army Depot, CA  
Stratford Army Engine Plant, CT  
Sudbury Training Annex, MA  
USA Bellmore Maintenance Facility, NY

## **ATTACHMENT B**

# **EXAMPLES OF ACTIVITIES ELIGIBLE AND INELIGIBLE FOR FUNDING**

## **ATTACHMENT B**

### **Examples of Restoration Activities Eligible and Ineligible for BRAC Funding**

#### *Eligible "Cleanup" Projects*

Investigations to identify, confirm, and determine the risk to human health and the environment resulting from past DoD contamination. This also includes feasibility studies or engineering evaluation and cost analysis (EE/CA); remedial action plans and designs; and removal or remedial actions.

Expenses associated with cooperative multi-party cleanup plans and activities litigation expenses.

Remedial actions to protect or restore (not enhance) natural resources injured by contamination from past hazardous waste disposal activities.

Cleanup of low-level radioactive waste sites which have been identified as restoration sites.

Management expenses associated with the BRAC Environmental Restoration Program. Management expenses are those overhead costs required for adequate program oversight and management.

Operation and maintenance costs for remedial and monitoring systems.

Immediate actions necessary to address health and safety concerns resulting from past Army contamination such as providing alternate water supplies or treatment of contamination drinking water.

Studies to locate abandoned underground tanks, activities to determine whether a release has occurred, and clean up of contamination.

Response to releases from in service tanks discovered during initial integrity testing (leak detection monitoring) per 40 CFR 280 where testing was conducted prior to the regulatory date of December 22, 1993.

CERCLA response actions and eligible RCRA corrective actions identified in FFA/IAGs.

Corrective actions at solid waste management units (SWMUs) needed because of past Army activities when the SWMU was inactive or closed prior to being subjected to RCRA requirements.

Support services provided by another agency in accordance with 10 USC 2701(d).

Fines and penalties imposed by regulatory agencies assessed under the authority of the Federal

Facilities Compliance Act associated with restoration activities. (Note: These fines must be identified in the BES for the budget year.)

***Eligible "Closure-related Compliance" Projects***

Remediation and closure of active underground tanks in support of property transfer.

Costs of testing and disposing of PCB transformers in support of property transfer.

Costs of surveys, containment, removal or disposal of asbestos and lead based paint.

***Ineligible Cleanup or Closure-related Restoration Activities***

Closing or capping sanitary landfills unrelated to a hazardous waste cleanup action.

Construction of hazardous waste storage, transfer, treatment or disposal facilities, except when part of a restoration remedial action.

Testing or repair of active underground tanks and costs of replacing leaking underground tanks.

Costs of storing or replacing PCB transformers and testing of PCB transformers not to be removed under BRAC for property reuse.

Costs of spill prevention and containment measures for operating equipment and facilities.

Costs of operation, maintenance or repair to hazardous waste treatment, storage or disposal facilities which are in use (i.e. regulated or permitted), except when part of a remedial action or for closure.

***Eligible "UXO" Projects***

Reasonable costs for unexploded ordnance response in support of reuse or property transfer. The Army will work with property recipients to establish UXO cleanup goals that are compatible with desired land use and are technically feasible and affordable.

**ATTACHMENT C**  
**DECISION DOCUMENT OUTLINE**

## ATTACHMENT C

### DECISION DOCUMENT OUTLINE

#### 1. PURPOSE

This decision document describes the selected action to \_\_\_\_\_ (state action) \_\_\_\_\_ at the \_\_\_\_\_ (name of site) \_\_\_\_\_ at \_\_\_\_\_ (installation) \_\_\_\_\_ chosen in accordance with the CERCLA as amended by the SARA, the NCP, RCRA, and AR 200-1, as applicable.

Give a brief description of the site, including DSERTS number, type of operation that caused a release, dates the site operated, and the hydrogeologic setting. Also, briefly describe the nature and extent of contamination and how the site poses a risk to human health and the environment. State what action/remedy has been selected and how the selected action will eliminate or reduce the risk to human health and the environment.

This removal/interim remedial/remedial action alternative was selected by \_\_\_\_\_ (installation) \_\_\_\_\_, with support from \_\_\_\_\_ (State or EPA) \_\_\_\_\_.

#### 2. SITE RISK

Give a brief description of the results of any risk assessments or risk considerations at the site. Discussion should, at a minimum, address exceedence of state and Federal maximum contaminant levels for the given media of concern, exposure pathways, known or potential health or ecological effects of contaminant, and overall risk which could result from the contamination at the site if no remedial action were taken. Do not include relative risk site evaluations as a measure of risk for a decision document.

#### 3. REMEDIAL ALTERNATIVES

Briefly describe the remedial alternatives considered, the selected remedial alternative, and provide an explanation/rationale of why the remedial method was selected and the expected goals or long-term effectiveness of the remedy. State negotiated cleanup levels/goals and any planned remedial action operations and monitoring.

If desired, or deemed necessary, reference any technical documents supporting this decision, i.e., "The alternative(s) summarized here are described in the remedial investigation and feasibility study (RI/FS) report dated \_\_\_\_\_ which should be consulted for a more detailed description of all the alternatives".

#### 4. PUBLIC/COMMUNITY INVOLVEMENT

At a minimum, describe what steps were taken to involve the public in the selection of the remedy. Unless an emergency situation exists, as defined by the removal action criteria in the NCP, part 300.415(b) (2), the public is afforded an opportunity to review and comment on any proposed remedial action.

#### 5. DECLARATION

See attached declaration statements. Choose the declaration statement that best describes the site and situation.

#### 6. APPROVAL AND SIGNATURE

Re-state the selected alternative, the total cost of the action and the appropriate approval authority for the action. The appropriate approval authority is based on the cost of the action described in the decision.

- a. The ACSIM, approves all DDs greater than \$6 million..
- b. The MACOM commander approves DDs between \$2 million and \$6 million.
- c. The Installation Commander approves DDs less than \$2 million.

#### DECLARATION STATEMENTS - SECTION 5

1. When the selected remedy satisfies the statutory preference for treatment as a principal element, by treating at least the principal threat(s) posed by the site, the declaration should state:

"The selected remedy is protective of human health and the environment, attains Federal and State requirements that are applicable or relevant and appropriate to this interim remedial action (or removal) [or "a waiver can be justified for the Federal or State applicable or relevant and appropriate requirement that will not be met"], and is cost effective. This remedy satisfies the statutory preference for remedies that employ treatment that reduces toxicity, mobility or volume as a principal element and utilizes permanent solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable."

