

8049



**U.S. Army
Environmental
Center**

VERSION 2

Base Realignment and Closure (BRAC) Cleanup Plan

**Fort Sheridan
Fort Sheridan, Illinois**

Prepared for:

**U.S. ARMY ENVIRONMENTAL CENTER
ABERDEEN PROVING GROUND, MARYLAND 21010**

Prepared by:

**EARTH TECH
1420 KING STREET, SUITE 600
ALEXANDRIA, VIRGINIA 22314**

Unlimited Distribution
Approved for Public Release

NOVEMBER 1995

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LIST OF ACRONYMS

ACM	Asbestos-Containing Material
AOC	Area of Concern
ARAR	Applicable or Relevant and Appropriate Requirement
AREE	Area Requiring Environmental Evaluation
AST	Aboveground Storage Tank
BCP	BRAC Cleanup Plan
BCT	BRAC Cleanup Team
BEC	BRAC Environmental Coordinator
BRAC	Base Realignment and Closure
BTC	Base Transition Coordinator
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
CRP	Community Relations Plan
CSA	Coal Storage Area
CWA	Clean Water Act
DD	Decision Document
DENIX	Defense Environmental Network Information Exchange
DERA	Defense Environmental Restoration Account
DERP	Defense Environmental Restoration Program
DLA	Defense Logistics Agency
DOD	Department of Defense
DSERTS	Defense Services Environmental Restoration Tracking System
EA	Environmental Assessment
EIS	Environmental Impact Statement
EnPA	Enhanced Preliminary Assessment
EOD	Explosive Ordnance Disposal
EPCRA	Emergency Planning and Community Right-to-Know Act
FESOP	Federally Enforceable State Operating Permit
FFA	Federal Facility Agreement
FONSI	Finding of No Significant Impact
HUD	Housing and Urban Development
IAC	Illinois Administrative Code
IDOC	Illinois Department of Conservation
IEPA	Illinois Environmental Protection Agency
IRDMIS	Installation Restoration Data Management Information System
IRP	Installation Restoration Program
ISA	Initial Screening of Alternatives
JPC	Joint Planning Committee
LTM	Long-Term Monitoring
MOU	Memorandum of Understanding

LIST OF ACRONYMS

Continued

MSDS	Material Safety Data Sheet
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEPA	National Environmental Policy Act
NFA	No Further Action
NFRAP	No Further Response Action Planned
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRC	Nuclear Regulatory Commission
OEA	Office of Economic Adjustment
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PA	Preliminary Assessment
PCB	Polychlorinated Biphenyl
PIRP	Public Involvement Response Plan
PNA	Polynuclear Aromatic Hydrocarbons
POL	Petroleum, Oils, and Lubricants
PP	Proposed Plan
ppm	Parts Per Million
QAPP	Quality Assurance Project Plan
RA	Remedial Action
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RDX	Royal Detonation Explosive
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI/FS	Remedial Investigation/Feasibility Study
RMIS	Restoration Management Information System
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act
SDWA	Safe Drinking Water Act
SI	Site Investigation
SPCC	Spill Prevention, Control and Countermeasures
STP	Sewage Treatment Plant
SVOC	Semi-volatile Organic Compound
TAG	Technical Assistance Grant
TAL	Total Analyte List
TCL	Target Compound List
TERC	Total Environmental Restoration Contract
TRC	Technical Review Committee
TSCA	Toxic Substances Control Act

LIST OF ACRONYMS

Continued

USAEC U.S. Army Environmental Center
USACE U.S. Army Corps of Engineers
USAEHA U.S. Army Environmental Hygiene Agency
USEPA U.S. Environmental Protection Agency
UST Underground Storage Tank
UXO Unexploded Ordnance
VOC Volatile Organic Compound

BCP GLOSSARY OF TERMS

Applicable or Relevant and Appropriate Requirement (ARAR). ARARs are cleanup standards, standards of control, and other environmental protection requirements, criteria, or limitations promulgated in federal or state regulations that define remedial action requirements at CERCLA sites.

Area Requiring Environmental Evaluation (AREE). An AREE is an individual site, multiple sites or program area identified through an environmental assessment or site investigation as a potential threat to human health or the environment which requires further investigation under CERCLA. An AREE is roughly synonymous with an Area of Concern (AOC).

BRAC Cleanup Team (BCT). The BCT is formed to manage environmental programs for BRAC installations consisting of a U.S. Army installation representative, USEPA region representative, and state environmental agency representative.

BRAC Environmental Coordinator (BEC). The BEC is the U.S. Army representative of the BCT.

Base Closure and Realignment Act (BRAC Act). The Base Closure and Realignment Act of 1988 (P.L. 100-526, 102 Stat. 2623) (BRAC 88 or BRAC I) and the Defense Base Closure and Realignment Act of 1990 (P.L. 101-0510, 104 Stat. 1808) (BRAC 91, 93, 95) legislated the closure or realignment of military bases.

Base Transition Coordinator (BTC). The BTC is the DOD representative who serves as the primary point of contact for the public at a BRAC installation and assists in disposal and reuse planning and coordination for the property.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (1980). This Act is otherwise known as Superfund; it provides for liability, compensation, cleanup and emergency response for hazardous substances released to the environment. It was amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). Section 120 of CERCLA specifically addresses procedures to be followed for federal facilities investigation and cleanup including BRAC installations. Section 120(h) was amended by the Community Environmental Response Facilitation Act of 1992 (CERFA).

Community Environmental Response Facilitation Act (CERFA). This Act is an amendment to CERCLA which established new procedures for contamination assessment, remediation (cleanup), and regulatory agency notification and concurrence for federal facility closures. CERFA requires the U.S. Army to identify uncontaminated property; its primary goal is to accelerate the transfer of property that can be immediately reused and redeveloped. The USAEC prepared CERFA reports for all U.S. Army BRAC installations. Included in the report is an environmental condition of property map which classifies property in four categories, CERFA clean, excluded, qualified and disqualified.

BCP GLOSSARY OF TERMS

Continued

Community Relations Plan (CRP). The CRP is a formal plan for community relations activities at an NPL site (see Public Involvement and Response Plan).

Corrective Measures Study (CMS). The CMS is the third phase of the RCRA corrective action program for a facility consisting of the identification of corrective action requirements and the evaluation and selection of appropriate remedies for these problems identified in the RFI. The CMA roughly equates to the FS and PP prepared for sites being investigated under CERCLA.

Decision Document (DD). The DD formalizes the selection of remedial actions which are to be implemented at the installation. DDs are prepared for installations not on the National Priorities List. The DD corresponds roughly to a Record of Decision (ROD) for an NPL site.

Defense Environmental Restoration Account (DERA). The DERA is the Defense Appropriations Act funding mechanism for the DERP IRP (except the BRAC IRP).

Defense Environmental Restoration Program (DERP). The DERP is the program established in 1984 to promote and coordinate efforts for the evaluation and cleanup of contamination at Department of Defense (DOD) installations. The program currently includes: the Installation Restoration Program (IRP), under which DOD installation investigations and site cleanups are conducted; and Other Hazardous Waste (OWH) Operations, through which research, development and demonstration programs aimed at improving remediation technology and reducing DOD waste generation rates are conducted. DERP is managed centrally by the Office of the Secretary of Defense. SARA provides continuing authority for the Secretary of Defense to carry out this program in consultation with the USEPA and in compliance with CERCLA and SARA guidelines.

Early Action. Also called interim actions, early actions are remedial actions taken to respond to an immediate site threat or take advantage of an opportunity to significantly reduce risk quickly. These actions are typically limited in scope and are followed by other OU actions that complete site restoration for the long-term. Examples of early or interim actions are construction of a temporary landfill cap, and removal of contaminated soil to prohibit contamination of groundwater.

Environmental Assessment (EA). An EA is a document prepared to evaluate the environmental impacts of a federal action in compliance with NEPA when an EIS may not be necessary. If the EA indicates that there may be negative impacts to the environment from the proposed action, an EIS is required. If no significant impact is identified in the EA, a Finding of No Significant Impact (FONSI) is documented and no further evaluation under NEPA is required.

BCP GLOSSARY OF TERMS

Continued

Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). This Act is Title III of SARA which requires certain facilities to coordinate emergency planning with local and regional authorities and prepare hazardous material inventory and release data (Tier I and II and Toxic Release Inventory Reports). Executive Order 12856, signed August 3, 1993, requires that federal facilities comply with EPCRA.

Environmental Impact Statement (EIS). An EIS is required by the NEPA which examines major federal actions to determine their impact on the environment. Installation disposal and reuse actions require the preparation of NEPA documentation.

Environmental Investigation/Alternatives Analysis (EI/AA). The EI/AA describes RI/FS studies conducted at U.S. Army installations which are not on the NPL.

Explanation of Significant Difference (ESD). An ESD is a document which identifies significant changes that are being made to a component of the remedial action remedy in a ROD or DD. If fundamental changes are made to the overall remedy they are documented in a ROD or DD amendment and not an ESD.

Fast-Track Cleanup. The Fast-Track Cleanup point (or initiative) is one of President Clinton's Five-Point Program. The Five-Point Program is intended to speed economic recovery at communities where military installations are slated to close. Several actions that were implemented as part of the Fast-Track Cleanup initiative were, establishing the base closure team, encouraging public involvement, and identifying uncontaminated property.

Feasibility Study (FS). An FS is a CERCLA environmental restoration study undertaken to develop and evaluate options for remedial action. Generally performed concurrently with and using data gathered during the RI. The FS evaluates remedial action alternatives based on technical feasibility and cost effectiveness, regulatory requirements, public health effects, and environmental impact.

Federal Facility Agreement (FFA). The FFA is a binding agreement between the party responsible for cleanup of an NPL site and the USEPA which formalizes the CERCLA procedures and schedules to be followed for the site.

Federal Facility Site Restoration Agreement (FFSRA). This is a binding agreement between the party responsible for cleanup of a non-NPL site and the lead state environmental agency which formalizes the CERCLA procedures and schedules to be followed for the site. The FFSRA equates to a FFA for an NPL site.

Hazard Ranking System (HRS). This is a system established by the USEPA for evaluating contaminated sites based on the potential hazard posed to public health and the environment.

BCP GLOSSARY OF TERMS

Continued

The system uses PA/SI data to generate a score ranging from 0 to 100 for each installation or individual site evaluated. Installations with a score above 28.5 may be included on the NPL.

Installation Restoration Data Management Information System (IRDMIS). IRDMIS is a database developed by the U.S. Army and maintained by the USAEC to manage sampling and analysis data generated at U.S. Army installations undergoing environmental investigation and restoration.

Installation Restoration Program (IRP). This is a program implemented under the DERP to investigate and remediate DOD installations. The IRP conforms with the NCP and CERCLA and applies guidelines promulgated by the USEPA. The IRP for active installations is funded by the DERA, the IRP for BRAC installations is funded through the Military Construction Act.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This plan provides the organizational structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances in accordance with CERCLA and the Clean Water Act (CWA). These procedures include the completion of a Preliminary Assessment, Remedial Investigation/Feasibility Study, Proposed Plan, Record of Decision, Remedial Design and Remedial Action.

National Environmental Policy Act (NEPA). This Act was passed in 1970 to encourage the assessment of environmental impact in federal decision making processes. The Act requires the preparation of an EIS or an EA for significant federal actions.

National Pollutant Discharge Elimination System (NPDES). USEPA administered program authorized by the Clean Water Act (CWA) to monitor wastewater discharges to surface and groundwaters. NPDES elements include industrial and sanitary wastewater discharge permitting programs and storm water permitting programs.

National Priorities List (NPL). The NPL is a listing of CERCLA hazardous substance release sites scoring 28.5 or higher under the USEPA Hazard Ranking System. Such sites are first proposed for NPL listing. Following a public comment period, proposed NPL sites may be listed on the NPL or may be deleted from consideration for placement on the list. Regulatory oversight for CERCLA site restoration actions at NPL installations is provided by the USEPA. Such installations are required to enter into an FFA.

No Further Response Action Planned (NFRAP). NFRAP is the designation given to an AREE or IRP site when investigation (SI or RI/FS) results indicate the site does not require remedial action or, after adequate remedial actions have been completed. NFRAP is synonymous with no further action (NFA).

BCP GLOSSARY OF TERMS

Continued

Operable Unit (OU). An OU is an environmental restoration unit identified as part of the CERCLA environmental restoration process to aid in the development of a remedial action strategy for the installation. Operable units may address geographical portions of an installation, specific installation problems, initial phases of an action, sets of actions performed over time or concurrent actions located in different portions of the installation.

Piezometer. An instrument used to measure head at a point in the subsurface; a nonpumping well, generally of small diameter, that is used to measure the elevation of the water table or potentiometric surface. A piezometer generally has a short screen through which water can enter.

Preliminary Assessment (PA). The PA is the first phase of investigation in the CERCLA environmental restoration process. The PA consists of a review of existing information and site reconnaissance if appropriate, to determine AREEs.

Proposed Plan (PP). The PP is a document which identifies the preferred remedial action alternative for a site and which provides a brief summary of all of the alternatives studied in the detailed analysis phase of the RI/FS.

Public Involvement and Response Plan (PIRP). The PIRP is a U.S. Army document which outlines the program established to inform the community of the IRP at an installation and provides for community involvement in the cleanup process. The PIRP is synonymous with the Community Relations Plan (CRP). A PIRP or CRP is required for NPL sites and may also be prepared for U.S. Army installations which are not on the NPL but are undergoing investigation under the active installation or BRAC IRP.

Quality Assurance Project Plan (QAPP). The QAPP sets the data quality objectives and the quality control criteria for sampling, analysis, and data handling. The plan should include field equipment calibration requirements, field documentation, sample handling, sample chain-of-custody procedures, data validation audit procedures, and scope-of-oversight and reporting procedures.

RCRA Facility Assessment (RFA). An RFA is the first phase of the RCRA corrective action program for a facility consisting of a records review and site inspection to gather information on releases at the facility. The RFA process includes an evaluation of SWMUs as well as preliminary determinations regarding the need for further investigation. The RFA roughly equates to the PA conducted under the CERCLA environmental program.

RCRA Facility Investigation (RFI). An RFI is the second phase of the RCRA corrective action program for a facility conducted at installations where the RFA identified the need for further evaluation. The RFI consists of multimedia investigations conducted to characterize the extent

BCP GLOSSARY OF TERMS

Continued

of releases at the RCRA facility. The RFI roughly equates to the RI conducted under the CERCLA environmental restoration process.

Record of Decision (ROD). This document formalizes the selection of remedial actions which are to be implemented at an NPL site. The ROD certifies that the remedy selection process was carried out in accordance with CERCLA and with the NCP. It describes the treatment, engineering, and institutional components of the remedial action and remediation goals. The ROD roughly equates to a DD for a non-NPL site.

Remedial Action (RA). RA is the final phase of the CERCLA environmental restoration process during which the actual construction of the remedy or implementation phase of site cleanup occurs. When all phases of the remedial activity at the site have been completed in compliance with the terms of the ROD or DD the site can be designated NFRAP.

Remedial Design (RD). RD is the engineering phase of the CERCLA environmental restoration process during which technical drawings and specifications are developed for the subsequent Remedial Action. These specifications are based upon the detailed description of the remedy and the cleanup criteria provided in the ROD or DD.

Remedial Investigation (RI). The RI is the CERCLA environmental restoration process phase undertaken to determine the nature and extent of the problem represented by a release of CERCLA hazardous substances. The RI includes multimedia sampling, field studies, monitoring, data analysis and completion of a baseline risk assessment and ecological evaluation to determine the nature, extent, and impacts to the human health and environment from contaminants present at the site if no remedial action is taken.

Resource Conservation and Recovery Act (RCRA). This Act is federal law introduced in 1976 as an amendment to the Solid Waste Disposal Act. RCRA consists of 9 subtitles including subtitles C, D, and I which outline management requirements for hazardous waste, solid waste and underground storage tanks containing petroleum products, respectively.

Restoration Advisory Board (RAB). The RAB acts as a forum for discussion and exchange of cleanup information between the DOD installation representatives and the public at BRAC installations where property will be available for transfer. The RAB consists of a DOD component, USEPA, state environmental agency, and local community representatives, and is jointly chaired by the BEC and a local community member.

Site Inspection (SI). The SI is a CERCLA investigation conducted if a Preliminary Assessment indicates the need for further investigation. SIs routinely involve visual inspections and the collection and analysis of multimedia samples to evaluate the extent of the problem and to determine whether a more detailed study such as an RI/FS is necessary.

BCP GLOSSARY OF TERMS

Continued

Solid Waste Management Unit (SWMU). A SWMU is a solid waste management unit at a RCRA facility from which hazardous constituents might migrate. SWMUs may include containers, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators and recycling units, and wastewater treatment units.

Spill Prevention Control and Countermeasures (SPCC). These are actions taken by an installation to address potential releases of hazardous substances or petroleum products. An SPCC Plan which documents procedures established by an installation to effect these response actions may be required for an installation pursuant to the Clean Water Act, RCRA, or SARA.

Superfund Amendments and Reauthorization Act (SARA). SARA is the law and amendments to CERCLA which address liability, compensation, cleanup and emergency response for hazardous substance releases. Title III of SARA established the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA).

Zone. A zone is a geographically contiguous area amenable to investigation in an SI or RI as a single unit identified to organize installation field efforts, group data from multiple investigations, facilitate the development of conceptual site models, prepare detailed maps and otherwise manage investigation activities. Zones are different than OU response actions.

EXECUTIVE SUMMARY

Introduction

This Base Realignment and Closure (BRAC) Cleanup Plan (BCP) describes the status, management and response strategy, and action items related to Fort Sheridan's ongoing base-wide environmental restoration and surplus property compliance programs. These programs support restoration of the installation property, which is necessary to meet the requirements for property disposal and reuse activities associated with the closure of the installation.

The scope of the BCP considers the following regulatory mechanisms: the BRAC Act; National Environmental Policy Act (NEPA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended, including the Community Environmental Response Facilitation Act (CERFA); Resource Conservation and Recovery Act (RCRA); and other applicable laws.