2. When the selected remedy for the site involves little or no treatment to reduce toxicity, mobility or volume of contaminants, that is, treatment is not utilized to address the principal threat(s) posed by the site, CERCLA requires a statement explaining why such a remedial action is not chosen. The declaration in this case should state:

"The selected remedy is protective of human health and the environment, attains Federal and State requirements that are applicable or relevant and appropriate to this interim remedial action (or removal) [or "a waiver can be justified for the Federal or State applicable or relevant and appropriate requirement that will not be met"], and is cost effective. This remedy utilizes permanent solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable for this site. However, because treatment of the principal threats of the site was not found to be practicable [or "within the limited scope of this action"], this remedy does not satisfy the statutory preference for treatment as a principal element of the remedy." This must be followed by the rationale for this finding based on the specific factors used to determine that treatment is either impracticable or not within the limited scope of this action. In addition, a brief statement that past or future operable units will meet the statutory preference for treatment should be included when appropriate.

3. If the remedy will leave hazardous substances on-site above health-based levels, the Declaration should include the following:

"Because this remedy will result in hazardous substances remaining on-site above levels that allow for unlimited use and unrestricted exposure, a review will be conducted within five years after commencement of remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment."

4. If the remedy will not leave hazardous substances on-site above health-based levels, the Declaration should include the following:

"Because this remedy will not result in hazardous substances remaining on-site above levels that allow for unlimited use and unrestricted exposure, the five-year review will not apply to this action".

## **DECISION DOCUMENT FOR A SOIL REMOVAL**

### **COOLVILLE ARMY DEPOT, ALABAMA**

#### **1. PURPOSE**

This decision document describes the selected action to remove contaminated soils at the Acid Pond site at Coolville Army Depot, Alabama. This action was chosen in accordance with the CERCLA as amended by the SARA, the NCP, RCRA and AR 200-1, as applicable.

The Acid Pond site (DSERTS number CVAD-13) contains two unlined ponds surrounded by earth berms located within a heavily wooded area. The ponds were in operation from 1949 until 1973. It is reported that the ponds received acid wastes from batteries, shell de-rusting operations, and approximately 17,000 mustard-filled projectiles (155mm) from a reconditioning operation in 1955. A tributary to Lake Eric drains to the south along the base of the slope west of the ponds. Lake Eric is the water supply for Coolville Army Depot.

Elevated levels of arsenic, cadmium, chromium, lead, selenium in soils, surface water and ground water near the site indicate that contamination is migrating from the Acid Pond site. Given the close proximity of the Acid Pond site to the installation water supply (Lake Eric), the decision was made to remove the contaminated soils (the source of contamination to the surface water and ground water), regrade the site, and monitor the ground water.

This removal action alternative was selected by the Army with support from the Alabama Department of Environmental Management and the Region IV, U.S. Environmental Protection Agency (EPA).

#### **2. SITE RISK**

Investigation of this site began in 1982. At those times low levels of zinc and nitrite/nitrate was detected in ground water and chromium and lead were detected in downgradient surface-water samples. In 1989, maximum concentrations of arsenic, cadmium and chromium in soil from the site exceeded risk-specific dose values for carcinogens. Ground water at the site also exceeded state and federal maximum contamination levels for chromium, lead and selenium. In 1994, continued investigation determined that concentrations of contaminants increased in surface water and ground water.

Area drainage from the Acid Pond site occurs primarily by surface runoff into a tributary west of the ponds that drains south into Lake Eric. Lake Eric is located approximately 800 feet from the Acid Pond site. Potential receptors of contamination from the Acid Pond site are installation personnel (from the water supply provided by Lake Eric); employees working near the site, cattle, deer and small game animals, as well as aquatic life.

### 3. REMEDIAL ALTERNATIVES

Remedial alternatives proposed from the Corrective Measures Study and the Interim Remedial Action Study for the Acid Pond site were:

-- No Action. This action does not prevent the continued migration of contaminants from the soil to the surface water and groundwater, therefore, the potential risk of exposure through the installation water supply remains. Potential exposure to installation personnel working near the site and exposure to the ecology also remains.

-- Institutional controls (site fencing and monitoring). This action would provide adequate protection of facility personnel working near the site and to several ecological factors, however, since the source of contamination would remain as well as the migration pathways, the installation water supply remains a potential exposure pathway. Potential exposure to aquatic life would also remain.

-- Multi-layer cap and institutional controls (site fencing and monitoring). This action would provide adequate protection of facility personnel working near the site and large land animals. This action would decrease water infiltration at the site and possibly reduce leachate generation. Since the source of contamination would remain, the installation water supply remains a potential exposure pathway. Potential exposure to aquatic life would remain but would be reduced. Monitoring would have to be long-term due to the proximity of the Lake Eric water supply.

-- Soil removal and limited institutional controls (monitoring). This action would consist of removing and disposal of contaminated soil and regrading the Acid Pond site. Institutional controls would be limited to monitoring the groundwater and surface water. This action would eliminate the source of contamination and thereby be protective of any exposure to humans, animals and aquatic life. With the removal of the source, the groundwater contaminant concentrations should naturally attenuate.

The alternative selected for remediation of the Acid Pond site is soil removal with limited institutional controls. As the site characterization, risk assessment and study of alternatives have been completed for this site; it is planned that this action will be the final remedial action for this site. Cleanup levels in soil of 1 ppb for chromium, 3 ppb for cadmium and 5 ppb for arsenic as well as 5 ppb for lead and selenium were negotiated with the EPA and the State of Alabama. Groundwater and surface water monitoring will occur annually for three years after completion of the removal.

#### 4. PUBLIC/COMMUNITY INVOLVEMENT

Coolville Army Depot has a Community Relations Plan. In accordance with the Community Relations Plan, a public notice will be placed in the local newspaper announcing the remedial activities to be completed at the Acid Pond site.

#### 5. DECLARATION

The selected remedy is protective of human health and the environment, attains Federal and State requirements that are applicable or relevant and appropriate to this removal action, and is cost effective. This remedy satisfies the statutory preference for remedies that employ treatment that reduces toxicity, mobility or volume as a principal element and utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable. Because this remedy will not result in hazardous substances remaining on-site above levels that allow for unlimited use and unrestricted exposure, the five-year review will not apply to this action.

#### 6. APPROVAL AND SIGNATURE

The selected alternative for the Acid Pond site is soil removal and limited institutional controls. The total cost of this action is estimated at \$1 million. The appropriate approval authority for this action is the Coolville Army Depot Installation Commander.

APPROVED BY:

---

W. H. JONES  
Colonel, CM  
Commanding

**ATTACHMENT D**  
**FIVE YEAR REVIEW GUIDANCE**

## **ATTACHMENT D**

### **Assistant Chief of Staff for Installation Management (ACSIM) Guidance for Army Compliance with Comprehensive Environmental Response Compensation and Liability Act (CERCLA) Five-Year Review Requirements**

1. **Introduction:** This guidance outlines the rationale for approach to conducting CERCLA five-year reviews at Army installations. These reviews, along with efforts to optimize long-term monitoring (LTM) and long-term operations (LTO), are an opportunity to evaluate ongoing remedial actions to ensure that they continue to be cost effective and are achieving their remedial action objectives. This shall also be the time to consider whether or not to petition the U.S. Environmental Protection Agency (EPA) to delete the site from the National Priorities List. The costs of LTO and LTM will consume an increasing proportion of the Army's restoration budget in the coming years. Therefore it is critical that the Army institutionalize a process to ensure five-year reviews be conducted in a timely, technically proficient manner which identifies all potential cost savings. This guidance outlines steps to ensure these goals are met.

2. **Objective:** To implement a system at the Office of the Assistant Chief of Staff for Installation Management (ACSIM) for tracking the completion of five-year reviews; to prepare and disseminate Army guidance on the format, scope, and cost for such reviews to assure they are conducted in a consistent, and cost-effective manner; and to use the five-year review process to analyze ongoing remedial actions for potential cost savings.

3. **Background:**

a. The CERCLA and the National Contingency Plan (NCP) require a review of all remedial actions which do not achieve unrestricted use cleanup levels be conducted every five years to assure they are still protective of human health and the environment. The NCP states "If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after initiation of the selected remedial action." This requirement applies to both National Priorities List (NPL) sites and non-NPL sites as long as they are being addressed under the Defense Environmental Restoration Program. The commitment to conduct such reviews must be stated in the Record of Decision (ROD) or Decision Document (DD). The initiation of five-year reviews is triggered by the start of the first remedial action that requires such a review. Since the rate of finalizing RODs and DDs and initiation of remedial actions began to increase in the 1992-1994 time period, the need to conduct such reviews will steadily increase over the next several years.

b. The five-year review provides the Army an ideal opportunity to conduct a project review to determine if ongoing remedial measures are still cost effective and technically sound. As the many active remedial systems continue to operate, their continuance may be somewhat taken for granted in the business of getting O&M budgets approved and assuring that are operating correctly. A periodic review, such as every five years (or more frequently), would be a chance to evaluate, in depth, the need for the remedial action and the Army's continued support of the long-term O&M costs. The review would focus on determining if a remedy has already reached completion and may be terminated, or whether the remedy might be replaced by other more state-of-the-art remedies that would achieve the same results at less cost.

c. The responsibility to conduct the five-year reviews and prepare five-year review reports lies ultimately with the installation/major Army command (MACOM). Such reviews would require personnel experienced in the selection and/or modification of CERCLA remedies and familiar with current requirements in the environmental field and current DOD/Army environmental policies (e.g., emphasis on justifying natural attenuation).

d. To ensure both consistency within the Army and technical objectivity, ACSIM review and approval of the five-year review report is necessary. This review will provide a broad unbiased perspective and an awareness of national trends, which might not be always possible by staff closer to the project.

**4. Implementation:** The Army plan for conducting five-year reviews is as follows:

a. The USAEC will develop guidance to conduct/staff/approve five-year reviews for distribution by ACSIM to all MACOMs and installations. Guidance development would be coordinated with the other DOD services as appropriate or desirable. Currently, the EPA has two guidance documents on conducting such reviews. They are: Structure and Components of Five Year Reviews, OSWER Directive 9355.7-02, dated May 23, 1991; and Supplemental Five Year Review Guidance, OSWER Directive 9355.7-02A, dated July 1994.

b. The USAEC will add a field to the Defense Site Environmental Restoration Tracking System (DSERTS) database to track deadlines for conducting five-year reviews and dates for completing such reviews at each site.

c. The USAEC will review the cost-to-complete projections against the DSERTS database to ensure that sufficient resources are planned to conduct five-year reviews within the required timeframes.

d. The USAEC will distribute yearly to affected/responsible installations/MACOMs a memorandum notifying them that a five-year review is needed in the next fiscal year. The list of installations would be determined from DSERTS, using the field showing completion date of RODs and DDs. Such notice will allow funding requests to be processed by the installations and/or MACOMs.

e. Active installations will prepare draft five-year review reports wherever possible. As directed by the ACSIM, USAEC will conduct the reviews and prepare reports at the request of active installations that do not have the capability to conduct such reviews and at Base Realignment and Closure (BRAC) installations for which there is no other executor. The USAEC will retain engineering, consulting, and contracting capability to execute such reviews.

f. The USAEC will receive, review, and through ACSIM, approve all draft five-year review reports, and retain a copy of all final review reports in its Technical Information Center. The ACSIM approval of the review report is required because the five-year review is used to make a significant decision about whether or not the Army must allocate funds for treatment system operation and LTM.

**ATTACHMENT E**  
**RELATED ISSUES**

## ATTACHMENT E

### RELATED ISSUES

#### 1. Unexploded Ordnance (UXO)

Responding to UXO is one of the DoD's most difficult and under funded challenges. At present, UXO response is technologically limited, lengthy and expensive. The total acreage requiring UXO response is unknown and there is no comprehensive cost estimate for UXO response. In the past UXO response was not considered an environmental issue, but rather solely a safety issue. However, the Federal Facility Compliance Act of 1992 required the U.S. Environmental Protection Agency (EPA) to determine when conventional and chemical military munitions become a hazardous waste under RCRA. Thus, now UXO response must address safety and environmental concerns.

The EPA issued the Military Munitions Rule, effective August 12, 1997 in response to the requirement of the Federal Facility Compliance Act of 1992. Recognizing that part of DoD's mission is to train troops in the safe and effective use of munitions, the Military Munitions Rule identified military munitions as a hazardous waste when UXO is (1) removed from the range for storage, reclamation, treatment, or disposal, or (2) recovered then disposed of by burial/land-filling, either on or off-range. The Munitions Rule also recognized that fired munitions that land off range and are not promptly rendered safe and/or retrieved are subject to RCRA. In the Munitions Rule, EPA postponed action on whether to identify military munitions left on closed or transferred ranges as subject to RCRA.

The DoD proposed the Range Rule on September 26, 1997 to address explosive safety, human health, and environmental concerns related to military ordnance on closed, transferred, and transferring ranges. The Range Rule lays out the program the DoD will use to address UXO at closed, transferred, and transferring ranges.

Until further policy and guidance becomes available, the identification, investigation, and response to unexploded ordnance at closing/realigning installations in support of reuse and property transfer is a BRAC restoration cost.

## **2. Lead-Based Paint Hazards**

The appropriateness of using CERCLA to address lead in soil as a result of historic use of lead-based paint is an issue of debate between the DoD and the U.S. Environmental Protection Agency (EPA).

EPA is of the opinion that lead released from lead-based paint is a hazardous substance under CERCLA and that the President has the authority to take removal and other response measures pursuant to section 104 of CERCLA. DoD questions the appropriateness of using CERCLA mechanisms to address lead from lead-based paint only at property being transferred at DoD installations. It is DoD policy to comply with the requirements of the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X of the Housing and Community Development Act, Public Law 102-550).