The Fort Sheridan BCP is a dynamic planning document developed by the BRAC Cleanup Team (BCT) consisting of the U.S. Army, U.S. Environmental Protection Agency, and representatives of the State of Illinois Environmental Protection Agency (IEPA). It was necessary to make certain assumptions and interpretations to develop the schedule and cost estimates provided in this plan. The BCP will be updated regularly to reflect the current status and strategies of remedial actions. This document is the latest in a series of updates/modifications and represents conditions and strategies as of September 1995.

Status of Disposal, Reuse, and Interim Lease Process

Fort Sheridan was recommended for closure in December 1988 by the Commission of Base Realignment and Closure. The fort officially closed on 26 May 1993. The disposal planning process of Fort Sheridan is ongoing and involves three interrelated activities: the NEPA documentation process, development of a disposal plan, and development of a community reuse plan. The first two items are the responsibility of the U.S. Army. The third is the responsibility of the Joint Planning Committee (JPC) created by the cities of Lake Forest, and Highland Park, the town of Highwood, and Lake County for the purpose of developing a plan for reuse and redevelopment of Fort Sheridan.

The NEPA documentation for Fort Sheridan includes the Environmental Impact Statement (EIS) for the closure of Fort Sheridan, which was completed in August 1990, and an Environmental Assessment (EA) addressing the disposal and reuse of the surplus Fort Sheridan property, which was completed in 1993. The NEPA process will be completed when a finding of no significant impact for the EA is finalized. The Army has outlined alternative disposal and reuse scenarios in the EA. Portions of the surplus property could be available for transfer as early as September

1996. The surplus property is the property at Fort Sheridan that has been identified for reuse and disposal. Sites on the surplus property being investigated under CERCLA are scheduled for a September 1998 disposal. The JPC has opened the reuse planning process to public review and are reviewing various reuse plans put forward by an earlier authorized planning group, the Fort Sheridan Commission. A Conceptual Land Use Plan was finalized September 1994 and approved by the Army in November 1994. This document is the installation's "Reuse Plan."

In May 1993, 100 acres of Fort Sheridan were transferred to the Army Reserves. In January 1994, the Navy purchased 200 acres. At this time, approximately 400 acres are considered surplus property.

Status of Environmental Restoration Program

The Enhanced Preliminary Assessment (EnPA) identified 34 areas requiring environmental evaluation (AREEs) at Fort Sheridan. Nineteen AREEs are located on the surplus property. Seven of these AREEs were identified in the Remedial Investigation/Feasibility Study (RI/FS) or the Bottom-up Review. These AREEs include landfills, vehicle storage areas, coal storage, chemical and other material storage areas, storm drainage systems, underground storage tanks (USTs), and others. At Fort Sheridan, asbestos abatement is continuing, and lead-based paint surveys, lead-based paint hazard abatement, and radiation surveys are underway and expected to be completed by spring of 1996. A polychlorinated biphenyl (PCB) transformer survey was completed in 1992, and at this time PCB transformers still remain on surplus property.

Key Restoration and Transferability Strategies and Schedules

Fort Sheridan has shifted its focus from the activities of an active installation to development of restoration activities for disposal and reuse of the property. The BCP strategies are currently being implemented to focus restoration activities towards final transfer of installation surplus property. Strategies for determining the most effective responses for contaminant sources and contaminated areas at the installation have been performed on a case-by-case basis by the BCT. A comprehensive strategy to identify appropriate regulatory programs applicable to the areas of contamination discovered during the restoration program is being developed and will be updated as necessary.

Summary of Current BCP Action Items

Table ES-1 provides a listing of recommendations and issues associated with environmental restoration, compliance, and technical/management action items that require further evaluation and implementation by the BCT/Project Team. Bottom up review program numbers specified in the Department of Defense (DOD) BCP Guidebook which relate to each action item are identified in the table. The Bottom-up review is conducted by the BRAC Cleanup Team (BCT), as assisted by the Project Team. The bottom-up review is conducted to review past and ongoing cleanup activities executed under multiple environmental programs at each closing installation. The review should assist the BCT and Project Team to develop installation-specific strategies for implementation of DOD policy and guidance; evaluate the adequacy, quality, and

TABLE ES-1. BCT ACTION ITEMS

Action Item	Status			
	Program Review Item	In Progress	To Be Performed	Completed
COMPLIANCE ACTIVITIES				
Asbestos Surveys and Abatement		x		
Radiological Surveys		x		
UST Removal/Compliance	7	x		
Unexploded Ordnance Survey and Clearance	7		x	
PCB Survey	7			x
Lead-Based Paint Survey	7			x
Lead-based Paint Hazard Abatement			x	
Radon Surveys	7			x
Hazardous Materials/Waste Management	7	x		
Evaluate need to update natural resource (biological) data	7, 16, 17		x	
Cultural Resources Survey				x
CERCLA 120(H)(3) CONSIDERATIONS				
Identify Environmental Condition of Property		x		
Suitability for Property Transfer - Update environmental conditions map as remediation is completed	28		x	
Evaluate alternatives to reduce potential health risk concerns at former landfills	22, 23, 24	x		
COMMUNITY RELATIONS ACTIVITIES				
Develop Community Relations Plan	14, 30			x
Establish Restoration Advisory Board	14			x
MANAGEMENT AND ADMINISTRATIVE SUPPORT ACTIVITIES				
Prepare conceptual site models	22			x
RESTORATION ACTIVITIES				
Develop comprehensive QAPP	20			x
Establish Background Inorganics for Soils/Groundwater	23	x		
Establish Classification of Groundwater	23			x
Establish and Maintain Administrative Record		x		

completeness of data and other information needed for environmental restoration decision making relative to all contaminated sites on the installation; and provide information for focusing the direction of the installation's future environmental response activities and for developing methods to support future decisions. The DOD BCP Guidebook is available for review as part of the installation's Administrative Record. The Administrative Record is kept at the Fort Sheridan BRAC office, which is located in Building 48G.

CHAPTER 1

► INTRODUCTION AND SUMMARY ◀

The purpose of this Base Realignment and Closure (BRAC) Cleanup Plan (BCP) is to summarize the current status of the base-wide Fort Sheridan environmental restoration and surplus property environmental compliance programs. The BCP also presents a comprehensive strategy for implementing response actions at the installation which are necessary to protect human health and the environment. This implementation strategy integrates activities being performed under both the Installation Restoration Program (IRP) and installation environmental compliance programs to support restoration of Fort Sheridan. The BCP is developed by and for the BRAC Cleanup Team (BCT) as the basis for substantive agreement and reporting on the installation's overall status and strategy toward selecting and implementing necessary response actions to protect human health and the environment. The BCP provides the basis for meeting or modifying deadlines in statutes, enforceable agreements, and/or deadlines internal to the installation.

This BCP is a dynamic planning document. It is necessary to make certain assumptions and interpretations to develop the schedule and cost estimates provided. As additional data become available, implementation programs and cost estimates will be updated. Such changes will then be reflected in future updates to the BCP. This version of the BCP was prepared with information available as of October 1995.

Chapter 1 of the BCP describes the objectives of the environmental restoration program, explains the purpose of the BCP, introduces the BRAC Cleanup Team (BCT) formed to review the program, and provides a brief history of the installation.

Chapter 2 summarizes the current status of the Fort Sheridan property disposal planning process and describes the relationship of the property disposal process with other environmental programs.

Chapter 3 summarizes the current status and past history of the Fort Sheridan IRP and associated environmental compliance programs, public involvement activities that have occurred to date, and the environmental condition of installation property.

Chapter 4 describes the installation-wide strategy for environmental restoration, including the strategies for dealing with each operable unit (OU) on the installation. This chapter also includes plans for managing installation compliance programs, natural resource programs, and community relations activities.

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

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

Chapter 7 provides a list of primary references used in the preparation of the BCP.

The following appendices are included in this document:

- ▶ Appendix A presents summary tables of past, current, and projected costs for the environmental restoration program.
- ▶ Appendix B includes technical documents and data loading summary, listings of previous environmental restoration program deliverables by program and by site.
- ▶ Appendix C will include summaries of Decision Documents (DDs) on restoration actions when they are developed.
- ▶ Appendix D includes summaries of each DD for each site or OU for which a no further response action planned (NFRAP) decision has been made.
- ▶ Appendix E includes working conceptual models for sites, zones, or OUs.
- ▶ Appendix F includes ancillary materials relevant to the BCP including a map of sensitive natural areas, wetlands, and cultural resources; a map of property suitable for transfer; a BCP distribution list; disposal milestones; cultural/historic resources; environmental justice issues; a programmatic agreement for cultural resources; and text from CERCLA § 120.

1.1 Environmental Response Objectives

The U.S. Army Garrison, Fort McCoy, located in central Wisconsin, is responsible for the management and overall implementation of environmental restoration programs and BRAC activities at Fort Sheridan. The U.S. Army Environmental Center (USAEC) is currently conducting a Remedial Investigation/Risk Assessment and a Remedial Investigation/Feasibility Study (RI/FS) at Fort Sheridan. Other environmental investigation, remedial design/remedial action (RD/RA), and compliance program support is provided by the U.S. Army Corps of Engineers (USACE), Louisville District.

The BCT, USAEC, USACE, and other supporting U.S. Army agencies' combined objectives for the environmental restoration and compliance program at Fort Sheridan are as follows:

- ▶ Protect human health and the environment;
- ▶ Conduct all environmental restoration activities in a manner consistent with Section 120 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), the National Oil and Hazardous Substances

Pollution Contingency Plan (NCP), Applicable or Relevant and Appropriate Requirements (ARARs), and all other applicable guidance developed by the U.S. Army, U.S. Environmental Protection Agency (USEPA), and Illinois Environmental Protection Agency (IEPA);

- ▶ Comply with existing statutes and regulations;
- ▶ Continue efforts to identify all potentially contaminated areas and incorporate any new sites into the BCP process, as appropriate;
- ▶ Initiate selected removal actions to control, eliminate, or reduce risks to manageable levels;
- ▶ Establish priorities for environmental restoration and restoration-related compliance activities so that property disposal and reuse goals can be met;
- ▶ Continue to develop, screen, and select response actions or remedial actions that reduce risks in a manner consistent with statutory and regulatory requirements;
- ▶ Commence remedial actions for (1) environmental and (2) property disposal and reuse priority areas as soon as practicable;
- ▶ Strive to meet reuse goals established by the U.S. Army and community;
- ▶ Continue to consider future land use when characterizing risks associated with releases of hazardous substances, pollutants, contaminants, or hazardous wastes;
- ▶ Continue to identify and map the environmental condition of installation property, with the intent of identifying areas suitable for transfer by deed, areas that lack sufficient information to make a determination, and areas that are not suitable for transfer by deed;
- ▶ Complete the environmental restoration process as soon as practicable for each OU, in an order of priority which takes into account both environmental concerns and redevelopment plans;
- ▶ Advise the real estate arm of the USACE of property that is deemed suitable for transfer, and properties that are not suitable for transfer because they are either not properly evaluated or pose an unacceptable human health or environmental risk;
- ▶ Conduct long-term remedial action for groundwater and any necessary reviews to evaluate the progress of remediation; and
- ▶ Establish interim and long-term monitoring (LTM) plans for other remedial actions, as appropriate.

1.2 BCP Purpose, Updates, and Distribution

This BCP summarizes the status of Fort Sheridan's installation-wide environmental restoration and surplus property compliance programs and the comprehensive strategy for installation-wide environmental restoration and restoration-related compliance activities in the surplus property. It describes the response action approach being implemented at the installation in support of installation realignment and closure. In addition, it defines the status of efforts to resolve technical issues so that continued progress and implementation of scheduled activities can occur. The Fort Sheridan BCP strategy and schedule is designed to streamline and expedite the necessary response actions associated with Fort Sheridan in order to facilitate the earliest possible disposal and reuse activities. Risk assessment protocols will incorporate future land use in exposure scenarios.

This BCP is a "living document" and will be updated as required, according to the BCT. Updates to the BCP will be distributed to each member of the Fort Sheridan Project Team, as well as to additional individuals and organizations identified in the distribution list provided in Appendix F as Table F-1. In addition, the BRAC Environmental Coordinator (BEC) for Fort Sheridan will prepare updated attachments to the BCP and distribute them to the other BCT members for comment as needed.

1.3 BCT/Project Team

The Fort Sheridan BCT has been established and is led by Colleen Reilly who is the BEC. Ms. Reilly represents the Fort McCoy Installation Commander. The two other BCT members are Remedial Project Managers from the USEPA, Region V (Owen Thompson) and the IEPA (Paul Lake).

The Fort Sheridan Project Team consists of the BCT and additional individuals whom the BCT selects to assist in the environmental restoration process at Fort Sheridan, including the Base Transition Coordinator (BTC), representatives from the USAEC, USACE, Fort McCoy Environmental Management Division, and others. The Project Team is led by the BEC. Project Team meetings are held regularly for the purpose of conducting periodic program reviews and reaching consensus on decisions with the USEPA and IEPA. Table 1-1 lists the current BCT and Project Team members and specific roles and responsibilities. Other support staff who contribute in the areas of toxicology and risk assessment, legal representative, Resource Conservation and Recovery Act (RCRA) compliance, fate and transport, field support, ecological, etc. are not all listed. BCT and Project Team members may consult/coordinate with additional staff as necessary.

1.4 Installation Description and History

This section provides a general description and historical summary of Fort Sheridan.

TABLE 1-1. CURRENT BCT/PROJECT TEAM MEMBERS

Name	Title	Phone	Role/Responsibility
BCT MEMBERS			
Paul Lake	Environmental Protection Engineer, IEPA	(217) 782-6760	IEPA Representative/BCT Member
Colleen Reilly	Fort Sheridan Base Environmental Coordinator	(708) 926-7201	BEC/BCT Member
Owen Thompson	Remedial Project Manager, USEPA	(312) 886-4843	USEPA Representative/BCT Member
PROJECT TEAM MEMBERS			
Victor Bonilla	Environmental Specialist	(406) 752-4701	FORSCOM Headquarters
Kurt Brownell	Fort McCoy Environmental Specialist	(608) 388-2160	Program Manager
Dell Creek	Fort McCoy Staff Archaeologist	(608) 388-2160	Program Manager
Ron Daughy	RCRA Issues, IEPA	(217) 782-6760	RCRA Issues
Paul Day	Project Geologist, Fort Sheridan	(708) 926-4805	Project Geologist
Bob Fileceia	Environmental Engineer	(502) 582-6012	USACE, Louisville District
Ron Gierthy	Fort Sheridan	(708) 926-3842	Base Transition Coordinator, Fort Sheridan
Mike Heaton	RCRA Closures, IEPA	(217) 524-3300	RCRA Closures
Susan Herzog-Blumer	Fort McCoy Environmental Specialist	(608) 388-2160	Program Manager
Bill Hopkins	Community Relations Coordinator, Fort Sheridan	(708) 926-4806	Community Relations
Mike Lambert	Real Estate Specialist, USACE Louisville District	(502) 625-7373	Real Estate
Charles Lechner	USAEC Project Officer	(410) 671-1605	USAEC
Chris Kallis	Environmental Protection Specialist, IEPA	(708) 388-7900	Water Specialist, USEPA
Chris Karem	Geologist	(502) 582-6012	USACE, Louisville District
Jackie Neuber	Air Pollution, IEPA	(271) 282-2113	Air pollution quality
LTC Linda Olson	BTC	(703) 693-7556	
Sharon Otto	Geologist, IEPA	(217) 782-6760	Geologist
Jenny Ross	U.S. Navy, Great Lakes Training Center	(708) 688-5999	U.S. Navy Representative
Jim Show	Chemist, IEPA	(217) 285-5166	Chemist/Quality Assurance

TABLE 1-1. CURRENT BCT/PROJECT TEAM MEMBERS**Continued**

Name	Title	Phone	Role/Responsibility
PROJECT TEAM MEMBERS (CONTINUED)			
Nadine Smith	Real Estate Specialist, USACE Louisville District	(502) 625-7374	Real Estate
Ron Steward	Landfill Specialist, IEPA	(217) 524-3300	Landfill Issues
Steve Stokke	Program Manager, Fort McCoy	(608) 388-2160	Program Manager
Connie Sullinger	Risk Assessor, IEPA	(217) 782-6760	Health and Safety
Don Sutton	Air Pollution, IEPA	(271) 282-2113	Air pollution quality
Jerry Sweitzer	Air Pollution, IEPA	(271) 282-2113	Air pollution quality
Michelle Tebrugge	Community Relations Coordinator, IEPA	(217) 782-5562	Community Relations, IEPA
Susan Toutant	Project Manager, Louisville District	(502) 625-2014	Project Manager
Patricia Wells	Field Representative, IEPA	(708) 388-7900	IEPA

Key: BCT = BRAC Cleanup Team
 BRAC = Base Realignment and Closure
 FORSCOM = Forces Command
 IEPA = Illinois Environmental Protection Agency
 RCRA = Resource Conservation and Recovery Act
 USACE = U.S. Army Corps of Engineers
 USAEC = U.S. Army Environmental Center
 USEPA = U.S. Environmental Protection Agency

1.4.1 General Property Description

Fort Sheridan comprises 712 acres in Lake County, Illinois. Fort Sheridan is located on the western shore of Lake Michigan, approximately 25 miles north of Chicago's business district and 20 miles south of the Wisconsin border. Figure 1-1 shows the general location of the installation. Fort Sheridan is surrounded on three sides by the urban-residential communities of Lake Forest (north), Highland Park (south), and Highwood (west). The McCormick Nature Reserve is adjacent to the northern installation boundary. The three communities have a combined population of approximately 55,000. Figure 1-2 shows land use surrounding the installation.

Fort Sheridan originated in response to two historical events: the Great Chicago Fire of October 1871 and widespread civil disturbances caused by labor management strife in the 1880s. Chicago City leaders called for the establishment of a U.S. Army post in the area to provide the security of Federal and nearby troops to assist, if needed, Chicago peace-keeping forces during incidents of civil disturbance. Three members of the Commercial Club of Chicago donated the original 632.5 acres of property on which Fort Sheridan is located. Subsequent acquisitions increased Fort Sheridan's acreage by 114.68 acres, and two excesses, occurring in 1972 and 1982 reduced the Fort's acreage by 34.10 acres. Fort Sheridan currently encompasses 712 acres. A history of land acquisitions is provided in Table 1-2.