Until further policy and guidance becomes available, the identification, investigation, and abatement of lead-based paint in support of reuse and property transfer at BRAC properties is an eligible closure-related compliance cost.

### 3. Land Use Controls

The level to which BRAC installations are remediated is partially based on the community's future plan for reuse of the property. Measures that provide adequate protection of human health and the environment and prevent inappropriate use of the property must be in place before transfer of property to the community. Land Use Controls (LUCs) are measures the Army can take to limit access to areas of contamination and protect property users and the public. Land Use Controls include *institutional controls* and *engineering controls*. Institutional controls (ICs) are legal mechanisms that insure that any restrictions on land use and any engineering controls put in place to implement a selected remedy are maintained. Engineering controls are those physical mechanisms that implement the remedy selected for the cleanup of the site. As the BRAC program progresses and more and more property is prepared for transfer, numerous questions have arisen regarding the decisions leading up to use of LUCs and ICs.

The following is the applicable portions of the recent "Army Guidance for Using Institutional Controls in the CERCLA Process" (ACSIM, 4 Sep 98) that apply specifically to BRAC installations.

#### ARMY GUIDANCE FOR USING INSTITUTIONAL CONTROLS IN THE CERCLA PROCESS

##### 1. References:

- a. USD (A&T) memorandum, "Responsibility for Additional Environmental Cleanup after Transfer of Real Property, 25 Jul 97
- b. DUSD (ES) Fact Sheet, Institutional Controls, What they are and how they are used, Spring 1997
- c. DUSD (ES) Guidebook, "A Guide to Establishing Institutional Controls at Closing Military Installations", February 1998
- d. SFIM-AEC-ERO memo, 17 Jul 98, subject: Guidance for U.S. Army Compliance with CERCLA Five-year Review Requirements at Army Installations

**2. Applicability.** This guidance is applicable to National Priorities List (NPL) and Non-NPL Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) decision making at Base Realignment and Closure (BRAC) installations. Although the focus of this guidance is on using ICs in the CERCLA decision making process, ICs are also commonly used in decision making under other environmental legal authorities such as RCRA and UXO cleanups. The general IC principles outlined in this guidance for planning, programming and budgeting for IC maintenance should be used for all ICs regardless of the cleanup process being used. All ICs selected under CERCLA and other authorities, should be included in the Finding of Suitability to Lease (FOSL) or Finding of Suitability to Transfer (FOST) if the property is proposed for transfer or lease.

3. **Background.** An IC or land use restriction is a legal or administrative mechanism that limits access to or use of property, or warns of a hazard. Examples include deed restrictions, easements, notices/warnings, covenants, zoning, well drilling prohibitions, or well use advisories. Some, but not all, land use restrictions constitute "Institutional Controls" (ICs). The term "Institutional Controls" is used in the National Contingency Plan to refer to land use restrictions used in the CERCLA process and generally refers only to those land use restrictions imposed because of environmental situations, conditions, or risks at a site. ICs are commonly used in CERCLA to supplement an environmental remedy or as the actual remedy of choice.

4. **General Rule and Exception for ICs in the CERCLA Process:**

a. **General Rule:** Any IC imposed because of a possible CERCLA risk at a site constitutes a "remedy" under CERCLA and must be considered and selected in accordance with the CERCLA remedy selection process. For example, if protection of human health and the environment at a particular site is dependent upon restricting future land use in a manner consistent with use assumptions made in the risk assessment, such land use restrictions are "imposed because of a possible CERCLA risk at a site," and constitute a CERCLA remedy.

b. **Exception:** There are circumstances when there is an unusually high level of certainty that land use will not change in the future. For example, special legislation or other statutory requirements directing a specific use of the property. In these specific cases when we determine during screening or site-specific risk assessment that contaminant levels present no unacceptable human health risk based on this mandated future use, any restrictions based upon the mandated future use are not viewed as "imposed because of a CERCLA risk at a site" and therefore do not constitute remedies. With respect to such sites, we conclude that no further action is required at the site. At this point the installation should prepare a No Further Action (NFA) Decision Document (DD) or Record of Decision (ROD), memorializing the exposure assumptions given the mandated land use as well as the results of the baseline risk assessment or risk-based screenings. Any restrictions based on the exposure assumptions should be captured in the NFA DD and in the FOST/FOSL.

5. **Considering ICs in RI/FS.** If an IC is being considered as a remedial alternative or a part of a remedial alternative, it should be analyzed in the risk assessment and feasibility study and be memorialized within the DD (non-NPL) or ROD. In order to make informed decisions regarding ICs as remedial alternative installations should:

a. Consider not only the no action alternative and IC remedial alternative, but also one or more alternatives consistent with property use without restriction that is protective of human health and the environment. While this option may not be affordable or practicable due to the known future use, the analysis will allow decision makers to compare life-cycle IC cost with the more conservative clean-up alternative.

b. In evaluating the maintenance costs associated with institutional controls, the installation must research the state and local requirements/options for IC management. Generally, the maintenance costs associated with institutional controls should reflect only costs associated with existing requirements/processes, such as CERCLA five year reviews. Additionally, it is important that the installation/MACOM legal representatives analyze any relevant state real property or environmental law, because options for state/local maintenance will vary from state to state. References 1b and 1c are good resources to use as launching points to research various local options.

c. For BRAC property transfers it is crucial that the installation involve the Local Reuse Authority (LRA), environmental regulatory agencies, community stakeholders and the Restoration Advisory Board early in the environmental remediation process. The LRAs especially, must clearly understand the implications of the ICs imposed as part of remedial action decisions to ensure appropriate land use planning.

**6. Documenting ICs as CERCLA Remedies.** Any DDs or RODs requiring ICs should describe the necessary IC in detail, including the assumptions made concerning current and future land use and/or exposure scenarios as well as a discussion of the contaminants remaining at the site. The land use scenario(s) used in risk assessment upon which the risk management and remedy decisions are premised should be stated. The DD or ROD should discuss the specific institutional control and describe the type of land use restriction language that would be required if the property were to go out of the control of the Army, such as Base Realignment and Closure (BRAC) property. When transferring or leasing property, this information from the DD or ROD will be put in the FOSL or FOST. The FOST/FOSL will be subsequently used to put the necessary restrictions in legal agreements such as deeds, leases, or other documents as appropriate.

In addition, the DD/ROD should clearly describe the process and conditions by which an institutional control could be removed from the property. Typically, IC removal will require formal modification of the DD or ROD and associated modifications to the real property documents. In some cases the removal of an IC could constitute a significant change to a DD or ROD and would require the issuance of a new DD or ROD in accordance with NCP requirements.

**7. Responsibilities for Maintaining ICs.** Protection of human health and the environment is both a goal and a requirement of the environmental remediation process. The Army must ensure that this requirement is met, even when the property is no longer under direct Army control. Therefore, the installation should plan for any necessary IC maintenance as part of its remedy selection process. IC maintenance requirements will vary from site to site and should be developed in coordination with appropriate stakeholders such as LRAs, RABs and environmental regulators. The cost estimate for the remedial action should include any funding required for IC maintenance. In addition the installation should ensure that any continued resource requirement for maintaining ICs are included in the installations cost-to-complete database to ensure adequate resource programming. As much as practicable installations should rely on existing processes, such as CERCLA five-year reviews to accomplish IC maintenance. The bottom line is that the IC remedy the Army has selected is the Army's responsibility.

#### **4. Site Close-Out**

The purpose of the BRAC Environmental Restoration Program is to protect public health and the environment from releases of hazardous substances from past disposal and spill sites. If a site does not threaten public health or the environment, it should be closed out. Currently, the Army is working with the other DoD Component Services to develop guidance for uniform close-out considerations and procedures.

The conditions required to justify site closeout decisions are site-specific. Key objectives of site closeout are to ensure that:

- The site closeout decision is formally made by MACOM (or the Installation Commander, if that responsibility has been so delegated).
- The site closeout decision is documented.
- Regulatory authorities and the public are notified of the site closeout decision.
- Concurrence on the site closeout decision is received, if necessary, from the EPA and the state.
- Deletion is conducted, if the site is on the NPL.
- In general, the decision can be justified on any of the following findings:
- No evidence is collected in a preliminary assessment that indicates use of the site for hazardous waste handling, storage, or disposal.
- A site inspection or site characterization shows there is no possibility of direct contact, fire or explosion, and samples taken at the site show that no hazardous substances are migrating or likely to migrate from the site.
- The conclusion of a public health evaluation or baseline risk assessment states that there is no significant threat to public health or the environment.
- The successful completion of monitoring, removals, remedial actions, or post project activities has occurred.

## **5. Natural Resource Injuries**

In 1998, DoD formed a committee to create policy and guidance to comply with the natural resource sections of CERCLA and the Clean Water Act. This committee has not yet completed this policy. However, where appropriate, installations may need to consider Natural Resource Injuries (NRIs) before remedy selection.

NRIs refer to a measurable adverse change in the chemical or physical quality or viability of a natural resource caused by a release or threatened release of a hazardous substance". Injuries can occur to the following types of natural resources: surface water, groundwater, air, and geologic or biological resources. In many cases, investigations leading to a cleanup decision identify and quantify some injuries.

Until the DoD committee publishes its policy and guidance on natural resource injuries, it is recommended that any natural resource issues that arise at an Army installation be elevated up the Army chain of command for resolution.

## **6. Cost-Recovery/Cost Sharing**

Section 348 of the Fiscal Year 1998 Defense Authorization Act required DoD to develop uniform guidelines for the Component Services and Defense Agencies regarding the policies and practices for recovering environmental cleanup costs from, or sharing costs with, third parties that have contributed to the contamination of DoD property. DoD has provided new direction to the Component Services concerning cost-recovery and cost sharing. The DoD directs Component Services to:

Identify all opportunities for the potential recovery or sharing of costs associated with environmental restoration from DoD contractors and other parties, public and private, that may have contributed to environmental contamination at DoD sites.

Investigate each activity where cost-recovery/cost sharing potential exists to determine if the likelihood of success to pursue cost-recovery/cost sharing outweighs the costs associated with pursuing such an action.

Pursue cost recovery/cost sharing activities to the extent practicable if such activity appears to be potentially cost-effective by:

- Obtaining all data that is relevant to cost recovery and cost sharing activities;
- Identifying any Defense contractor negligence or other misconduct that may limit or preclude DoD's obligation to indemnify or reimburse the contractor for the costs of environmental restoration at a DoD site; and
- Initiating actions, where appropriate, to recover the environmental cleanup costs incurred or to be incurred by the Department,
- Report annually, no later than November 30, to the Deputy Under Secretary of Defense (Environmental Security), each cost-recovery or cost-sharing action underway or completed. Include site name, location, status underway or complete, amount recovered/shared, and cost of pursuing the action. This information will be included in the Fiscal Year DERP Annual Report to Congress.

The Army is currently developing implementation guidance for recovering environmental cleanup-costs from, or sharing costs with, third parties that have contributed to the contamination of Army property.

## **7. Radiological Surveys**

Each realigning and closing Army installation must evaluate the potential for radiological contamination early in the investigation process. As part of the Environmental Baseline Survey (EBS) all available installation records must be reviewed to determine if radioactive materials or commodities were used, stored, or disposed of at the facility.

Locations that are important to review during the EBS include cannibalization or demilitarization facilities or yards where tanks, trucks, vehicles, or other systems may have been disassembled or dismantled. Many of these systems historically had radium painted dials that may have been broken during dismantling, releasing radioactive contamination to the surrounding area. Radium was not typically licensed and standard records may not exist. Also, when identifying the type of radioactive contamination that may be present, it is important to consider naturally- occurring radioactivity. Naturally occurring (background) radiation is found in all soils, rocks, bricks and cement, surface water, and groundwater.

Radiological surveys must be conducted at areas identified in the EBS where radioactive materials may have been used. In areas where it is unlikely that radioactive materials were used, a simple survey can be used to determine if radionuclides are present above background level. In areas where there is knowledge of the use or storage of radioactive material a more intensive radiological survey must be conducted. The intensity of the survey should account for the past use of the site and be based on factors such as:

- Suspected or known use of radioactive materials at a site,
- Storage conditions of the radioactive materials (sealed or unsealed sources, indoor or outdoor facility),
- Condition of the sealed sources
- Half-life of radioactive material

During the Radiological Survey planning stages, it is important to involve all the appropriate regulatory agencies. This allows the radiological survey to be consistent with the most stringent detection limit requirements. A number of regulatory agencies are involved in the regulation of radioactive materials and wastes. The Nuclear Regulatory Commission (NRC) is required under the Atomic Energy Act (AEA) to regulate by-product, source, and special nuclear material. In some cases, this authority is delegated from the NRC to agreement states. Some states have promulgated their own regulations to deal with the use, handling, and disposal of radioactive materials. Different regulators may have different requirements with regard to how the survey is conducted and how the results are reported. There are also different reporting and health requirements. There may be two state agencies (public health and environmental) which have regulations governing radioactive materials. At the federal level, the environmental agency involved is the U.S. Environmental Protection Agency (EPA).

It is important when conducting the Radiological Survey to determine the type of materials used at the site and whether the materials were licensed under the NRC, an Agreement State, a Department of the Army Radiation Authorization or Department of the Army radiation permits.