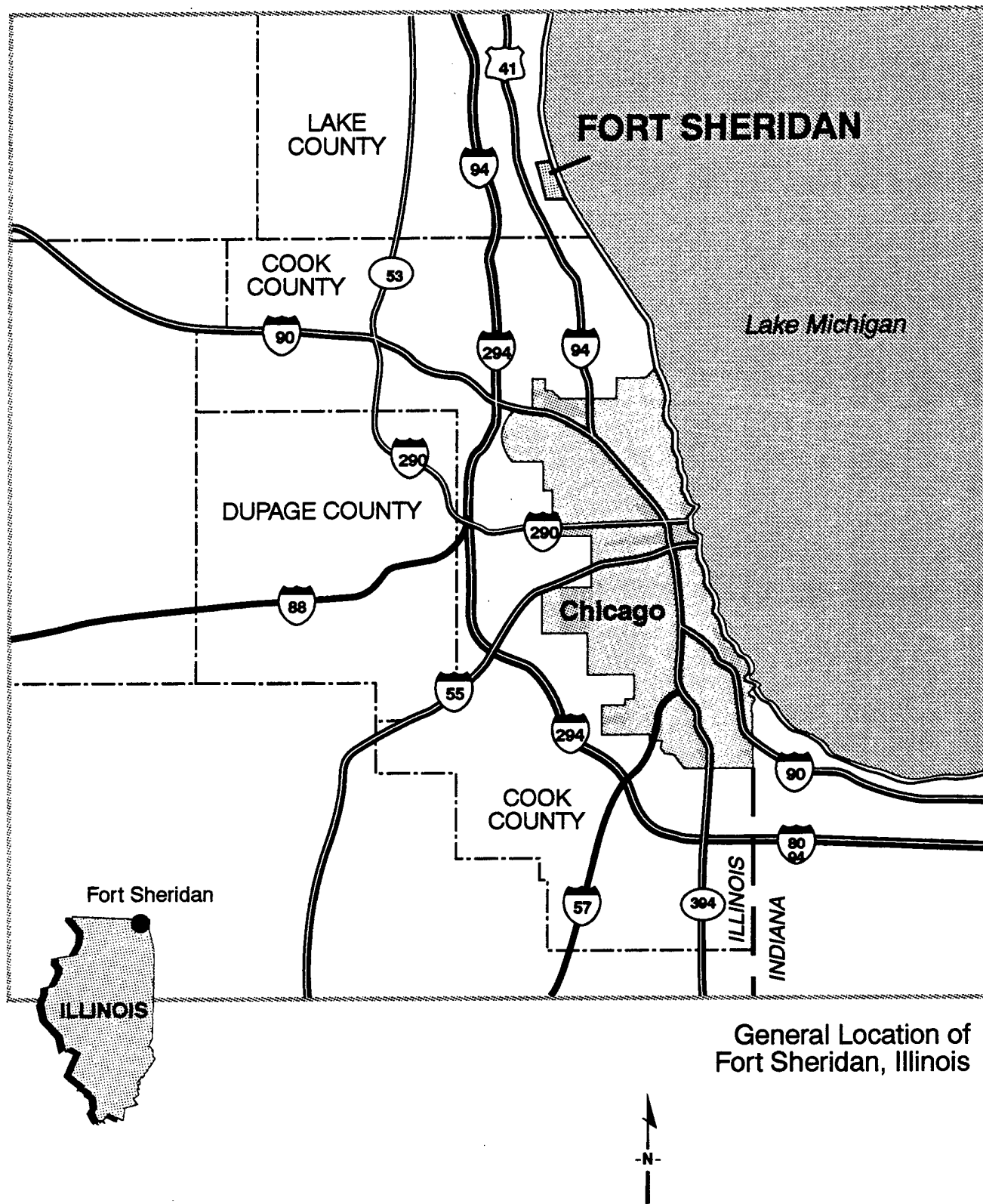
Fort Sheridan has served primarily as an administration activity and vehicle maintenance center, and has not been associated with weapons manufacture, chemical, or heavy industrial activity. Currently, the installation is closed and environmental restoration activities are ongoing. U.S. Army Reserve activities and U.S. Navy housing are located on approximately 290 acres at the southern portion of the installation. This property is known as the Department of Defense (DOD) property and was realigned under BRAC. An additional 14 acres of the U.S. Army Reserve activity are located in the northwest corner of the installation. At this time, the fate of the existing installation cemetery, located in the northern section of the installation on approximately 8 acres, has not been determined.

Prior to closure, Fort Sheridan served as headquarters of the Nike missile anti-ballistic defense systems in the midwest. From 1953 to the early 1970s, Nike Hercules defense systems at Fort Sheridan and throughout the midwest, were maintained, calibrated, and repaired in Building 128. Between 1984 and 1992, Fort Sheridan was headquarters of the Fourth Army and U.S. Army Recruiting Command, and the activities of 74 Army Reserve Centers in northern Illinois, northwest Indiana, and the lower peninsula of Michigan. From 1973 until the installation was closed, the Fort Sheridan primary mission has been to provide administrative and logistical support for the midwest region.

1.4.2 History of Installation

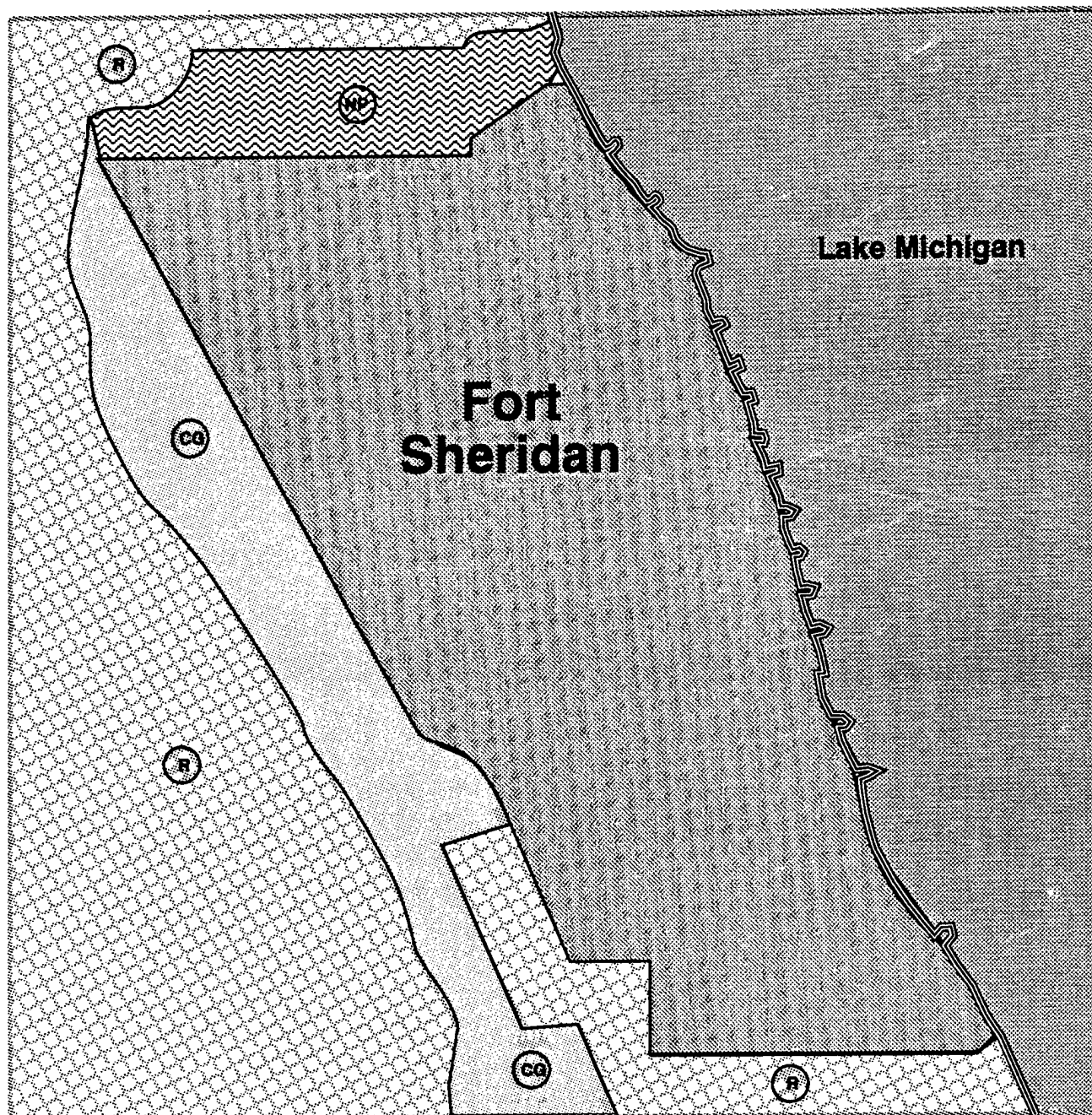
The land on which Fort Sheridan is located was donated to the Federal government in 1887. In 1888, Fort Sheridan was officially named in honor of Lt. General Philip H. Sheridan, Commander in Chief of the U.S. Army. Troops trained at Fort Sheridan participated in the Spanish-American War in 1898 and the 1913 Mexican War along the Texas border. In 1917,

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General Location of
Fort Sheridan, Illinois

Figure 1-1



EXPLANATION

-  Residential
-  Commercial General
-  Natural Preserve
-  Installation Boundary

Existing Land
Use Adjacent
to Fort Sheridan



Figure 1-2

Fort Sheridan, Illinois - November 1995

TABLE 1-2. PROPERTY ACQUISITION SUMMARY

Tract Number on Fort Sheridan Real Estate Map*	Previous Land Owner	Acreage		Acquisition Date
		Fee Land	Easement Land	
102, 103	Adolphus C. & Mary P. Bartlett Charles L. and Francis K. Hutchison John J. and Sarah J. Janes	632.5 acres		6 October 1887
101	Rebecca P. and William A. McNeil	12.14 acres		26 February 1909
See Blocks 18, 19, 20	Unknown	84 acres		1906, 1907, 1908
104	Otto R. Hansen	5.80 acres		Unknown
171	Michael Sweeney	12.74 acres		Unknown

*Fort Sheridan's Real Estate Map is in the Fort Sheridan CERFA Report.

Fort Sheridan became a military training center for men entering the U.S. Army from Illinois, Michigan, and Wisconsin. In the early 1920s, the largest of the 40 World War I hospitals, Lovell General Hospital, was constructed to treat the wounded and convalescents of World War I. In anticipation of World War II, a Recruit Reception Center was established in 1940. Fort Sheridan was also a major center for training antiaircraft artillery units, with three artillery ranges along the Lake Michigan Shoreline. It was also the administrative headquarters for 46 prisoner of war camps in Michigan, Illinois, and Wisconsin during World War II and headquarters of the Fourth Army. Historical activities at Fort Sheridan are summarized in Table 1-3.

1.5 Environmental Setting

This section describes the environmental setting of Fort Sheridan, including topography, geology, hydrogeology, and surface water hydrology.

1.5.1 Topography

The land currently occupied by Fort Sheridan was previously non-developed or farmed. The topography at Fort Sheridan is relatively flat, with a gentle slope of 2 to 4 degrees to the east, terminating at a bluff line that runs along the lakeshore. The top of the bluff ranges from 39 to 69 feet above the Lake Michigan level. Elevations at Fort Sheridan range from approximately 650 feet above sea level at the bluff line to up to 695 feet above sea level at the western boundary of the installation. Six deep ravines oriented west-east traverse the fort, breaking up the topography. These ravines range in elevations from about 580 feet above sea level to about 700 feet above sea level.

1.5.2 Geology

Fort Sheridan is located north of Chicago, Illinois, along the Lake Michigan shoreline on the Highland Park Moraine, the easternmost moraine in southern Lake County, Illinois. It is situated within the Lake Border Morainic System of the Central Lowlands Physiographic Province of the United States. This system consists of five long, narrow, closely spaced moraines that run generally parallel to the Lake Michigan shoreline. These moraines consist of unconsolidated glacial till of Pleistocene age, deposited during the Wisconsin glacialation.

The Pleistocene glacial deposits at Fort Sheridan are approximately 200 feet thick. These deposits, associated with the silty clay phase of the Wadsworth Till Member of the Wedron Formation, are composed of a matrix of silt and clay, while lower units are described as a clayey silt with discontinuous fine sand and silt lenses. Sporadic gravel and boulders may also be present. The report indicates that these units were deposited by streams flowing to (or from) the general direction of Lake Michigan. Because these channel sands are stratigraphically and topographically higher to the west, groundwater within the sands theoretically would flow from west to east, toward Lake Michigan. Channel sands occur at many different elevations indicating numerous channels may be present on the installation. The till is yellow to olive brown in the upper 1 to 15 feet oxidized zone, and gray below the water table. Permeability of the glacial deposits and Fort Sheridan is relatively low because of its high clay content.

TABLE 1-3. HISTORY OF INSTALLATION OPERATIONS

Period	Type of Operation	Weapon System	Hazardous Substance Activities	Map Reference (see Figure 1-3)
1887-1954	Cavalry, Infantry, Artillery Training, Hospital, Anti-Aircraft Training	Small Arms, Artillery	Landfills, POL, paints/thinners, solvents/degreasers, medical wastes, explosive ordnance disposal	1, 2, 3, 4, 5, 7
1950-1979 1954-1966	Nike Missile Defense System, Air Defense-Midwest	Nike Missile	Landfills, POL, paints/thinners, solvents/degreasers, medical wastes, pesticides, explosive ordnance disposal	1, 2, 3, 4, 5, 6, 7
1967-1993	Administrative Support for Army Reserve	None	POL, paints/thinners, solvents/degreasers, medical wastes, pesticides, explosive ordnance disposal	2, 3, 4, 5, 6, 7

Key: POL = Petroleum, Oil, and Lubricants

Three major and two minor surface soil series have been identified on Fort Sheridan. The major series are the Morley Silt Loam, which covers the majority of the land; the Hennepin Loam, which is located in parts of the northwest, northeast, and southeast areas; and beach sand, which is located along the lakeshore. The minor soil series, which occupy small areas along the western boundary of the installation, are the Markham and Beecher Silty Clay Loams.

1.5.3 Hydrogeology

Due to slow recovery rates on monitoring wells, accurate static groundwater water levels could not be obtained from the Draft Final RI/FS Study. Groundwater levels have been obtained from previously installed piezometers. The groundwater table is encountered within the till at depths up to 15 feet below ground surface. Groundwater exists under unconfined conditions, but because of the impermeable nature of till, may be locally perched. Regional groundwater flow is to the east, towards Lake Michigan. The available data indicate, in the vicinity of the ravines, that shallow groundwater flow tends toward the ravine.

Fort Sheridan and neighboring cities and towns obtain drinking water from Lake Michigan. The nearest town that uses groundwater as a municipal water supply is Lincolnshire, approximately 5 miles southwest of Fort Sheridan. Only one well at Fort Sheridan was used for purposes other than groundwater monitoring. This well, installed in the late 1960s, was used to supplement a pond at the northern end of the installation. The pump in this well has been inoperable for many years. The exact depth of this well is unknown.

Unconsolidated deposits are about 200 feet thick on Fort Sheridan. It is primarily glacial till with several thin zones of sand and gravel (occasionally silty), below 100 feet in some areas. Pebbles and boulders found are principally dolomite and shale. The Silurian dolomite is about 300 feet in thickness and forms a shallow bedrock aquifer. This aquifer is separated from the deep Cambrian-Ordovician bedrock by 100 to 200 feet thick layers of non-water-bearing shales of the Maquoketa formation. Some downward leakage from the shallow bedrock aquifer through the Maquoketa shales has been reported.

1.5.4 Surface Water Hydrology

There are no perennial streams on the facility. A small pond is located near the bluff at the northern end of the facility. This pond has a surface area of approximately 1-acre and is 15 feet deep at maximum depth. Constructed in 1967, the pond has no watershed and was once fed by a groundwater well. The facility's storm sewer system discharges into Lake Michigan, either by direct pipeline to culverts or via the ravines. Six deep ravines traverse the surface of the property from west to east, running generally perpendicular to the shoreline. In the past, one of these ravines and branches of the Janes, Bartlett, and Hutchinson Ravines have been used as waste disposal sites identified later as landfills. Surface runoff within Fort Sheridan flows either into the nearest ravine or an inlet to the base storm sewer system. The ravines provide natural drainage pathways leading to Lake Michigan.

1.6 Hazardous Materials and Waste Management Practices

In support of those missions assigned to Fort Sheridan, past activities have involved the handling of a variety of hazardous materials and the generation of hazardous waste such as waste oil, solvents, lubricants, paints, flammable materials, acids, medical wastes, and pesticides. Insufficient data are available to determine the total quantities of these materials used at the installation and generated as hazardous waste. Figure 1-3 indicates the various locations where hazardous material and/or hazardous waste activities reportedly occurred on the surplus property. Table 1-4 lists the locations of past waste generating activities on the surplus property of Fort Sheridan. Currently, there are no hazardous waste generating activities associated with the installation missions on the surplus property.

Past industrial waste disposal practices at Fort Sheridan have involved on-site landfilling, open pit burning, and off-site disposal through private contract. There are three inactive landfills on the surplus property. On-site disposal activities ceased in 1979. There are four additional inactive landfills on the DOD property.

1.7 Off-Post Property/Tenants

Off-Post Property. Fort Sheridan has no off-post properties. In the past, the Fort Sheridan Commander had responsibility for the Joliet Training Area; however, that responsibility was transferred to Fort McCoy in June 1993. Figure 1-4 will identify any off-post property that may be acquired by Fort Sheridan.

Tenants. The only non-U.S. Army tenant organization on the surplus property is the Joint Planning Committee (JPC), which is located in Building 48G.