If the Radiological Survey determines that radioactive contamination is present at a site above the applicable dose-based standard, decontamination is required. For large decontamination efforts, a Decommissioning Plan must be prepared. The guidance for preparing a Decommissioning Plan differs depending on the types of licenses. The requirements can be found in 10 CFR Parts 30, 40, or 70.

If the survey concludes that there is no contamination above the applicable dose-based standard, the radiological survey report will be instrumental in terminating a license and/or releasing the area for property transfer.

Closing and realigning Army installations with identified areas in the EBS where radioactive materials may have been used should review the *Radiological Survey Policy for the U.S. Army Materiel Command (AMC) Radioactive Commodity Base Realignment and Closure (BRAC) Sites (1998)* and the *Multi-agency Radiation Survey and Site Investigation Manual (MARSSIM)* for guidance to address the site and proceed with the Radiological Survey, decommissioning, termination of licenses and/or releasing the area for property transfer.

***See the Multi-agency Radiation Survey and Site Investigation Manual on the Internet at <http://www.epa.gov/radiation/marssim>. Other radiological survey references are presented in Attachment F of this management plan.***

## **8. Chemical Warfare Agents**

Environmental media potentially contaminated with residual amounts of chemical warfare agents (CWA) often pose problems for restoration projects that are disproportionate to the contamination's possible adverse environmental or public health impact. The issue of public sensitivity, coupled with the fact that, until recently, comprehensive information on the chronic toxicity associated with low-level exposures to CWA was difficult to obtain, clearly contributes to the additional complications. Ultimately, focusing on the potential human or environmental health aspects of the contamination (rather than on ancillary issues), as with industrial pollutants, will lead to the most cost-effective and responsible remedy.

Intrusive operations in areas potentially contaminated with CWA have unique safety and procedural complications, but it is important, not to overstate these complications. It is particularly important to thoroughly examine the need and specific objective of intrusive operations, in order to assure that the benefits of the effort are commensurate with the costs, and that the Army is in a position to effectively deal with the possible results of intrusive operations.

Specific policy and guidance on intrusive activities at CWA sites is being developed by the U.S. Army Environmental Center, along with supplemental documents addressing such things as sampling procedures, other specific technical and regulatory issues, and the role of the Project Manager, Non-Stockpile Chemical Materiel in handling recovered chemical munitions.

**ATTACHMENT F**

**BRAC RELATED ENVIRONMENTAL  
GUIDANCE**

## ATTACHMENT F

### BRAC RELATED ENVIRONMENTAL GUIDANCE

DoD, 1998. *Management Guidance for the Defense Environmental Restoration Program*, Office of the Deputy Under Secretary of Defense (Environmental Security), Washington, DC, March, 1998. **Internet** <http://www.dtic.mil/envirodod/envdocs.html>

DoD, 1997. *Base Reuse Implementation Manual*, Office of the Deputy Under Secretary of Defense (Industrial Affairs and Installations), Washington, DC, December, 1997. **Internet** <http://emissary.acq.osd.mil/bccr/brim.nsf>

Department of the Army, 1997. *Environmental Quality: Environmental Protection and Enhancement*. Army Regulation No. 200-1, Headquarters, Department of the Army, Washington, DC, 21 Feb 97. **Internet** <http://www.denix.osd.mil/denix/Public/Policy/Army/ar200-1.html>

Department of the Army, 1997. *Environmental Quality: Environmental Effects of Army Actions*, Army Regulation No. 200-2, Headquarters, Department of the Army, Washington, DC. **Internet** <http://www.denix.osd.mil/denix/Public/Policy/Army/ar200-2.html>

Department of the Army, 1995. *Environmental Quality: Natural Resources – Land, Forest and Wildlife Management*, Army Regulation No. 200-3, Headquarters, Department of the Army, Washington, DC. **Internet** <http://www.denix.osd.mil/denix/Public/Policy/Army/ar200-3.html>

Department of the Army, 1998. *Environmental Quality: Cultural Resources Management*, Army Regulation No. 200-4, Headquarters, Department of the Army, Washington, DC.

USAEC, 1998. *U.S. Army Environmental Restoration Programs Guidance Manual*, U.S. Army Environmental Center, Aberdeen Proving Ground, MD, April 1998. **Internet** <http://www.denix.osd.mil/denix/Public/Policy/Army/ERP/erptoc.html>

#### ATSDR

1. DASA(ESOH), 1998. Memorandum on *Agency for Toxic Substances and Disease Registry (ATSDR) Program Management Plan*, Deputy Assistant Secretary of the Army (Environment, Safety and Occupational Health), Washington DC, 20 Mar 98.
2. DoD, 1995. *Guidelines for the Coordination of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Activities between the Agency for Toxic Substances and Disease Registry and the Department of Defense*, Office of the Deputy Under Secretary of Defense (Environmental Security), Washington, DC, Feb 1995.

3. USEPA, 1987. *Guidance for Coordinating ATSDR Health Assessment Activities with the Superfund Remedial Process*, OSWER Directive 9285.4-02, U.S. Environmental Protection Agency, Washington DC, March 1987.

### **Community Involvement**

1. ACSIM, 1998. *U.S. Army Restoration Advisory Board and Technical Assistance for Public Participation*, Assistant Chief of Staff for Installation Management, U.S. Army Environmental Center, Aberdeen Proving Ground, MD, April 1998. **Internet** <http://denix.cecer.army.mil/denix/Public/Policy/Army/IRP/rabapr98.html>

2. DoD, 1996. *Restoration Advisory Board (RAB) Resource Book*, Office of the Deputy Under Secretary of Defense (Environmental Security), Washington, DC, Sep 96. **Internet** [http:// www.dtic.mil/envirodod/rab/rabresources](http://www.dtic.mil/envirodod/rab/rabresources)

3. ASA(IL&E), 1996. Memorandum on *Issuance of Policy – The Role of Restoration Advisory Boards (RABs) in Environmental Cleanup*, Assistant Secretary of the Army (Installations, Logistics and the Environment), Washington DC, 7 May 1996.

4. DoD, 1997. *Community Guide for Base Reuse*, Office of the Assistant Secretary of Defense for Economic Security, Washington DC, December 1997. **Internet** <http://emissary.acq.osd.mil/bccr/bcto/home.nsf>

5. USEPA, 1995. *Guidance for Community Advisory Groups at Superfund Sites*, U.S. Environmental Protection Agency (Office of Emergency and Remedial Response), Washington, DC, Dec 1995.

6. DoD, 1994. *Restoration Advisory Board (RAB) Implementation Guidelines*, Office of the Deputy Under Secretary of Defense (Environmental Security), Washington, DC and the U.S. Environmental Protection Agency, Washington, DC, Oct 1994. **Internet** [http:// www.dtic.mil/envirodod/rab/finalrab.html](http://www.dtic.mil/envirodod/rab/finalrab.html)

7. USEPA, 1992. *Community Relations in Superfund: A Handbook*, EPA /540/R-92/009, OSWER Directive 9230.0-3B, U.S. Environmental Protection Agency, Washington, DC, Jan 1992.

8. USEPA, 1990. *Innovative Methods to Increase Public Involvement in Superfund Community Relations*, OSWER Directive 9230.0-20, U.S. Environmental Protection Agency, Washington, DC, Nov 1990.

## **Cost Estimating**

1. ACSIM, 1998. Memorandum on *Environmental Restoration Cost-to-Complete (CTC) Update*, Assistant Chief of Staff for Installation Management, U.S. Army Environmental Center, Aberdeen Proving Ground, MD, 28 Mar 98.
2. ACSIM, 1997. Memorandum on *Restoration Program Reporting*, Office of the Assistant Chief of Staff for Installation Management (Office of the Director of Environmental Programs), Washington DC, 19 Mar 97.
3. ACSIM, 1996. Memorandum on *Managing the BRAC Environmental Program on a Site Level Basis*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 8 Aug 96.

## **Cultural/Natural Resources**

1. DAIM-BO, 1994, Memorandum on *Interim Guidance - Proposed Resolutions to ACHP Issues*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 1 Sep 94.
2. DAIM-ED-N, 1994. Memorandum on *Endangered/Threatened Species Guidance*, Office of the Assistant Chief of Staff for Installation Management (Environmental Division), Washington DC, 15 Feb 94.

## **Decision Documents/Records of Decision**

1. ACSIM, 1995. Memorandum on *Revised Interim Policy for Staffing and Approving Decision Documents*, Assistant Chief of Staff for Installation Management, Washington DC, 15 Nov 95. *Internet* <http://www.denix.osd.mil/denix/Public/Policy/Army/Intpil/dds1.html>
2. USEPA, 1989. *Guidance for Preparing Superfund Decision Documents; The Proposed Plan, The Record of Decision, Explanation of Significant Differences, and The Record of Decision Amendment (Interim Final)*, EPA/540/G-89/007, OSWER Directive 9355.3-02, U.S. Environmental Protection Agency, Washington DC, July 1989.

## **Defense Sites Environmental Restoration Tracking System (DSERTS)**

1. OACSIM, 1999. Memorandum on *Spring 1999 Defense Site Environmental Restoration Tracking System (DSERTS) Data Call*, Office of the Assistant Chief of Staff for Installation Management, Washington DC, 23 Feb 99.
2. DAIM-BO, 1998. Memorandum on the *BRAC Workplan Meeting*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 18 May 98.

3. DAIM-BO, 1996. Memorandum on *Managing The BRAC Environment Program On A Site Level Basis*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 8 Aug 98.

### **Defense State Memorandum Of Agreement (DSMOA)**

USACE, 1997. *Working Together to Achieve Cleanup: A Guide to the Cooperative Agreement Process*, Headquarters, U.S. Army Corps of Engineers, Washington, DC, 22 Aug 97. **Internet** <http://www.mrd.usace.army.mil/mrded-h/access/DSMOA/dsmoa.html>

### **Fast Track Cleanup**

1. DoD, 1997. Memorandum on *Submission of Fiscal Year 1997 BRAC Cleanup Plan (BCP) Abstracts*, Office of the Deputy Under Secretary of Defense (Environmental Security), Washington, DC, Aug 1997. **Internet** [http://www.dtic.mil/envirodod/brac/bcp\\_abs/index.html](http://www.dtic.mil/envirodod/brac/bcp_abs/index.html)

2. DoD, 1996. Memorandum on *Modifications to the Fast Track Cleanup at Closing Installations*, Office of the Deputy Under Secretary of Defense, Washington, DC, 18 May 1996. **Internet** <http://www.dtic.mil/envirodod/brac/reissued.html>

3. DoD, 1996. *BRAC Cleanup Plan (BCP) Guidebook*, Department of Defense, Washington DC, Fall, 1996. **Internet** <http://www.dtic.mil/envirodod/brac/toc.html>

4. USEPA, 1996. *Guidance for Implementing the Fast Track Cleanup Program at Closing or Realigning Military Bases*, U.S. Environmental Protection Agency (Office of Solid Waste and Emergency Response), Washington DC, Feb 1996.

5. ACSIM, 1995. Memorandum on *BRAC 95 Environmental Baseline Surveys (EBSs) and BRAC Cleanup Plans (BCPs)*, Assistant Chief of Staff for Installation Management, U.S. Army Environmental Center, Aberdeen Proving Ground, MD, 3 May 95.

6. DAIM-BO, 1995. Memorandum on *BRAC Implementation Guidance – BRAC 95*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 28 Feb 95.

7. DAIM-BO, 1995. Memorandum on *BRAC 95 BTC/BEC Guidance*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 24 Feb 95.

8. DAIM-ED-R, 1994. Memorandum on *Policy Guidance – Version 2 BCPs*, Office of the Assistant Chief of Staff for Installation Management (Office of the Director of Environmental Programs), Washington DC, 8 Dec 94.

9. DAIM-BO, 1994. Memorandum on *BRAC Environmental Restoration Policy Changes*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 22 Jul 94.

10. DAIM-BO, 1994. Memorandum on *Command Emphasis in Support of BRAC Environmental Coordinators*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 4 Feb 94.

11. DAIM-BO, 1994, Memorandum on *Additional Information on BRAC Cleanup Team Program Execution*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 4 Feb 94.

12. DAIM-BO, 1994. Memorandum on *Funding of Fast Track Cleanup at Closing Installations*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 14 Jan 94.

13. DAIM-BO, 1993. Memorandum on *Implementing Guidance for Fast Track Cleanup at Closing Bases*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 8 Oct 93.

14. DAIM-BO, 1993. Memorandum on *Fast Track Cleanup at Closing Installations*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 17 Sep 93.

15. DoD, 1993. *DoD Guidance and Policies on Fast Track Cleanup at Closing Installations*, Office of the Deputy Under Secretary of Defense, Washington, DC, 9 Sep 93.

### **Federal Facilities Agreement/Inter-Agency Agreement at NPL Installations**

DoD, 1988. Memorandum on *DoD's Policy on NPL Site Agreements*, Office of the Assistant Secretary of Defense, Washington DC, April 18, 1988.

### **Five Year Reviews**

1. ACSIM, 1998. *Guidance for U.S. Army Compliance with CERCLA Five-Year Review Requirements at Army Installations*, Assistant Chief of Staff for Installation Management, U.S. Army Environmental Center, Aberdeen Proving Ground, MD, 17 Jul 98.

2. USEPA 1995. *Second Supplemental Five-Year Review Guidance*, OSWER Directive 9355.7-03A, U.S. Environmental Protection Agency, Washington, DC, 21 Dec 95.