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EXPLANATION

- ① Designation of Activity Location
- Boundary of Activity Location
- — BRAC Property Boundary

Location of Past
Hazardous
Material/Waste
Activities on
Surplus Property



0 650 1300
FEET

Figure 1-3

TABLE 1-4. PAST HAZARDOUS/BIO-HAZARDOUS WASTE GENERATING ACTIVITIES (UNTIL 1993)

Facility	Unit	Activity	Name of Waste Material	Generation Rate	Disposition
Building 43	General Support Shop	Cleaning, stripping, painting, repair	Methylene chloride, xylene, soap/degreaser, other cleaners, paint	± 100 gal/mo	Licensed by private contractor
Building 51	Motor Pool	Vehicle maintenance	POL, solvents	Unknown	Collected in 55 gallon drums for disposal. Location not determined.
Building 172	Golf Course Storage Building	Pesticide storage	Various fertilizers and pesticides	No information available	Used on golf course
Building 216	Maintenance Shop	Vehicle body work, painting	POL, solvents, paints, thinners, degreasers	Unknown	Unknown
Building 707	Health Clinic	Medical care	Infectious waste, other medical waste	5 kilograms per day	Historically, wastes were shipped to Naval Training Center Great Lakes for incineration.
Heliport/ Building 117	Heliport	Helipad, fixed wing hangar, POL storage	POL	Unknown	Unknown
Building 86	Supply Storage	Hazardous material/waste storage	Waste generated undetermined	No information available	No information available
Building 126	Maintenance Storage	Pesticide storage	Various pesticides	No information available	Used on golf course on-post

Key: POL = Petroleum, Oil, and Lubricant

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**There are currently no off-post properties
associated with Fort Sheridan.
Future changes will be reflected here.**

EXPLANATION

Off-Post Properties

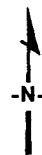


Figure 1-4

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CHAPTER 2

► PROPERTY DISPOSAL AND REUSE PLAN ◀

This chapter discusses the current status of the disposal and reuse planning process at Fort Sheridan and the relationship between the disposal process and environmental programs at the installation. It also identifies property transfer methods being utilized or considered in the disposal process.

2.1 Status of Disposal Planning Process

On 3 May 1988, the Secretary of Defense chartered the Commission on Base Realignment and Closure to recommend military bases within the United States, its commonwealths, territories, and possessions for realignment and closure. The Congress and the President subsequently endorsed the Commission approach with enactment of the Base Closure and Realignment Act, Public Law 100-526 on 24 October 1988. The Commission's report recommending bases to be realigned and closed was issued in December 1988, which included Fort Sheridan among those identified for closure. It was approved by the Secretary of Defense and Congress, as required by the Act. Closure was legislated to begin 1 January 1990. Fort Sheridan officially closed on 28 May 1993. At that time, approximately 100 acres were realigned to the U.S. Army Reserve. In October 1993 approximately 200 acres were realigned to the U.S. Navy. Approximately 400 acres were then declared surplus for which the Army initiated the disposal process.

This process is designed to integrate goals of both the U.S. Army and the communities of Lake Forest, Highwood, and Highland Park, and Lake County in order to provide for the efficient transfer of Fort Sheridan surplus property and minimize the impact of closure on the community. This disposal planning process involves three interrelated activities: the NEPA process, development of a disposal plan, and development of a community reuse plan. These disposal planning activities are currently ongoing on the installation and are outlined below.

2.1.1 *National Environmental Policy Act (NEPA) Documentation*

A closure Environmental Impact Statement (EIS) for Fort Sheridan was completed by the USACE, Louisville District in 1990, with a Record of Decision (ROD) dated 19 February 1991. The EIS addressed alternative site areas for the U.S. Army Reserve Component and conceptual alternative reuses of the installation. An Environmental Assessment (EA) for the disposal and reuse of Fort Sheridan was prepared in September 1993. A Draft Finding of No Significant Impact (FONSI) is currently under review by the U.S. Army and a decision on the FONSI is pending.

2.1.2 *Disposal Plan*

A disposal plan has been developed for Fort Sheridan by the USACE, Louisville District. The plan fully considers the reuse planning goals of the local community and incorporates U.S. Army

BRAC disposal hierarchy requirements established by Public Law 100-526 and the Federal Property and Administration Services Act of 1949. This hierarchy includes the following in the sequence provided: (1) Offer facility to DOD agencies for use; (2) Offer facility to other federal agencies; (3) Offer facility under Section 501 of the Stewart B. McKinney Homeless Assistance Act (excluding property taken by DOD agencies) to sponsoring organizations for the homeless; (4) Offer facility to state and local government agencies; and (5) Offer the property through competitive bid to the private sector. The Base Closure Community Redevelopment and Homeless Assistance Act of 1994, signed into law 25 October 1994, and Title XXIX of the 1995 Defense Authorization Act amended this process as pertains to homeless, state and local screening. These pieces of legislation exempt BRAC properties from screening under McKinney Act provisions. They do, however, require that the needs of the homeless be considered during the reuse planning process and be balanced with the need for further economic redevelopment. To accomplish this, the new process requires that screening for state, local, and homeless assistance needs be done at the local level by the local redevelopment authority.

Fort Sheridan had already conducted McKinney Act Screening prior to the enactment of the Base Closure Community Redevelopment and Homeless Assistance Act of 1994. The JPC had the option to proceed under the McKinney Act or complete the requirements under the new Base Closure Homeless Assistance Act. The JPC decided to continue under the McKinney Act at their 19 December 1994 meeting. Therefore, the property assignments identified during the McKinney Act screening will not be changed.

Prior to the formation of the JPC, the Fort Sheridan Commission was formed in 1989, and with financial assistance from the Office of Economic Adjustment (OEA), developed a Fort Sheridan Reuse Plan and Strategy. This plan was not approved by the DOD. The Fort Sheridan JPC was established in July 1993 and consisted of elected officials from the surrounding communities. The purpose of the JPC was to adopt general guidelines for future land uses, determine annexation boundaries, and resolve procurement of municipal services for the property. The JPC has continued to operate and is currently following President Clinton's Five Point Program for economic recovery of communities where military bases have closed. A future land use plan for the property was developed and approved by the JPC in September 1994. It also received Army approval in November 1994. This reuse plan now determines future actions for this property.

2.1.3 Reuse Plan

In September 1994, the Fort Sheridan JPC approved a Conceptual Land Use Plan, which promises to stimulate redevelopment and environmental cleanup at the closed Army post. The Conceptual Plan fosters two important goals of the committee by conserving important Illinois natural resources and open space, and preserving historically significant structures and landscape. The approval was an important consensus action among the local jurisdictions: Lake County and the cities of Highland Park, Highwood and Lake Forest. The plan affects the future reuse of the northern 400 acres of Fort Sheridan. These 400 acres are known as the surplus property. (Approximately 300 acres of Fort Sheridan have already been transferred to the Department of the Navy and the Army Reserves in a federal to federal transfer.)

Under a concept endorsed by the Illinois Department of Conservation and the U.S. Department of Interior, National Park Service, the northern half of the 400-acre plan area designates 290 acres for open space, including the ravines and shoreline bluffs along the shore of Lake Michigan. The open space area is proposed for the development of a redesigned golf course, walking trails, and bike paths under the ownership and management of the Lake County Forest Preserve District. Conservation and education programs would also be offered to the public.

A National Historic Landmark District, established in 1983, and the more than 94 eligible and contributing structures would be preserved and rehabilitated under the Conceptual Plan for residential and institutional uses. Over 550 single-family, townhouse and condominium units are to be converted from a diverse mix of structures including the old officers houses, barracks buildings, a hospital, and stables. The plan has opportunities for affordable and assisted senior housing.

The plan also depicts properties awarded by the U.S. Department of Health and Human Services last September for transitional family housing and homeless outreach programs. Institutional uses, including a young musicians ensemble program, gymnasium, schools, crime laboratory and other public service facilities, are planned as amenities for Fort Sheridan and the surrounding communities. The surplus property is to be transferred to private ownership through one or more of the property transfer methods discussed in this section. The five reuse parcels within the surplus property are as follows:

1. ***McKinney Act Screening Parcel.*** This parcel is composed of three areas that are surrounded by the Historic District Parcel and the Golf Course Parcel. The parcel consists of 42 buildings, which are to be utilized by three different groups. Buildings 31 and 32, of the McKinney Act Screening Parcel, are located within the Historic District Parcel. These buildings are to be utilized by the Chicago Vietnam Veterans. Buildings 8 through 13, 19, 20, and 92 through 94 are also located within the Historic District and are historic structures. These buildings, in addition to Buildings 220 through 247, and 356, which are located within the Golf Course Parcel, are to be utilized by the Catholic Charity of the Archdiocese of Chicago.
2. ***State and Local Screening Parcel.*** There are two buildings within this parcel. Building 1 is to be utilized by the Midwest Young Artists Association as a symphonic school, and Building 60 is to be used as a gymnasium by Lake Forest College. Both buildings are located within the Historic District Parcel.
3. ***Historic District Parcel.*** The Historic District Parcel at Fort Sheridan consists of 94 contributing structures, 230 acres of land, and the historic landscape elements of broad vistas, beautiful canopy trees, and carefully manicured grounds. The Fort Sheridan Historic District is a National Historic Landmark; as such, this historic district receives a higher degree of protection from federal actions than do other properties listed in, or eligible for listing in the National Register. The historic buildings on this site offer tremendous potential for redevelopment. The buildings range from large single-family homes, to the tower

barracks, to various structures that once served as stables, health care, and cultural facilities.

4. ***Golf Course Parcel.*** The Golf Course Parcel consists of 290 acres, which would include areas designated as open space, including ravines and shoreline bluffs along the shore of Lake Michigan, a redesigned golf course, walking trails, and bike paths, which would be owned and managed by the Lake County Forest Preserve District.
5. ***Cemetery and Former Nike Silos Parcel.*** This parcel is located adjacent to the Army Reserve property in the far northwest corner of the installation. At this time, there has been no interest in the former Nike Silos and it has not been determined who will maintain the Army cemetery.

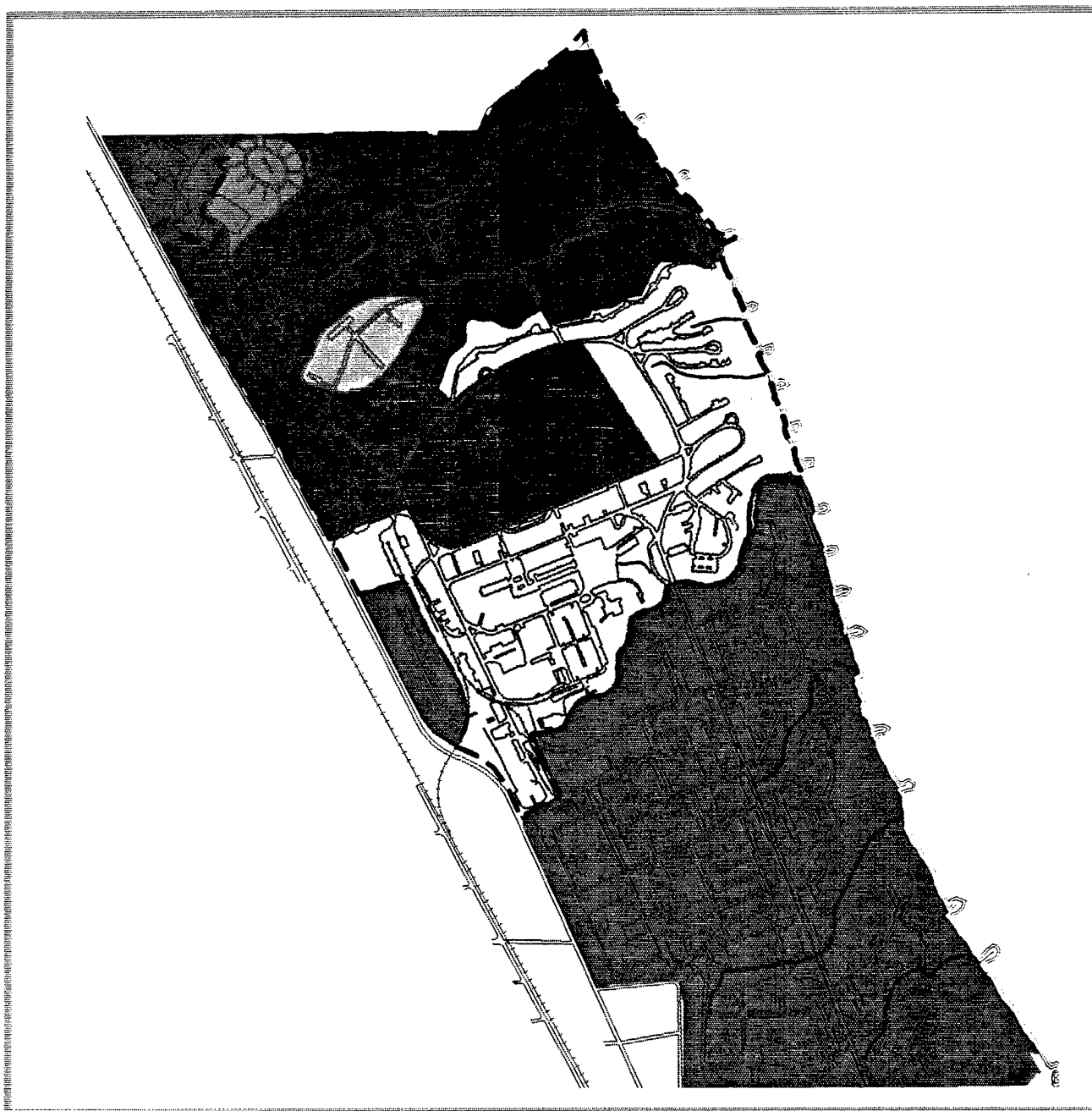
These parcels are shown in Figure 2-1. Milestones for property transfer are listed in Table F-2 in Appendix F.

2.2 Relationship to Environmental Programs

Disposal and reuse activities at Fort Sheridan are intimately linked to environmental investigations, restoration, and compliance activities for two reasons:

- ▶ Federal property transfers to nonfederal parties are governed by CERCLA Section 120(h)(3)(B)(i) and 120(h)(4)(D) (see Appendix F for this text).
- ▶ Residual contamination may be allowed to remain on certain properties after remedial actions have been completed or put into place, thereby restricting the future use of those properties.

CERCLA Section 120(h)(3)(B)(i) requires deeds for federal transfer of previously contaminated property to contain a covenant that all remedial actions necessary to protect human health and the environment have been taken. CERCLA also requires that deeds for property on which a hazardous substance was stored for more than one year, released or disposed, include information on the type quantity, and the time at which the storage or release occurred. CERCLA provided clarification to the phrase "has been taken." This clarification states that all remedial action has been taken if the construction and installation of an approved remedial design has been completed, and the remedy has been demonstrated to the USEPA Administrator to be operating properly and successfully. It further states that the carrying out of long-term pumping and treating, or operation and maintenance, after the remedy has been demonstrated to the Administrator of Region V USEPA to be operating properly and successfully does not preclude the transfer of the property. Thus, any required remedial and/or removal response actions must be selected and implemented for such contaminated properties before transfers to private parties can occur.



EXPLANATION

— — BRAC Property Boundary

 DoD Property

Surplus Property

 Historic District Parcel

 Cemetery/Nike Parcel

 Golf Course Parcel

 McKinney Act Parcel

0 650 1300
FEET



Disposal and
Reuse Parcels
on Surplus Property

Figure 2-1

The requirement for complying with CERCLA 120(h) and the possibility of residual contamination at the installation, and the remediation of the site based on future use are factored into the property disposal and reuse process at Fort Sheridan. Table 2-1 presents summary information on the reuse parcels and provides an approximate timetable for transfer by deed of each parcel at Fort Sheridan. The disposition of property is undetermined at this time. The designation of the reuse parcels are based on the goals of the JPC date.

The requirement for complying with CERCLA 120(h) and the possibility of residual contamination are factored into the property disposal and reuse process at Fort Sheridan. This is accomplished in the following manner:

- ▶ Fort Sheridan has experienced releases of CERCLA hazardous substances and is subsequently subject to CERCLA transfer restrictions as described above.
- ▶ The BRAC IRP at Fort Sheridan is required by law to use an investigative and restoration process consistent with the CERCLA process for National Priorities List (NPL) sites. This process involves an RI/risk assessment based on future land use. The Reuse Plan prepared by the JPC and the Reuse EA identify the future land use scenarios at Fort Sheridan.
- ▶ A feasibility study (FS) for the installation will be prepared to evaluate the effectiveness of remedial actions in mitigating risk based on the proposed reuses of the installation.
- ▶ The U.S. Army has and will continue to solicit input from the community on proposed reuse scenarios and reuse plan implementation through communication with the JPC and participation in the Restoration Advisory Board (RAB) process (see Section 3.5).
- ▶ The presence of residual contamination at Fort Sheridan will be considered in the development of real estate transfer documentation. At this time, there is no indication of groundwater contamination at Fort Sheridan. If groundwater contamination is found during subsequent investigations, remediation of contaminated groundwater at Fort Sheridan could continue beyond the date of transfer. The U.S. Army will not transfer land until remediation is complete, or until the remedy is operating and functioning successfully. Easements will be established to ensure U.S. Army and regulator access for remedial action equipment operation and maintenance and LTM.

The IRP strategy and schedule is designed not only to remediate sites in a manner consistent with reuse goals, but also to streamline and expedite the necessary response actions associated with the Reuse Parcels within the surplus property. Because of the need to delineate between areas suitable and unsuitable for transfer based on historical activities and restoration status, the BCT has developed an environmental condition of property map and a property suitable for transfer map for Fort Sheridan (see text and Figure 3-2 in Chapter 3.4 and Figure 3-3 in Appendix F) using data from the Community Environmental Response Facilitation Act (CERFA)

TABLE 2-1. REUSE PARCEL DATA SUMMARY

Parcel	Acres	Priority	Proposed Reuse	Known CERCLA Sites	Projected Transfer Date	Possible Transfer Mechanisms	Recipient
Historic District Parcel	230	1	Residential/ Commercial	Landfill Nos. 3 and 4, Coal Storage Areas 1, 2, and 3, Vehicle and Equipment Storage 1 and 2, Yard at Building 216, Scott Loop Drain, Building 43 (Furniture Stripping)	Fall 1996- Fall 1998	Competitive sale; negotiated sale	TBD
Golf Course Parcel	290	1	Recreational Open Space	Landfill No. 2, Building 126 (Golf Course Pesticide Storage), Janes Ravine, Airport Drain, Hutchinson Ravine, UXO Area	Fall 1996- Fall 1998	Negotiated sale; no cost public conveyance; competitive sale	TBD
Cemetery and Former Nike Silo Parcel	15		Unknown	Nike Missile Silos 908 and 909	Fall 1996- Fall 1998	Federal transfer, caretaker status, or negotiated sale; no cost public conveyance; competitive sale	TBD
McKinney Act Parcel			Nicholson Housing (Buildings 220-247 and 356) is to be utilized by the Catholic Charity of the Archdiocese of Chicago; Buildings 8-13, 19, 20, 31, 32, and 92-94 are also to be transferred to local homeless providers	None	Fall 1996	Federal transfer under the McKinney Act	CCAC and other local homeless providers
State and Local Screening Parcel			Building 1 is to be utilized by the Midwest Young Artists Association, and Building 60 is to be utilized by Lake Forest College as a gymnasium	None	Fall 1996	No-cost public benefit conveyance	Midwest Young Artists Association and Lake Forest College

Key: TBD = To Be Determined
 CCAC = Catholic Charity of the Archdiocese of Chicago
 UXO = Unexploded Ordnance
 CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act

and the ongoing RI/FS investigations of the installation. The environmental condition of property map allows the visualization of potentially contaminated areas and areas of no suspected contamination, and the relationship of these areas to disposal and reuse parcels. The property suitable for transfer map further defines those properties that have had no hazardous substance releases or that have had releases that have been remediated or have a remedy in place and are therefore available for transfer under CERCLA. The BCT will continue to update and refine the environmental condition of property and property suitable for transfer maps for Fort Sheridan as data become available and as site restorations are completed.

2.3 Property Transfer Methods

The various property transfer methods being utilized or considered in the disposal process at Fort Sheridan are described in this section. These transfer methods were identified using the U.S. Army BRAC disposal protocols established by Public Law 100-526, the Federal Property and Administration Services Act, the Surplus Property Act, the Federal Property Management Regulations, and the 1994 Defense Authorization Act. The status of the proposed transfer methods presented in the Fort Sheridan Reuse Plan are identified in Table 2-1. Transfer methods that are not currently being considered but that could be used in future disposal planning actions at the installation have also been identified.

2.3.1 Federal Transfer of Property

Through a Memorandum of Understanding (MOU) dated 8 August 1991, the Army sold 206.38 acres to the Department of the Navy effective 14 January 1994. Approximately 100 acres were transferred to the U.S. Army Reserves in 1993. As of October 1995, no further federal transfers are anticipated. This legal agreement is identified in Table 2-2.

Homeless providers received awards for 42 buildings. Seventeen buildings are located in the Historic District of the surplus property. The buildings are located in three different areas within surplus property. The buildings are numbered 8-13, 19, 20, 31, 32, 92-94, 220-247, and 356. The Stewart B. McKinney Homeless Assistance Act screening was completed on the surplus property during the summer of 1994.

2.3.2 No-Cost Public Benefit Conveyance

Historically, about 34.2 acres of Fort Sheridan property have been conveyed to various jurisdictions for roadways, pipeline right-of-ways, water treatment facilities, and open space. Under the provisions of different Federal Property Acts, a no-cost public benefit conveyance may be used to transfer selected portions of the surplus property. Lake Forest College has requested Building 60 and the Midwest Young Artists Association have requested Building 1 through Department of Education assignments. In September 1994, the Department of Education approved these assignments. In June 1995, the Army granted these assignments.

TABLE 2-2. EXISTING LEGAL AGREEMENTS/INTERIM LEASES

Title of Interim Lease/Legal Agreement	Buildings or Areas	Date of Agreement	Reuse Parcel
MOU between Department of the Army and Department of the Navy: transferred certain properties at Fort Sheridan, Illinois	206.38 acres and 152 buildings	8 August 1991	DOD Parcel - U.S. Navy
Interim lease with Lake County Forest Reserve to use golf course	Golf course and Buildings 117, 126, and 155	13 May 1994	Surplus Parcel - Golf Course

Key: MOU = Memorandum of Understanding
DOD = Department of Defense

2.3.3 Negotiated Sale/Economic Development Conveyance

A negotiated sale will probably occur at Fort Sheridan for the Historic District, golf course, and cemetery and Former Nike Silo Reuse Parcels. However, given the proposed reuse of the fort, an economic development conveyance is an unlikely option for the JPC to pursue.

2.3.4 Competitive Public Sale

A competitive public sale will be the alternative transfer method for the Golf Course Parcel and the Historic District Parcel if a negotiated sale is not executed.

2.3.5 Widening of Public Highways [Easements]

There is no indication at this time that any property at Fort Sheridan will be transferred for the widening of public highways.

2.3.6 Donated Property

There is no indication at this time that any property at Fort Sheridan will be donated.

2.3.7 Interim Leases

An interim lease has been obtained for the golf course. The Lake County Forest Preserve District signed a lease in May 1994 for the use of the golf course. This lease has an automatic annual renewal for up to 2 years. Interim leases are identified in Table 2-2.

2.3.8 Other Property Transfer Methods

There is no indication at this time that any other property transfer methods will be employed at Fort Sheridan.

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CHAPTER 3

► INSTALLATION-WIDE ENVIRONMENTAL PROGRAM STATUS ◄

This chapter summarizes the current status of the base-wide environmental restoration projects and ongoing compliance activities on the surplus property at Fort Sheridan. It also summarizes the status of the cultural and natural resources program, the community involvement to date, and the environmental condition and suitability for transfer of the installation property.

3.1 Environmental Program Status

Fort McCoy is responsible for base-wide environmental restoration and compliance matters on the surplus property. The Army and Navy are responsible for compliance matters on their property. The Army is the lead agency for the restoration program. Two principal U.S. Army components assist the installation's effort. The USAEC conducted BRAC site investigation activities at installation. The USACE, Louisville District provides support in areas including RD, RA, compliance programs, and natural and cultural resource management. Fort Sheridan is not an NPL site. The lead regulatory oversight agency for the installation is the IEPA.

Environmental restoration programs at Fort Sheridan are currently conducted under the BRAC IRP program in compliance with applicable Department of the Army, DOD, and State and Federal statutes and regulations, including CERCLA. Environmental compliance programs at Fort Sheridan are conducted in compliance with applicable Department of the Army and DOD regulations, and State and Federal regulatory programs including those administered under the Clean Air Act (CAA), Clean Water Act (CWA), Safe Drinking Water Act (SDWA), RCRA Toxic Substances Control Act (TSCA), and SARA.

An environmental restoration program has been in place at Fort Sheridan for approximately 6 years. A summary of some of the major milestones in the IRP and compliance programs at the installation is provided below.

- An Installation Assessment was conducted in 1981 and updated in 1987.
- An Enhanced Preliminary Assessment (EnPA) was prepared in 1989. Thirty-four areas requiring environmental evaluation (AREEs) were identified.
- A closure EIS was prepared for the installation in August 1990.
- A Draft RI/FS report was conducted in June 1992. Thirty-five sites within eight categories were investigated.

- ▶ A CERFA Report was prepared in April 1994.
- ▶ An EA was conducted in 1993.

Table 3-1A lists the sites that are located on the Fort Sheridan surplus property and Table 3-1B lists the sites that are on the Fort Sheridan DOD property. These sites were identified during the EnPA, Installation Assessments, the CERFA Report, and the RI/FS investigations.

Two OUs have been identified based on geographic location, the Surplus OU and the DOD OU, in order to facilitate and expedite transfer and reuse of the surplus property. Additional OUs may be developed in the future based on remedial action requirements. OUs define an installation's remedial strategy. OU types may be based on geographic area, common media (soil, groundwater, surface water, and other), common treatment technology, priorities, or schedules. Properly defined, OUs establish a logical sequence of discussions that address contamination releases in a comprehensive fashion.

3.1.1 Restoration Sites

The restoration effort at Fort Sheridan was initiated in the spring of 1989 with the EnPA. The EnPA, completed in October 1989, identified a number of areas that needed further investigation. These areas were expanded in number and further defined as AREEs in the CERFA Report completed in April 1994. The CERFA Report identified AREEs in the surplus property. AREEs in the DOD Parcel were not identified and described in the CERFA Report. Under CERFA (Public Law 102-426), federal agencies are required to identify real property (U.S. Government property selected for closure by the BRAC Commission under Public Laws 100-526 and 101-510) that can be immediately reused and redeveloped. Satisfying this objective requires the identification of real property where no hazardous substances or petroleum products, regulated by the CERCLA, were stored for 1 year or more, known to have been released, or disposed.

In 1992, a Draft Final RI and Baseline Risk Assessment Report for Fort Sheridan was prepared. The Draft Baseline Risk Assessment is based on the RI data and evaluates the human health and environmental risks associated with the study areas on the installation. With the establishment of two OUs, additional sampling is underway to finalize the RI and Baseline Risk Assessment. An RI and Baseline Risk Assessment will now be prepared for each OU. Following preparation and evaluation of the RI and Baseline Risk Assessment, an FS will be prepared for each OU to identify remedial alternatives for sites requiring remedial action.

The scope of the risk assessment includes an evaluation of both current and future risks, by identifying contaminants, describing contaminant exposure pathways and receptors, estimating exposures, and characterizing risks. As part of the RI and Baseline Risk Assessment, surface water and sediment samples were collected from the six ravines which traverse Fort Sheridan from west to east, as well as from three smaller drain systems. The sampling was conducted to determine what impact, if any, the runoff from the installation had on Lake Michigan. One ravine and branches of several other ravines have historically been used as landfills.

**TABLE 3-1A. PRELIMINARY LOCATION OF THE ENVIRONMENTAL RESTORATION
SITES ON THE SURPLUS PROPERTY**

DSERTS Number	Description	Draft Final Remedial Investigation Report, 1992 Results/Findings				Final Determination
		EnPA	CERFA	RI/FS RI/Risk Assessment	Findings	
02	Landfill 2	x	x	x	Only metal exceeding an ARAR is beryllium. Nineteen VOCs and SVOCs were detected above the CRL; twelve compounds are either present at concentrations below regulated levels or are not regulated for soils and seven exceed LUST cleanup objectives for soil and five exceeded regulatory levels. Explosive RDX was detected in groundwater samples. Twenty-nine inorganic analytes were found to be in excess of the TL. Of these, two exceed the Illinois Groundwater Quality Standard (IGQS) Class II criteria. Fill material is general refuse, cinders, coal, and UXO.	UXO clearance needed.
03 / 04	Landfills No. 3 and 4	x	x	x	Soils: Metals found none above ARARs. Thirteen organic compounds above the CRL were detected in soil samples. Groundwater: Two analytes in concentrations above IGQS regulatory levels are likely the result of the monitoring wells being installed in clay soils. Fill material is debris, rubble, cinders, elevated levels of thallium and thirteen targeted organic compounds were above CRLs.	TBD
29	Coal Storage Area No. 1	x	x	x	SVOCs and eleven metals which are above the established installation tolerance limits; only four of the metals have RCRA action levels; all four were below these levels.	TBD. This site is being studied under the Surplus RI. The site is located in both the Surplus and DoD Parcels.
29	Coal Storage Area No. 2	x	x	x	No SVOCs found, nine metals above established installation tolerance limits, three of the metals have RCRA action levels; all were below these levels.	TBD
29	Coal Storage Area No. 3	x	x	x	SVOCs found, twelve metals above installation tolerance limits; three have RCRA action levels, all were below.	TBD
30	Building 115 UST*	x	x	x	VOCs found; total BTEX concentration is below threshold cleanup level for LUST sites.	TBD
12	Vehicle and Equipment Storage Area 1	x	x	x	Toluene/xylenes present.	TBD
12	Vehicle and Equipment Storage Area 2	x	x	x	Toluene, chlorobenzene, 1,4-dichlorobenzene, and 1,2,4-trichlorobenzene present.	TBD
31	Yard Area at Building 126, Golf Course	x	x	x	Low levels of two pesticides were identified in soils; eleven metals were above installation tolerance levels; five metals have RCRA action levels; all were below; no SVOCs found; water samples did not contain TCL VOCs or SVOCs about action levels.	TBD
	Yard Area at Building 216	x	x	x	Low levels of anomalous metals are present in upper 7 feet of soil south of the building.	TBD

TABLE 3-1A. PRELIMINARY LOCATION OF THE ENVIRONMENTAL RESTORATION SITES ON THE SURPLUS PROPERTY

DSERTS Number	Description	Draft Final Remedial Investigation Report, 1992 Results/Findings				Final Determination
		EnPA	CERFA	RI/FS RI/Risk Assessment	Findings	
13	Building 43 (General Support Shop)	×	×	×	Soil and water samples contained high VOCs and SVOCs; including methylene chloride and xylenes. Three inorganics in sediment sample exceed TL but are below established RCRA action levels.	TBD - because of the buildings location to Bartlett Ravine, it has been included in the risk assessment for the ravine.
17	Former Nike Missile Site: Silo 908	×	×	×	908: No SVOCs were detected from the wipe samples obtained from the wells; no asbestos identified; antimony and arsenic are the only metals found in a sediment sample inside the silo that were above RCRA action levels.	TBD
17	Former Nike Missile Site: Silo 909	×	×	×	No SVOCs detected in four wipe samples and no asbestos identified.	TBD
	Janes Ravine Drainage System (Surface H ₂ O and sediment samples were collected at this site)			×	Sediment analysis indicated six inorganics above the TL. Of these, beryllium exceeded the RCRA action limit. One sediment sample contained naphthalene and total carcinogenic PNAs that exceed the cleanup objective. The pesticides p,p'DDE and p,p'DDT were found in excess of cleanup standards in sediment. Surface water samples had TDS and chloride in excess of standards.	TBD
	Airport Drain (Surface H ₂ O and sediment samples were collected at this site)			×	All analytes, organics and inorganics, were detected in soils were below regulatory action levels. In surface water samples, TDS, chloride and sulfate levels were in excess of the standards.	TBD
	Hutchinson Ravine Drainage System (Surface H ₂ O and sediment samples were collected at this site)			×	All inorganics were below their RCRA action levels. Total carcinogenic PNAs exceeded cleanup levels in sediment at the sampling location where surface water from the community of Highwood enters the Ravine System. Surface water was identified as being high for TDS and chloride.	TBD
	Scott Loop Drain (Surface H ₂ O and sediment samples were collected at this site)			×	All inorganics were below RCRA action levels. Total carcinogenic PNAs exceed the cleanup standard. Surface water sample exceeded TDS and chloride level standards.	TBD

Key:

TBD	=	To Be Determined
RCRA	=	Resource Conservation and Recovery Act
BTEX	=	Benzene, Toluene, Ethylbenzene, and Xylene
TDS	=	Total Dissolved Solids
EnPA	=	Enhanced Preliminary Assessment
CERFA	=	Community Environmental Response Facilitation Act
DSERTS	=	Defense Services Environmental Restoration Tracking System
RI/FS	=	Remedial Investigation/Feasibility Study
SVOC	=	Semivolatile Organic Compound
VOC	=	Volatile Organic Compound
PNA	=	Polycyclic Aromatic Hydrocarbon

*Non-CERCLA site.