3. USEPA 1994. *Supplemental Five-Year Review Guidance*, OSWER Directive 9355.7-02A, U.S. Environmental Protection Agency, Washington, DC, 26 Jul 94.

4. USEPA, 1991. *Structure and Components of Five-Year Reviews*, OSWER Directive 9355.7-02, U.S. Environmental Protection Agency, Washington, DC, 23 May 91.

## **Independent Technical Review**

ACSIM, 1997. Memorandum on *Implementation of Technical Peer Review for Environmental Restoration Projects for Fiscal Year 1998*, Interim Final, Assistant Chief of Staff for Installation Management, U.S. Army Environmental Center, Aberdeen Proving Ground, MD, 2 Sep 97.

## **Land Use Controls**

ACSIM, 1998. Memorandum on *Army Guidance on Using Institutional Controls (ICs) in the CERCLA Process*, Assistant Chief of Staff for Installation Management, DAIM-BO, Washington DC, 4 Sep 98.

## **National Environmental Policy Act (NEPA)**

1. DAIM-BO, 1996. Memorandum on *General Information Concerning BRAC NEPA Documentation – BRAC 95*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 3 Apr 96.
2. DAIM-BO, 1996. Memorandum on *Delegation of Authority for BRAC NEPA Documentation*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 1 Apr 96.
3. DAIM-BO, 1996. Memorandum on *Checklist and Legal Review Certifications for BRAC NEPA Documentation Staffing at HQDA*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 17 Jul 96.
4. USACE, 1995. *Base Realignment and Closure Manual for Compliance with the National Environmental Policy Act*, U.S. Army Corps of Engineers, Mobile District, Mobile, AL, Sep 1995.
5. DAIM-BO, 1994. Memorandum on *BRAC NEPA Documentation*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 1 Sep 94.
6. DAIM-BO, 1993. Memorandum on *Disposal/Reuse NEPA Documentation*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 19 Oct 93.

## **Natural Attenuation**

ACSIM, 1995. Memorandum on *Interim Army Policy on Natural Attenuation for Environmental Restoration*, Office of the Assistant Chief of Staff for Installation Management (Office of the Director of Environmental Programs) DAIM-ED-R, Washington DC, 19 Oct 93.

## Property Transfer

1. USEPA, 1998. Memorandum on *EPA Guidance on the Transfer of Federal Property by Deed Before All Necessary Remedial Action Has Been Taken Pursuant to CERCLA Section 120(h)(3)*, U. S. Environmental Protection Agency, Washington DC, 16 Jun 98.
2. DoD, 1998. Memorandum on *Environmental Review Process to Obtain the Finding of Suitability Required for Use of Early Transfer Authority for Property Not on the National Priorities List*, Office of the Deputy Under Secretary of Defense (Acquisition and Technology), Washington, DC, 24 Apr 98.
3. DoD, 1997. Memorandum on *Responsibility for Additional Environmental Cleanup After Transfer of Real Property*, Office of the Deputy Under Secretary of Defense (Acquisition and Technology), Washington, DC. 25 Jul 97.
4. DAIM-BO, 1996. Memorandum on *Clarification of Meaning of Uncontaminated Property for Purposes of Transfer by the United States*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 9 Dec 96.
5. DAIM-BO, 1996. Memorandum on *Guidance for Leasing of BRAC Properties*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 31 May 96.
6. DAIM-BO, 1996. Memorandum on *Army Policy on Consideration of Future Land Use in Determining Cleanup Standards for Base Realignment and Closure (BRAC) Property*, Office of the Assistant Chief of Staff for Installation Management (DAIM-ED-R), Washington DC, 23 Apr 96.
7. DoD, 1995. *Fast Track To FOST, Interim Final*, Office of the Deputy Under Secretary of Defense (Environmental Security), Washington, DC. Feb 95.
8. DAIM-ED-R, 1995. Memorandum on *Implementing Guidance for Signature Authority and Staffing Procedures for Finding of Suitability to Transfer/Lease (FOST/FOSL)*, Office of the Assistant Chief of Staff for Installation Management, Washington DC 23 Aug 95.
9. DAIM-ED-R, 1994. Memorandum on *Use of Environmental Baseline Surveys (EBSs)-Transfer Policy Memorandum*, Office of the Assistant Chief of Staff for Installation Management, Washington DC 11 Apr 94.

## **Radiological Surveys**

1. USAMC, 1998. Memorandum on *Radiological Survey Policy for U.S. Army Materiel Command (AMC) Radioactive Commodity Base Realignment and Closure (BRAC) Sites*, U.S. Army Materiel Command, Alexandria 17 Apr 98, subject:
2. USEPA, 1997. *Multi-Agency Radiation Survey and Site Investigation Manual*, NUREG-1575/EPA 402-R-97-016, U.S. Environmental Protection Agency, Washington DC, Dec 97.  
*Internet <http://www.epa.gov/radiation/marssim>*
3. DAIM-BO, 1994. Memorandum on *Radiologic Contamination on Base Realignment and Closure (BRAC) Installations*, Office of the Assistant Chief of Staff for Installation Management (BRAC Office), Washington DC, 25 Mar 94.
4. NRC, 1992. *Residual Radioactive Contamination From Decommissioning, Technical Basis for Translating Contamination Levels to Annual Effective Dose Equivalent*, NUREG/CR-5512, U.S. Nuclear Regulatory Commission, Washington DC, Oct 1992.
5. NCR, 1992. *Manual for Conducting Radiological Surveys in Support of License Termination*, NUREG/CR-5849, U.S. Nuclear Regulatory Commission, Washington DC, Jun 1992.
6. USEPA, 1989. *Risk Assessment Guidance for Superfund, Volume 1: Human Health Evaluation Manual*, Chapter 10, U.S. Environmental Protection Agency, Washington DC, Sep 1989.
7. Department of the Army, 1980. *Ionizing Radiation Protection (Licensing, Control, Transport, Disposal, and Radiation Safety)*, Army Regulation No. 385-11, Headquarters, Department of the Army, Washington, DC, 1 May 1980.

## **Relative Risk**

1. DoD, 1997. *DoD Relative Risk Site Evaluation Quality Assurance Plan*, Office of the Deputy Under Secretary of Defense (Environmental Security), Washington, DC. Summer 1997.  
*Internet <http://www.dtic.mil/envirodod/relrisk/qapage.html>*
2. DoD, 1997. *DoD Relative Risk Site Evaluation Primer*, Office of the Deputy Under Secretary of Defense (Environmental Security), Washington DC, Summer 1997.  
*Internet: <http://www.dtic.mil/envirodod/relrisk/relrisk.html>*

## **Unexploded Ordnance**

DoD, 1997. *Draft Closed, Transferred, and Transferring Ranges Containing Military Munitions; Proposed Rule*. Department of Defense, Office of the Secretary, 32 CFR 178 [RIN 0790-AG35]. 26 Sep 97.