TABLE 3-1B. PRELIMINARY LOCATION OF THE ENVIRONMENTAL RESTORATION SITES ON THE DOD PARCEL

DSERTS Number	Description	Environmental Investigation Report Results/Findings				Final Determination
		EnPA	CERFA	RI/FS RI/Risk Assessment	Findings	
1	Landfill No. 1	×		×	Of the 13 metals present over TL, only beryllium exceeds any corrective action levels in soils. Two organics are present above Illinois regulated levels for soil under the LUST program. Nine inorganics were found in groundwater in excess of the TL. Two organic compounds were detected in groundwater at the site, both were below ARARs.	TBD
5	Landfill No. 5	×		×	Fifteen organic compounds were detected in soil; nine have established or proposed regulatory levels, only one is above regulatory level. Only two analytes in groundwater exceeded regulatory levels.	TBD
6	Landfill No. 6	×		×	Sulfate only analyte above regulatory levels. Vinyl chloride was the only organic analyte found in groundwater above regulatory standards	TBD
7	Landfill No. 7	×		×	No metals or organic compounds detected above regulatory levels in soils. Only sulfate and cadmium exceed their regulatory levels for groundwater	TBD
29	Coal Storage Area 4	×		×	SVOCs found; eight metals were found to be above installation tolerance limits; two have RCRA action levels, both were below these action levels.	TBD
30	Building 125 Gas Station UST*	×		×	Total BTEX in soils are below action levels established for LUST sites. Of SVOCs only one exceeded the threshold concentration. Two caused total carcinogenic for PNAs above the acceptable level. No metals exceeded ARARs.	TBD
09	Building 208 Waste Oil UST*	×		×	Total BTEX exceeds the action level for LUST sites. Naphthalene was detected above the cleanup standard. Total BTEX and benzene in groundwater exceeded cleanup standards. Antimony only metal exceeding ARARs.	TBD
12	Vehicle and Equipment Storage Area 5	×		×	Toluene found; as was acetone and chloroform which was not expected and are of questionable origin.	TBD
12	Vehicle and Equipment Storage Area 6	×		×	SVOCs found in the soils may be from fill material.	TBD
12	Vehicle and Equipment Storage Area 7	×		×	Toluene and xylene both detected in soils.	TBD
12	Vehicle and Equipment Storage Area 9	×		×	SVOCs detected at site, probably from fill material.	TBD
12	Buildings 137, 137X, and 139	×		×	Metals detected in soils. VOCs and SVOCs also detected.	TBD
12	Yard Area at Building 122	×		×	Metals, pesticides, and organic compounds detected. Five inorganic compounds were detected in groundwater samples that exceeded TLs.	TBD

**TABLE 3-1B. PRELIMINARY LOCATION OF THE ENVIRONMENTAL RESTORATION
SITES ON THE DOD PARCEL**

Continued

DSERTS Number	Description	Environmental Investigation Report Results/Findings				Final Determination
		EnPA	CERFA	RI/FS RI/Risk Assessment	Findings	
31	Yard Area at Building 128	x		x	Toluene found is below BTEX cleanup value; no SVOCs found.	TBD
31	Yard Area at Building 368	x		x	Low levels of VOCs, SVOCs, and anomalous metals are present in the soil of various depths. Water present at the site contained low levels of diethyl phthalate.	TBD
19	Yard Area at Building 377 (Pesticide Storage)	x		x	Beryllium only metal exceeding its TL; no pesticides present.	TBD
31	Yard Area at Building 902 (Reserve Unit Vehicle Maintenance)	x		x	Low levels of VOCs and SVOCs, and metals exist north and east of the building. Anomalous levels of magnesium in the groundwater.	TBD
32	Building 70 (Warehouse)	x			Samples of this building's wooden floor were taken, concentrations of contaminants were compared to action level for soils. Low possibility of contaminants releasing since they are absorbed in the wood. Naphthalene only analyte which exceeds IEPA LUST cleanup objectives.	TBD
32	Building 122 (Transformer Storage)	x		x	Wipe samples of concrete floor showed no targeted compounds above detection limits. Samples analyzed for SVOCs, herbicides, and pesticide/PCBs.	TBD
32	Building 137 (Vehicle Repair and Maintenance)	x		x	Two wipe samples were analyzed for SVOCs and metals. Two metals found above drinking water standard. Cresols found below USEPA ambient concentration. Concrete samples showed copper, lead, and zinc in concentrations which exceeded TL.	TBD
32	Building 139 (Heavy Equipment Maintenance Shop)	x		x	Two wipe samples from the concrete floor were analyzed for SVOCs and metals. Iron is only metal, which exceeds drinking water standards.	TBD
32	Building 142 (Transformer released in building)	x		x	Wipe samples of floor near the location of the former transformers were analyzed for PCBs. None detected.	TBD
32	Building 361 (Photographic Film Developing Building)	x		x	No VOCs or SVOCs were identified; all metals were below drinking water standards. A sediment sample obtained from a manhole outside and north of building had metal concentrations above the TL. PNAs carcinogenic level is above the soil cleanup objectives.	TBD
17	Missile Fueling Point	x		x	Four organic compounds detected were below RCRA action levels; one did not have RCRA action level. Only beryllium exceeds the USEPA proposed RCRA corrective action level for metals.	TBD
17	Nike Missile Silo, 910	x		x	Four wipe samples taken from the wall of the silo showed no SVOCs. Sediment sampling revealed two inorganics which exceed USEPA proposed RCRA corrective action levels.	TBD

**TABLE 3-1B. PRELIMINARY LOCATION OF THE ENVIRONMENTAL RESTORATION
SITES ON THE DOD PARCEL**

Continued

DSERTS Number	Description	Environmental Investigation Report Results/Findings				Final Determination
		EnPA	CERFA	RI/FS RI/Risk Assessment	Findings	
	Bartlett Ravine (Surface water and sediment samples were collected at this site and the following sites in this table)	x		x	Sediment sample taken at discharge point had SVOCs which exceeded their cleanup objective. Surface water sample exceeded standards for TDS and chloride.	TBD
	Officer Family Housing Drain			x	Sediment sample had detections of inorganics all below their RCRA action levels. VOCs and SVOCs were detected all were below RCRA action levels or below cleanup values for LUST sites. Surface water sample had high TDS and chloride.	TBD
	Van Horn Ravine			x	Analysis of the sediment samples indicated ten organics which exceeded TLs. Of these only one exceeded USEPA proposed RCRA corrective action levels. Total carcinogenic PNAs exceed the LUST cleanup standards. In the surface water sample only chlorinated exceed limits.	TBD
	Landfill No. 7 Black Pipe			x	Inorganics in sediment were above installation tolerance levels, but below RCRA action limits. Samples of surface water identified only TDS and chloride to be in excess of standards.	TBD
7	Landfill No. 7			x	Beryllium in sediment was the only exceedance of RCRA action levels. VOCs and SVOCs were detected, but all were below cleanup objectives.	TBD
7	Wells Ravine			x	Beryllium exceeded its RCRA action level in sediment. Other metals exceeded their tolerance levels. Phenanthrene and pyrene exceeded LUST cleanup levels. Only chloride, arsenic, and sodium were in excess of established water sampling tolerance limits.	TBD
	Shenck Ravine			x	Inorganics detected in sediment, none above TL or action levels. In surface water sample, only TDS and chloride above Lake Michigan discharge standards.	TBD

Key: TBD = To Be Determined
 TDS = Total Dissolved Solids
 RCRA = Resource Conservation and Recovery Act
 SVOC = Semi-volatile Organic Compounds
 LUST = Leaking Underground Storage Tank
 VOC = Volatile Organic Compound
 TL = Tolerance Limit

Note: Tolerance limits (TLs) were determined for metals in soils and groundwater using background data. TL are to determine anomalous metal values and the modified method that was used to establish these TL was suggested by the Michigan Department of Natural Resources and is in compliance with USEPA guidelines. USEPA proposed RCRA corrective action levels are contaminant levels which require remedial action, such as soil removal. These action levels are conversial and have not been "approved".

TABLE 3-2A. SURPLUS PROPERTY ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY

Site Name	DSERTS No.	Description	Hazardous Substance(s) of Concern	Date of Operation	Status	Risk to Human Health and the Environment	Regulatory Mechanism	NFRAP
Landfill 2	02	Landfill	Domestic/industrial waste, UXO	1950's	RI/Risk Assessment	TBD	CERCLA	TBD
Landfills 3 and 4	03/04	Landfill	Domestic/industrial waste	Mid 1940s-late 1960s	RI/Risk Assessment	TBD	CERCLA	TBD
Coal Storage Area No. 1	29	Surface Coal Storage	Coal leachate and residues	Unknown	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Coal Storage Area No. 2	29	Surface Coal Storage	Coal leachate and residues	Not Available	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Coal Storage Area No. 3	29	Surface Coal Storage	Coal leachate and residues	Not Available	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Vehicle and Equipment Storage Area 1	12	Vehicle and Equipment Storage	Waste Oil Fuels	Unknown to 1993	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Vehicle and Equipment Storage Area 2	12	Vehicle and Equipment Storage	Waste Oil Fuels	Unknown to 1993	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Yard Area at Building 126, Golf Course	31	Golf Course Office/Maintenance	Pesticides/fertilizer	1959 to 1993	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Yard Area at Building 216	33	Maintenance Shop	POL, solvents, degreasers, paint thinners,	1940's to 1993	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Building 43 (General Support Shop)	13	Support Shop	Methylene chloride, solvents, degreaser, paint	1950's to 1993	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Former Nike Missile Silos, 908 and 909	17	Nike Missile Silos	Unknown	1965-1974	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Janes Ravine Drainage System	None	Ravine	Non-specific	N/A	SI/RI/Risk Assessment	TBD	CWA	TBD

TABLE 3-2A. SURPLUS PROPERTY ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY

Continued

Site Name	DSERTS No.	Description	Hazardous Substance(s) of Concern	Date of Operation	Status	Risk to Human Health and the Environment	Regulatory Mechanism	NFRAP
Airport Drain	None	Storm Drain	Non-specific	N/A	SI/RI/Risk Assessment	TBD	CWA	TBD
Hutchinson Ravine Drainage System	None	Ravine and Drainage	Non-specific	N/A	SI/RI/Risk Assessment	TBD	CWA	TBD
Scott Loop Drain	None	Storm Drain	Non-specific	N/A	RI/Risk Assessment	TBD	CWA	TBD
Building 911, Gas Mask Tightness Testing Building	37	Building Used to Test Gas Mask Tightness	Unknown	1960's to 1990's	SI	TBD	CERCLA	TBD
Firing Ranges	40	Firing Range	Metals	< 1960's	SI	TBD	CERCLA	TBD
Skeet Range	42	Skeet Range	Metals	Not Available	SI	TBD	CERCLA	TBD
Stormwater Sewers	None	Stormwater Sewers	Stormwater/Drain Runoff	N/A		TBD	CWA	TBD
Lovell Army Hospital, Former Buildings 1 and 2	26	Medical Facilities	Unknown	1917-Mid-1960s	SI	TBD	CERCLA	TBD
Building 40	35	Heating Plant	Hazardous substances	Heating Plant from 1967 to Present	SI	TBD	CERCLA	TBD
Building 42	39	Supply and Hazardous Material Storage	Hazardous material storage	Hazardous material storage since 1950	RI	TBD	CERCLA	TBD
Building 51	36	Motor Pool	POL, solvents	1930's to 1993		TBD	CERCLA	TBD
Building 77	38	Former Black Smith Shop and Battery Storage	Lead-acid batteries	1970 to 1993	SI	TBD	CERCLA	TBD
Building 86	38	Warehouse	Waste POLs, solvents, acids, corrosives	1990's	SI	TBD	CERCLA	TBD

TABLE 3-2A. SURPLUS PROPERTY ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY

Continued

Site Name	DSERTS No.	Description	Hazardous Substance(s) of Concern	Date of Operation	Status	Risk to Human Health and the Environment	Regulatory Mechanism	NFRAP
Building 117	16	Maintenance Hangar and Storage	POL, undetermined	1953 to 1960's		TBD	CERCLA	TBD
Building 135	35	Supply Storage	Hazardous material storage	1940's to Present		TBD	CERCLA	TBD
Building 154	46	Pool Chemical Storage	Chlorine and Muriatic Acid	1964 to 1980's from Pool Chemical Storage	SI	TBD	CERCLA	TBD
Building 172	19	Golf Course Storage	Pesticides, fertilizers	1940's to 1993		TBD	CERCLA	TBD
Building 173	35	Ordnance Magazine and Hazardous Material Storage	Explosives and Unknown Hazardous Materials	1941 to 1993	SI	TBD	CERCLA	TBD
Building 707	45	Dental Clinic	Mercury	1967 to Present	SI	TBD	CERCLA	TBD
Disturbed Area	None	Disturbed Area in 1952 Aerial Photo	Unknown	Approximately 1952 to 1953	SI	TBD	CERCLA	TBD
Ammunition Storage Magazine (Building 171)	22	Ammunition Storage since 1941	Explosives	1941 to Present	SI	TBD	CERCLA	TBD
Reported Gas Mask Testing Tent Area	None	Gas Mask Testing Tent	Unknown	1939	SI	TBD	CERCLA	TBD
McArthur Loop Drain	None	Storm Drain	Non-specific Hazardous Substances	N/A	SI	TBD	CWA	TBD

TABLE 3-2A. SURPLUS PROPERTY ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY

Continued

Site Name	DSERTS No.	Description	Hazardous Substance(s) of Concern	Date of Operation	Status	Risk to Human Health and the Environment	Regulatory Mechanism	NFRAP
Water Treatment Plant (Buildings 29 and 29A)	25	Water Treatment Plant	PCB's	1890's to 1994	SI	TBD	CERCLA	TBD
Former Nike Site Control Area (Building 912)	34	Nike Site Control Area	Concern is a septic tank system	1954 to 1978	SI	TBD	CERCLA	TBD

Key: TBD = To Be Determined
 N/A = Not Applicable
 SI = Site Investigation
 RI = Remedial Investigation
 DSERTS = Defense Services Environmental Restoration Tracking System
 NFRAP = No Further Response Action Planned
 CWA = Clean Water Act
 CERCLA = Comprehensive Environmental Restoration, Compensation, and Liability Act
 POL = Petroleum, Oil, and Lubricant
 UXO = Unexploded Ordnance

TABLE 3-2B. DOD PARCEL ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY

Site Name	DSERTS No.	Description	Hazardous Substance(s) of Concern	Date of Operation	Status	Risk to Human Health and the Environment (Future Residential)	Regulatory Mechanism	NFRAP
Landfill No. 1	1	Landfill	Household Wastes	1940s to Early 1950s	RI/Risk Assessment	TBD	CERCLA	TBD
Landfill No. 5	5	Landfill	Household Wastes	1960s	RI/Risk Assessment	TBD	CERCLA	TBD
Landfill No. 6	6	Landfill	Household Wastes and Demolition Wastes	1960s	RI/Risk Assessment	TBD	CERCLA	TBD
Landfill No. 7	7	Landfill		1940's to 1960's	RI/Risk Assessment	TBD	CERCLA	TBD
Coal Storage Area 4	29	Surface Coal Storage	Coal Leachate and Residues	Not Available	SI/RI/Risk Assessment	TBD	CERCLA CWA	TBD
Vehicle and Equipment Storage Area 5	12	Vehicle & Equipment Storage	Waste Oils and Fuels	Unknown to Present	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Vehicle and Equipment Storage Area 6	12	Vehicle & Equipment Storage	Waste Oils and Fuels	Unknown to Present	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Vehicle and Equipment Storage Area 7	12	Vehicle & Equipment Storage	Waste Oils and Fuels	Unknown to Present	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Vehicle and Equipment Storage Area 9	12	Vehicle & Equipment Storage	Waste Oils and Fuels	Unknown to Present	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Yard Area at Building 122	12	Storage of Chemicals and Out-of-Service Transformers	Chemicals and PCB Contaminated Oil	Not Available	SI/RI/Risk Assessment	TBD	CERCLA	TBD

TABLE 3-2B. DOD PARCEL ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY

Continued

Site Name	DSERTS No.	Description	Hazardous Substance(s) of Concern	Date of Operation	Status	Risk to Human Health and the Environment (Future Residential)	Regulatory Mechanism	NFRAP
Yard Area at Building 128	31	Storage Area	Waste Oil, Solvents, and Antifreeze	Not Available	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Yard at Building 137	12	Vehicle Repair and Maintenance	Fuels, Solvents, Oils	Not Available	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Yard at Building 139	12	Heavy Equipment Maintenance Shop	Fuels, Solvents, Oils	Not Available	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Yard Area at Building 368	31	Storage Area	Fuels and Oils	Not Available	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Yard Area at Building 377	19	Pesticide Storage and Mixing	Pesticide Residues	Not Available	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Yard Area at Building 902	31	Reserve Unit Vehicle Maintenance	Fuels, Solvents, Oils	Not Available	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Building 70	32	Warehouse Storage	Hazardous Substances	Not Available	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Building 122	32	Hazardous Waste and Hazardous Material	Hazardous Waste and Hazardous Material	Not Available	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Building 142	32	Transformer Released in Building	PCB Contaminated Oil	Not Available	SI/RI/Risk Assessment	TBD	CERCLA	TBD
Building 361	32	Photographic Film Developing Building	Photographic Film Developing Solutions	Not Available	SI/RI/Risk Assessment	TBD	CERCLA	TBD

TABLE 3-2B. DOD PARCEL ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY

Continued

Site Name	DSERTS No.	Description	Hazardous Substance(s) of Concern	Date of Operation	Status	Risk to Human Health and the Environment (Future Residential)	Regulatory Mechanism	NFRAP
Former Nike Missile Fueling Point	17	Fueling Point	Solvents	1965 to 1974	SI/RJ/Risk Assessment	TBD	CERCLA	TBD
Former Nike Missile Silo, 910	17	Nike Missile Silo	Unknown	1965 to 1974	SI/RJ/Risk Assessment	TBD	CERCLA	TBD
Bartlett Ravine	None	Ravine	Non-specific	N/A	SI/RJ/Risk Assessment	TBD	CWA	TBD
Officer Family Housing Drain	None	Storm Drain	Non-specific	N/A	SI/RJ/Risk Assessment	TBD	CWA	TBD
Van Horn Ravine	None	Ravine	Non-specific	N/A	SI/RJ/Risk Assessment	TBD	CWA	TBD
Landfill No. 7 Black Pipe	07	Vent Pipe for Landfill	Landfill leachate	1981 to present	RJ/Risk Assessment	TBD	CERCLA CWA	TBD
Wells Ravine	None	Ravine	Non-specific	N/A	SI/RJ/Risk Assessment	TBD	CERCLA CWA	TBD
Shenck Ravine	None	Ravine	Non-specific	N/A	SI/RJ/Risk Assessment	TBD	CERCLA	TBD
Wastewater Treatment Plant Sludge Drying Beds	24	Sludge Drying Beds	Treated Sanitary Sludge	1918 to 1978	SI	TBD	CERCLA	TBD
Free Standing Water Tower	None	Water Storage Tower	Lead-based Paint Chips/Residue	1941 to Present	SI	TBD	CERCLA	TBD
Storm Sewer	None	Storm Sewer		N/A		TBD	CWA	TBD
Vehicle and Equipment Storage Area 4	12	Vehicle and Equipment Storage	Waste oil and fuels	Not Available	SI	TBD	CERCLA	TBD

TABLE 3-2B. DOD PARCEL ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY

Continued

Site Name	DSERTS No.	Description	Hazardous Substance(s) of Concern	Date of Operation	Status	Risk to Human Health and the Environment (Future Residential)	Regulatory Mechanism	NFRAP
Building 300	None	Former Nuclear Weapons Maintenance Shop	Uranium	Not Available	SI	TBD	CERCLA	TBD
Former Incinerator	11	Incinerator	Metals	Prior to 1960's	SI	TBD	CERCLA	TBD
Fill Area 8	8	Disturbed Area on 1952 Aerial Photo	Unknown	Approximately 1952 to 1961	SI	TBD	CERCLA	TBD
Former Firing Point	None	Former Anti-aircraft Training	Heavy Metals Explosives	Not Available	SI	TBD	CERCLA	TBD
Former Pistol Range	41	Former Pistol Training Area	Metals	Prior to 1967	SI	TBD	CERCLA	TBD
Former Machine Gun Range	41	Former Machine Gun Training Area	Metals	Prior to 1967	SI	TBD	CERCLA	TBD
Former Small Arms Range	40	Former Small Arms Range	Metals	Prior to 1967	SI	TBD	CERCLA	TBD

Key: TBD = To Be Determined
N/A = Not Applicable
SI = Site Investigation
RI = Remedial Investigation
DSERTS = Defense Services Environmental Restoration Tracking System
NFRAP = No Further Response Action Planned
CWA = Clean Water Act
CERCLA = Comprehensive Environmental Restoration, Compensation, and Liability Act
POL = Petroleum, Oil, and Lubricant
UXO = Unexploded Ordnance
NC = Not Calculated

An Ordnance Survey was completed in 1994 for a 50-acre parcel in the northeast corner of the fort. This area was identified from historical records as having been an ordnance disposal area. The survey was completed on 10 percent of the 50-acre parcel to verify the presence or absence of ordnance in the area. Fourteen items, mostly unexploded live mortars, were discovered during the survey. A survey and clearance of unexploded ordnance (UXO) to a determined depth (consistent with proposed reuse) is scheduled for fall 1995.

Table 3-2A identifies all sites on the surplus property and Table 3-2B identifies all sites on the DOD property being investigated as part of the environmental restoration program at Fort Sheridan. The DOD Restoration Management Information System (RMIS) site numbers and Defense Services Environmental Restoration Tracking System (DSERTS) numbers are provided in these tables where the data are available. DOD developed the RMIS to manage and track the environmental remediation process for the DOD components. The DSERTS is a personal computer program used for collecting and reporting information on the status of the installation restoration and BRAC environmental cleanup programs. DSERTS provides an automated method for tracking Defense Environmental Restoration Program (DERP) installation and site data. DSERTS enables the user to establish and maintain a data base of information pertaining to environmental remediation and provides reports that detail this information at the DOD component level. The information collected with DSERTS is transferred to the DOD RMIS and the RMIS is used by DOD to provide program status for the Defense Environmental Cleanup Program Annual Report to Congress.

Figure 3-1 depicts the sites and OUs currently under investigation.

Four environmental restoration early action activities have been implemented by the BCT as of October 1995. Table 3-3 summarizes each of these early actions.

3.1.2 Installation-wide Source Discovery and Assessment Status

A number of installation-wide assessments have been conducted to identify the presence of contamination and contamination sources at Fort Sheridan. These include an Installation Assessment, which was completed in May 1982 and updated in August 1987, the EnPA in 1989, and the Draft Final RI and Baseline Risk Assessment prepared in 1992. The most recent installation-wide investigation was the CERFA Investigation, which was completed in April 1994. AREEs have been identified through these installation-wide investigations. If any new AREEs are identified, they will be addressed according to the strategy described in Chapter 4 of this document.

Several other installation-wide surveys related to environmental compliance programs have been conducted at Fort Sheridan. An Industrial Waste Treatment Survey Report was completed in August 1989, a Report of Findings of PCB Transformer Sampling Conducted at Fort Sheridan was completed in June 1992, an Asbestos Survey was completed in August 1991, and an Ordnance Survey (50-Acre Parcel) was completed in February 1994. These surveys are described in detail in Section 3.2. There has also been a Sanitary Sewer Evaluation and two Inflow/Infiltration Studies conducted on Fort Sheridan's sewer systems.



EXPLANATION

--- Installation Boundary

□ Surplus OU

■ DoD OU

Sites and OUs
Currently Under
Investigation

0 650 1300
FEET

Figure 3-1

TABLE 3-3. ENVIRONMENTAL RESTORATION EARLY ACTION STATUS

Site Name	Action	Purpose	Status
Building 43	Removal of hazardous wastes from the storm sewers	Removal of contamination source	In progress
Building 368	Removal of hazardous wastes from the storm sewers	Removal of contamination source	In progress
Landfills 6 and 7	Conducting interim remedial action to expedite the closure process and reduce the potential risks	Removal of contamination	In progress
UXO Clearance	UXO clearance of 38-acre parcel	Removal of UXO	Fall 1995 (or Spring 1996)

3.2 Compliance Program Status, Surplus Property

Compliance activities on the surplus property at Fort Sheridan are being conducted in coordination with environmental restoration activities under the IRP. Compliance activities address underground storage tanks (USTs), aboveground storage tanks (ASTs), oil water separators, hazardous waste management, asbestos, radon, PCBs, water discharges, Nuclear Regulatory Commission (NRC) licensing, radiological materials handling, mixed waste management, and pollution prevention.

Compliance actions at Fort Sheridan can be divided into two categories: current mission- and operational-related compliance projects and closure-related compliance projects. Mission- and operational-related projects are those which have been or would be conducted for the normal operation of the installation and are unrelated to activities necessitated by installation closure under BRAC. Conversely, closure-related compliance projects are those conducted specifically as a result of environmental compliance and restoration activities related to BRAC closure and property disposal. Table 3-4 shows the mission/operational compliance projects that are ongoing at Fort Sheridan. The status of closure-related compliance projects at Fort Sheridan is shown in Table 3-5.

There have been no compliance early actions at Fort Sheridan at this time. Table 3-6 has been included for future compliance early actions. A more detailed description of the various environmental compliance programs at Fort Sheridan is provided in the subsections below.

Several compliance programs require permits, notifications, or registrations with the State and/or Federal regulatory agencies. The various notifications, permits, and registrations currently applicable to the Fort Sheridan surplus property are summarized by environmental compliance program in Table 3-7.

3.2.1 Storage Tanks

USTs and ASTs have historically been used for the storage of petroleum products at Fort Sheridan for heating purposes, vehicle maintenance operations, waste storage, and vehicle fueling. Compliance and environmental restoration activities related to these storage tanks are described in this section.

3.2.1.1 USTs. USEPA had delegated the management of the UST program to the State of Illinois until August 1995. The USEPA began a phaseout of Federal funding for the Illinois leaking UST cleanup program because the State had not corrected deficiencies in its statutory authority created by a 1993 State law. The 1993 law does not meet the requirements of the Federal law concerning leaking USTs. The State had primary enforcement responsibility when the UST closure and investigation activities began at Fort Sheridan. Currently, the UST closure

**TABLE 3-4. MISSION/OPERATIONAL-RELATED COMPLIANCE PROJECTS
ON THE SURPLUS PROPERTY**

Project	Status	Regulatory Program
Underground Storage Tank Management	USTs on the surplus	
Aboveground Storage Tank Management	Active ASTs are maintained in compliance with SPCC Plan.	Aboveground Storage Tank regulations
Hazardous Materials Management	Hazardous substances inventories and MSDSs maintained; spill response equipment maintained; hazardous material training coordinated.	SARA, Title III, U.S. Coast Guard and Oil Storage Facilities Management Regulations
Hazardous Waste Management	Installation is a small quantity generator. Wastes disposed off-site via licensed vendor.	RCRA Subtitle C, Illinois Hazardous Management Regulations, and U.S. Army Regulations
Pollution Prevention Programs	Includes solvent recycling and waste minimization.	Army Regulation 200-1, SARA Title III
Air Quality Management	Title V air permit application has been submitted.	Clean Air Act
Oil/Water Separator Management	No oil/water separators in use on surplus property.	Clean Water Act, 40 CFR 110 and 112
NEPA Compliance	Closure EIS and Disposal and Reuse Environmental Assessment completed by U.S. Army Corps of Engineers in 1991 and 1993. NEPA process will be completed when a finding of no significant impact for the EA is finalized.	NEPA
Worker Training Various Compliance Programs	Training ongoing and scheduled.	Multiple
PCB Transformers	Four PCB-containing transformers tagged and inspected in compliance with PCB Management Plan.	TSCA
NRC Licensing/Radiation	Installation is under Army-wide NRC licenses. Building 42 is only building on the surplus property that is still storing/using radioactive materials.	Army Regulation 385-11 and NRC Regulation

Key: NEPA = National Environmental Policy Act
RCRA = Resource Conservation and Recovery Act
SARA = Superfund Amendments and Reauthorization Act

**TABLE 3-5. CLOSURE-RELATED COMPLIANCE PROJECTS ON THE
SURPLUS PROPERTY**

Project	Status	Regulatory Program
Underground Storage Tank Management	Twelve underground storage tanks have been removed at this time. Underground storage tank removal is continuing.	RCRA Subtitle I, Clean Water Act.
Hazardous waste management	The installation is a small quantity generator. Hazardous waste management will continue according to regulations.	RCRA
Polychlorinated Biphenyl (PCB) Management	Seven PCB-containing transformers remain on the surplus property. These transformers are inspected according to regulations.	TSCA, USEPA policy.
Asbestos Management	Comprehensive asbestos survey to be completed in 1995. Damaged friable asbestos removal is ongoing.	Army Regulation 200-1 and DOD Policy Memorandum "Asbestos, Lead Paint, and Radon Policies at BRAC Properties," 31 October 1994.
Lead-Based Paint Management	A lead-based paint survey of 91 buildings which are to be future residential and/or child care facilities in surplus property has been completed (a total of 91 buildings).	Army Regulation 200-1 and DOD Policy Memorandum "Asbestos, Lead Paint, and Radon Policies at BRAC Properties," 31 October 1994 and TSCA (Title X).
NEPA Compliance	Closure Environmental Impact Statement and Disposal and Reuse Environmental Assessment completed by U.S. Army Corps of Engineers in 1991 and 1993.	NEPA
Unexploded Ordnance	Interim survey completed. Additional surveys are scheduled for fall 1996 and spring 1997.	TBD
Radon	All priority 1 buildings surveyed in 1990.	Army Regulation 200-1 and DOD Policy Memorandum "Asbestos, Lead Paint, and Radon Policies at BRAC Properties," 31 October 1994.
Cultural Resources	ARPA, NAGRA, and National Historic Preservation Act surveys complete. Preliminary Assessment with Advisory Council on Historic Preservation and State Historic Preservation Officer signed August 1995.	ARPA, National Historic Preservation Act, NAGRA, and Department of Interior standards.
Natural Resources	Coordination with U.S. Fish and Wildlife Service on proposed actions. Endangered species surveys conducted in 1978, 1988, 1989, 1990, and 1993.	Endangered Species Act

Key:

- NEPA = National Environmental Policy Act
- RCRA = Resource Conservation and Recovery Act
- TSCA = Toxic Substances Control Act
- USEPA = U.S. Environmental Protection Agency
- DOD = Department of Defense
- BRAC = Base Realignment and Closure
- ARPA = Archaeological Resources Protection Act
- NAGRA = Native American Graves and Repatriation Act
- AHPA = Archaeological and Historical Protection Act

TABLE 3-6. COMPLIANCE EARLY ACTION STATUS

Location	Bldg. #/UST #	Action	Purpose	Status
	There have been no compliance early actions at Fort Sheridan at this time.			

**TABLE 3-7. ENVIRONMENTAL COMPLIANCE PERMITS,
LICENSES, NOTIFICATIONS AND REGISTRATIONS, SURPLUS PROPERTY**

Compliance Program	Permit/License/Notification/ Registration No.	Description	Issuing Agency	Issue Date	Expiration Date	Comments
Underground Storage Tanks	Underground Storage Tank Registration Numbers and Tank Removal Permit Numbers are tank specific		Illinois State Fire Marshall	Numerous from 1989 to present	NA	All tanks require registration with Illinois State Fire Marshall and all tank removals must be permitted by the Illinois State Fire Marshall.
Hazardous Waste Generation	Illinois and Federal Hazardous Waste Generation identification numbers	Notification of Hazardous Waste Activity	USEPA, IEPA	Unknown	NA	Fort Sheridan is currently a "small quantity generator"; therefore, no permit is required.
Air Emissions	Application for Title V Air has been submitted	Air Emissions Source Permit	1 May 1995 Interim Status	Annual Update	--	Permit application and supporting documentation submitted to IEPA for permit requirement determination. Permit requirement is not anticipated.

Key: NA = Not Applicable
USEPA = U.S. Environmental Protection Agency
IEPA = Illinois Environmental Protection Agency

and cleanup at Fort Sheridan is being conducted under the Illinois UST program. The IEPA hopes to pass required legislation to reopen the program by June 1996.

At this time, 12 USTs that were formally located in the surplus property have been removed. Because Fort Sheridan UST closure and investigation activities are being conducted under IEPA jurisdiction, closure for the Surplus OU will be final following the approval of the closure reports by IEPA.

Table 3-8 provides an inventory of USTs on the surplus property. As part of the UST removal activities at Fort Sheridan, contaminated soils are being disposed offsite in permitted landfills. As of March 1994, no groundwater contamination has been observed in relation to any leaking UST on the surplus property.

3.2.1.2 ASTs. AST compliance programs on the surplus property at Fort Sheridan are conducted under Army Regulation 200-1, the federal requirements including 40 CFR Parts 110, 112, and 116 and 415, and Illinois Administrative Code (IAC) Sections 25/3.

Twenty-nine ASTs are currently located on the Fort Sheridan surplus property. The tanks store diesel and fuel oil for heating. In 1991 and 1992, secondary containment concrete berms were installed around all ASTs in the surplus property. An AST inventory for the surplus property is provided in Table 3-9. Two ASTs associated with Buildings 29 and 31 were apparently removed in the past. The Lake County Forest Preserve District installed a double-walled 500-gallon AST at Building 117 to refuel golf carts and golf course maintenance equipment.

3.2.2 Hazardous Material Management

Historically, activities at Fort Sheridan have involved the management of a variety of hazardous materials. These materials include solvents used at the motor pools and gas stations, pesticides stored and handled around Buildings 126 and 377, printing inks, solvents, and photographic development chemicals used at the installation print shops and photograph laboratories, and paints and solvents used in paint and furniture shops. Small amounts of other miscellaneous hazardous substances such as boiler treatment chemicals, groundskeeping, and janitorial supplies have also been used at the installation.

Use and storage of hazardous materials has significantly decreased on the surplus property since the fort closed and mission operations have decreased. Hazardous materials currently used on the surplus property are managed in compliance with federal requirements outlined in the Emergency Planning and Community Right-to-Know Act (EPCRA), Executive Order 12385, the Spill Prevention, Control and Countermeasure (SPCC) requirements in 40 CFR Parts 110 and 112, IEPA regulations, Army Regulation 200-1, and other applicable federal, state, and local regulations.

TABLE 3-8. UNDERGROUND STORAGE TANK INVENTORY, SURPLUS PROPERTY

Location	Year Installed	Capacity (Gallons)	Substance Stored	Status	Comments	Future Actions
Building 2	Not Available	10,000	Diesel	Removed in 1991	None	Final Closure Pending
Building 31	Not Available	1,000	Fuel Oil	Removed in 1993	None	Final Closure Pending
Building 40	Not Available	25,000	#2 Heating Oil	Removed in 1993	None	Final Closure Pending
Building 40	Not Available	25,000	#2 Heating Oil	Removed in 1993	None	Final Closure Pending
Building 40	Not Available	25,000	#2 Heating Oil	Removed in 1993	None	Final Closure Pending
Building 40	Not Available	25,000	#2 Heating Oil	Removed in 1993	None	Final Closure Pending
Building 51	Not Available	5,000	#2 Heating Oil	Removed in 1993	None	Final Closure Pending
Building 60	Not Available	6,000	Diesel	Removed in 1993	None	Final Closure Pending
Building 115	Not Available	10,000	Diesel	Removed in 1993	None	Final Closure Pending
Building 117	Not Available	10,000	#2 Heating Oil	Removed in 1991	None	Final Closure Pending
Building 117	Not Available	1,000	#2 Heating Oil	Unknown; Under investigation	None	Removed
Building 117	Not Available	10,000	JP4	Removed in 1991	None	Final Closure Pending
Building 205	Not Available	1,000	Fuel Oil	Removed	None	Closure Report
Building 205	Not Available	1,000	#2 Heating Oil	Removed in 1991	None	Final Closure Pending
Building 209	Not Available	4,000	Fuel Oil	Removed in 1991	None	Closure Report
Building 29	Not Available	1,000	Gasoline	Unknown, to be investigated	None	TBD
Building 29	Not Available	600	Gasoline	Unknown, to be investigated	None	TBD
Building 29	Not Available	1,000	Diesel	Unknown, to be investigated	None	TBD
Building 35	Not Available	10,000	Gasoline	Unknown, to be investigated	None	TBD
Building 42	Not Available	2,000	Unknown	Unknown, to be investigated	None	TBD

TABLE 3-8. UNDERGROUND STORAGE TANK INVENTORY, SURPLUS PROPERTY

Continued

Location	Year Installed	Capacity (Gallons)	Substance Stored	Status	Comments	Future Actions
Building 43	Not Available	2,000	Unknown	Unknown, to be investigated	None	TBD
Building 51	Not Available	Unknown	Gasoline	Unknown, to be investigated	None	TBD
Building 55	Not Available	10,000	Unknown	Filled in place in 1988	None	TBD
Building 98	Not Available	2,000	Unknown	Filled in place in 1988	None	TBD
Building 202	Not Available	10,000	Unknown	Filled in place in 1988	None	TBD
Building 202	Not Available	2,500	Unknown	Filled in place in 1988	None	TBD
Building 202	Not Available	1,000	Unknown	Filled in place in 1988	None	TBD
Building 913	Not Available	6,000	Unknown	Filled in place in 1988	None	TBD

TABLE 3-9. ABOVEGROUND STORAGE TANK INVENTORY, SURPLUS PROPERTY

Tank No.	Reuse Parcel	Location	Year Installed	Capacity (Gallons)	Substance Stored	Status	Comments	Future Actions
73-1	Surplus	Building 73	Not Available	275	Gasoline	Secondary Containment Construction	None	TBD
29-2	Surplus	Building 29	Not Available	1,000	#2 Fuel Oil	Secondary Containment Construction	None	TBD
29-1	Surplus	Building 29	Not Available	Not Available	Not Available	Removed	None	None
29-1	Surplus	Building 29	Not Available	275	Diesel	Secondary Containment Construction	None	TBD
31-1	Surplus	Building 31	Not Available	Not Available	Not Available	Removed	None	None
40-3	Surplus	Building 40	Not Available	30,000	#2 Fuel Oil	Secondary Containment Construction	None	TBD
40-1	Surplus	Building 40	Not Available	275	#2 Fuel Oil	Secondary Containment Construction	None	TBD
40-2	Surplus	Building 40	Not Available	30,000	#2 Fuel Oil	Secondary Containment Construction	None	TBD
44-2	Surplus	Building 44	Not Available	275	#2 Fuel Oil	Secondary Containment Construction	None	TBD
44-1	Surplus	Building 44	Not Available	275	#2 Fuel Oil	Secondary Containment Construction	None	TBD
55-1	Surplus	Building 55	Not Available	275	#2 Fuel Oil	Secondary Containment Construction	None	TBD
60-1	Surplus	Building 60	Not Available	150	Diesel	Secondary Containment Construction	None	TBD
61-1	Surplus	Building 61	Not Available	550	#2 Fuel Oil	Secondary Containment Construction	None	TBD
69-1	Surplus	Building 69	Not Available	275	#2 Fuel Oil	Secondary Containment Construction	None	TBD
72-1	Surplus	Building 72	Not Available	275	#2 Fuel Oil	Secondary Containment Construction	None	TBD

TABLE 3-9. ABOVEGROUND STORAGE TANK INVENTORY, SURPLUS PROPERTY

Continued

Tank No.	Reuse Parcel	Location	Year Installed	Capacity (Gallons)	Substance Stored	Status	Comments	Future Actions
72-2	Surplus	Building 72	Not Available	275	#2 Fuel Oil	Secondary Containment Construction	None	TBD
78-1	Surplus	Building 78	Not Available	275	#2 Fuel Oil	Secondary Containment Construction	None	TBD
78-2	Surplus	Building 78	Not Available	275	#2 Fuel Oil	Secondary Containment Construction	None	TBD
112-1	Surplus	Building 112	Not Available	550	#2 Fuel Oil	Secondary Containment Construction	None	TBD
121-1	Surplus	Building 121	Not Available	550	#2 Fuel Oil	Secondary Containment Construction	None	TBD
126-2	Surplus	Building 126	Not Available	250	#2 Fuel Oil	Secondary Containment Construction	None	TBD
126-1	Surplus	Building 126	Not Available	250	#2 Fuel Oil	Secondary Containment Construction	None	TBD
126-3	Surplus	Building 126	Not Available	275	#2 Fuel Oil	Secondary Containment Construction	None	TBD
152-2	Surplus	Building 152	Not Available	275	#2 Fuel Oil	Secondary Containment Construction	None	TBD
152-2	Surplus	Building 152	Not Available	275	#2 Fuel Oil	Secondary Containment Construction	None	TBD
153-1	Surplus	Building 153	Not Available	275	#2 Fuel Oil	Secondary Containment Construction	None	TBD
718-1	Surplus	Building 718	Not Available	550	#2 Fuel Oil	Secondary Containment Construction	None	TBD
726-1	Surplus	Building 726	Not Available	550	#2 Fuel Oil	Secondary Containment Construction	None	TBD
901-1	Surplus	Building 901	Not Available	275	#2 Fuel Oil	Secondary Containment Construction	None	TBD
912-1	Surplus	Building 912	Not Available	550	#2 Fuel Oil	Secondary Containment Construction	None	TBD
117-1	Surplus	Building 117	1994	500	Gasoline	Double-walled tank	None	TBD

No extremely hazardous substances as specified in the SARA, Title II, Section 302 are present at the installation. Fort Sheridan does not maintain or use sufficient quantities of hazardous chemicals to require reporting under SARA Title III, Section 312 (Tier reporting), or SARA Title III, Section 313 (Toxic Chemical Release Form R reporting).

Individual activities and the Fort Sheridan Fire Department maintain material safety data sheets (MSDSs) as required by the Occupational Safety and Health Administration (OSHA) for all hazardous chemicals on the installation. Spill response equipment is present at the installation. The Fort Sheridan Fire Department serves as the emergency spill response team.

Pesticide storage and handling at Fort Sheridan is conducted in compliance with the Federal Insecticide, Fungicide, and Rodenticide Act.

3.2.3 Hazardous Waste Management

Hazardous waste compliance programs on the surplus property are conducted under Army Regulation 200-1, and the Federal requirements found in 40 CFR 260 through 269, 40 CFR 117.49 CFR 171 et seq., Department of Transportation regulations, and 35 IAC Sections 700-738 et. seq.

The directions for managing hazardous waste and nonhazardous waste are contained in separate standard operating procedures and guidance documents. Elements of hazardous waste management are also included in documents such as the SPCC Plan. Management of hazardous waste under these various guidance programs provides the framework for compliance with Federal, State, and U.S. Army regulations. Small amounts of hazardous wastes are generated on the surplus property as part of the restoration program investigations and from the caretaker maintenance force. These wastes are stored in Building 86 until off-site disposal at a permitted, treatment, storage, and disposal facility. Less than 1,000 kilograms of hazardous wastes are generated per month on the surplus property; therefore, the closed installation's (the surplus property only) generator status varies between conditionally exempt or small quantity generator.

3.2.4 Solid Waste Management

Solid waste management compliance programs on the surplus property are conducted under Army Regulation 200-1 and 420-47, and the federal requirements found in 40 CFR 240-246 and 40 CFR 257-258, Department of Transportation regulations, and the Illinois Solid Waste Management Act.

Solid wastes currently generated at Fort Sheridan are managed in accordance with all applicable state and federal regulations. Solid waste generated on the surplus property is hauled to regional sanitary landfills by private haulers.

3.2.5 Polychlorinated Biphenyls (PCBs)

PCB management compliance programs on the surplus property are conducted under Army Regulation 200-1 and the Federal requirements found in 40 CFR 761 and Department of Transportation regulations.

A post-wide survey of transformers in 1992 identified nine transformers containing PCBs in the surplus property. One leaking PCB transformer was removed during the survey. The other eight PCB transformers were in good condition during the survey and remain in service on the surplus property.

3.2.6 Asbestos

Asbestos-containing material (ACM) is regulated by USEPA, OSHA, and the State of Illinois. Asbestos on the surplus property is being managed in compliance with these regulations using the Department of the Army memorandum "Asbestos, Lead Paint, and Radon Policies at BRAC Properties," 31 October 1994.

Fort Sheridan has conducted a series of post-wide asbestos surveys. As required by the Department of the Army guidance, asbestos survey results will be provided to the new property owner. Asbestos abatement is currently underway to abate damaged friable asbestos.

At this time, 123 buildings have been identified with damaged friable asbestos. Removal of friable asbestos is currently underway and will continue to be monitored in the buildings until property transfer. At this time, the following buildings have been identified as having friable asbestos: 1 through 13, 15 through 29, 29A, 30A, 30B, 31, 32, 33, 34, 38, 39, 42, 45, 46B, 47, 48, 49, 50, 53, 54, 56, 57C, 59, 60, 64, 66, 69, 73, 74, 75, 76, 80 through 85, 90, 91, 92A, 92B, 93A, 93B, 95A, 95B, 96, 97, 102, 105, 106, 117, 118, 119, 125-R, 126, 129, 140, 152 through 156, 170, 172, 173, 202, 202C, 216, 221A, 221C, 224B, 225C, 226A, 226D, 227A, 228A, 228C, 228D, 228E, 230C, 231B, 232C, 233, 234A, 238C, 464, 573-R, 700, 701, 702, 703, 707, 725, and 912.

3.2.7 Radon

The radon reduction program at Fort Sheridan is conducted under AR 200-1, Chapter 11, U.S. Army Radon Reduction Program.

Fort Sheridan conducted a post-wide radon survey in Priority 1 structures (i.e., day care centers, hospitals, schools, and living units) in 1990. Radon levels in four buildings (28, 92A, 93B, and 348A) located in the surplus property exceeded the 4 picocuries per liter (pCi/L) USEPA action level during the initial 90-day testing. These buildings were retested. Only Building 28 was found to have a radon level of greater than 4 pCi/L (8 pCi/L) during the retest. Because this building is currently unoccupied, no remedial actions have occurred or are planned prior to property transfer.

3.2.8 RCRA Facilities

There are no RCRA facilities located on the surplus property at Fort Sheridan. Therefore, no solid waste management units have been designated within the surplus property.

3.2.9 Wastewater Discharges

Point source wastewater discharges generated at Fort Sheridan are regulated under the CWA, and the National Pollutant Discharge Elimination System (NPDES) Permit Program (40 CFR Parts 122, 125, and 136), National Pretreatment Standards (40 CFR Part 403), Illinois Compiled Statutes Chapter 415, Illinois Water Pollution Discharge Act, 35 IAC Subtitle/Illinois Water Pollution Control Rules, and Army Regulation 200-1, Chapters 3 and 8.

Fort Sheridan's sanitary sewer system is currently connected to the North Shore Sanitary Sewer District system, therefore, a NPDES permit is not required. Stormwater at Fort Sheridan is routed through several ravines on the property before being discharged into Lake Michigan. Stormwater pipes were placed in the ravines before some of them were used as landfills.

3.2.10 Oil/Water Separators

Oil/water separators at Fort Sheridan are managed under the installation's SPCC plan, in accordance with applicable federal regulations including Section 313(a) of the CWA and regulations 40 CFR Parts 110, 112, and 122, 35 IAC Subtitle C, ISC Chapter 415, North Shore Sanitary Sewer District requirements, DOD directives, and Army Regulation 200-1.

No oil/water separators are presently in use in the surplus property. An oil/water separator installed in Building 51 during the 1980-1982 timeframe has not been used since 1989. This area is being investigated under the IRP for potential contamination as a result of past use.

3.2.11 Pollution Prevention

Pollution prevention on the surplus property is managed through the installation hazardous material management program described in Section 3.2.2 in accordance with Army Regulation 200-1, Chapter 6, and applicable Federal and State regulatory requirements. The Fort Sheridan pollution prevention program includes elements of the SPCC plan and the standard operating procedures and guidance memoranda to include solvent recycling and waste minimization.

3.2.12 NRC Licensing

Fort Sheridan has never been issued an installation-specific NRC license. Radioactive testing instruments, watches, and compasses licensed for use, are used and stored on the installation under several U.S. Army-wide NRC licenses. Building 42 is the only building on the surplus property that is still using/storing radioactive materials. These items are managed under IAW, Army (Army Regulation 385-11), and NRC regulations. The NRC licenses require a survey and decontamination, if applicable, of areas where the licensed radioactive commodities were stored.

3.2.13 Mixed Waste

There is no mixed waste generated at Fort Sheridan. Mixed waste is a mixture of hazardous waste and radioactive waste. Available records do not indicate mixed waste was ever generated at Fort Sheridan.

3.2.14 Radiation

No radioactive waste are currently generated on the surplus property. If radioactive wastes are generated (during remedial actions), they will be handled in accordance with Army, NRC, and Department of Transportation regulations and shipped and disposed offsite at a licensed/permitted facility.

3.2.15 Lead-Based Paint

The Fort Sheridan lead-based paint management program is conducted in accordance with U.S. Department of Housing and Urban Development (HUD) guidelines for lead-based paint protection (Title X, of the Housing and Community Development Act) and the DOD guidance "Asbestos, Lead Paint, and Radon Policies at BRAC Properties," 31 October 1994.

Regulations require that a lead-based paint survey be conducted for all facilities constructed prior to 1978 with the potential to house children under the age of seven. Forty-two buildings had been approved for use by local homeless organizations under the McKinney Act provisions. In addition, most buildings in the Historic District are slated for residential use, according to the JPC Conceptual Use Plan. Lead-based paint surveys were completed September 1995. The lead-based paint surveys included 91 buildings, including all the McKinney Act screening buildings, and all buildings slated for residential use according to JPC's Conceptual Land Use Plan. In addition, Building 47, which is scheduled for use as a day care center, and Building 1, which is scheduled for reuse by the Midwest Young Artists Association, were resurveyed.

Abatement of lead-based paint will be conducted in accordance with the Title X requirements and DOD guidance. Lead-based paint hazards will be abated prior to residential occupancy. This abatement is either being conducted by the Army prior to transfer or will have to be a condition of property transfer in that the new owner conduct the abatement according to the required regulations.

3.2.16 Medical Waste

There is currently no medical waste generated on the surplus property. The 1989 EnPA indicates the health clinic generated about 5 kilograms per day of infectious wastes. These wastes were autoclaved and disposed with the general refuse in a regional sanitary landfill. Prior to the 1970s, medical and veterinary wastes were reportedly disposed in the landfills on post. Since the early 1970s, medical wastes were reportedly hauled daily to the Great Lake Training Center for incineration in a pathological waste incinerator.

3.2.17 Unexploded Ordnance

In 1993, a UXO survey was conducted at over 10 percent of a 50-acre parcel in the northeast corner of the fort. This area was reported to have been historically used as a training range and ordnance disposal site. During the 10 percent survey, 14 items (UXO) were found and detonated on-site, including several mortars and a hand grenade. A survey of the entire area and UXO clearance to a specific depth (to be determined following the UXO survey) is scheduled for fall 1995 or spring 1996.

3.2.18 National Environmental Policy Act (NEPA)

The Fort Sheridan Base Closure EIS was completed in August 1990. An EA for the disposal and reuse of Fort Sheridan was completed September 1993. The FONSI is currently being reviewed by the U.S. Army.

3.2.19 Air Emissions

Under the requirements of Title V of the CAA, a Federally Enforceable State Operating Permit (FESOP) application for the surplus property was submitted in June 1995. The property is currently in interim status while the state processes the application, which, according to IEPA, could take 6 months to 2 years.

3.3 Status of Natural and Cultural Resources Programs

This section describes the current status of the natural and cultural resources at Fort Sheridan including identification and management of vegetation, wildlife, wetlands and other preservation areas; rare, threatened and endangered species; and cultural resources. Although Fort Sheridan does not have formalized management plans for natural and cultural resources, these resources are managed in accordance with Army Regulations 420-74 and 420-40, DOD Directive 4700.4 and 4710.1, and applicable federal and state regulations and statutes. The information available on biological resources present or potentially present on Fort Sheridan is based on studies conducted in 1978, 1981, 1985, 1988, 1989, 1990, and 1993. These studies were conducted by either the Illinois Department of Conservation (IDOC) or the USACE.

More detailed natural resource identification and description may be required prior to economic redevelopment and property reuse. Natural and cultural resources will also be considered during the environmental remedy selection process so that accidental impacts to these resources can be prevented.

3.3.1 Vegetation

About 600 acres of Fort Sheridan are developed and consist primarily of buildings, pavement, horticultural plantings, and lawns. Most of the natural on-post vegetation is associated with the ravines and the bluff areas. Janes Ravine is considered by the IDOC to be one of the finest examples of this kind of natural area in Illinois and contains high quality examples of mesic and dry-mesic upland forest. Janes Ravine was included in the Illinois Natural Areas Inventory by

the IDOC. While under federal ownership, however, there is little legal protection of these areas. During the remedy selection process, the BCT will take into account the effects of remedial activities on the natural resources. Other on-post ravines are significantly disturbed by landfills or roadways, but in some locations still support elements of natural ravine vegetation.

In relatively undisturbed areas, the ravines support a deciduous woodland dominated by basswood (*Tilia americana*), sugar maple (*Acer saccharinum*), ash (*Fraxinus spp.*), and elm (*Ulmus americana*). The most characteristic shrub is witch hazel (*Hamamelis virginiana*). The diverse herbaceous cover is described briefly in the Base Closure EIS and the Disposal and Reuse EA. A 1987 Tree Inventory prepared for the U.S. Army documented over 5,000 trees base-wide, including over 2,000 oak trees of varying species. Approximately 900 of these oak trees had a diameter of 20 feet or more.

3.3.2 Wildlife

Information on wildlife at Fort Sheridan is based primarily on studies conducted by the USACE in 1985 and 1993. A variety of common small mammals, amphibians, and reptiles are present at Fort Sheridan. These species occur primarily in the natural areas in the ravines, bluffs, and shoreline, and undeveloped areas of the post. The bird species known to occur on the post include woodland species, waterfowl, hawks, and gulls. In addition, Fort Sheridan is located in the migration corridor for the peregrine falcon (*Falco peregrinus*) and they have been observed along the lake shore.

3.3.3 Wetlands

A wetlands map prepared by the U.S. Department of Interior (1981), Fish and Wildlife Service, in conjunction with the IDOC, shows two wetland areas on the surplus property. The fish pond in the northeast area of the installation is a Federal jurisdictional wetland, and a lacustrine littoral unconsolidated shoreline wetland is present below the officer housing area. The wetland locations are shown in Figure F-1 of Appendix F. The two wetland areas identified on the surplus property have not been delineated using the federal manual for identifying and delineating jurisdictional wetlands.

3.3.4 Designated Preservation Areas

Designated preservation areas will include ravine vegetation areas, wetlands, relatively undisturbed ravine slopes supporting native vegetation, and the designated historic district. In addition, other historic and prehistoric resources outlined in the 1993 report "Literature Review, Architectural Evaluation, and Phase I Archaeological Reconnaissance of Selected Portions of Fort Sheridan, Illinois" will be subject to the protection required by the Programmatic Agreement between the Department of the Army, the State Historic Preservation Officer, and the Advisory Council on Historic Preservation on cultural resources. These areas are included in Figure F-1 of Appendix F.

3.3.5 Rare, Threatened and Endangered Species

Threatened and endangered species surveys were conducted in 1978 and 1988 by the IDOC. Additional reconnaissance surveys were conducted in 1989 by the USACE.

Eleven species of plants listed by the State of Illinois as threatened or endangered occur on the Fort Sheridan property or in the McCormick Nature Preserve adjacent to the Janes Ravine portion of Fort Sheridan. These species are listed in Table 3-10. No federally listed plant species are currently known to occur on the post.

Five state-listed and two federally-listed bird species are known to have been present on the post, although none has been observed to nest on the post. These species include Forster's tern (*Sterna forsteri*, state-endangered), common tern (*Sterna hirundo*, state-endangered), brown creeper (*Certhia familiaris*, state-endangered), veery (*Catharus fuscescens*, state-threatened), piping plover (*Charadrius melodus*, federal-endangered) and the peregrine falcon (*Falco peregrinus*, federal-endangered).

3.3.6 Cultural Resources

In 1984, about 260 acres of Fort Sheridan property were designated as a Natural Historic Landmark and listed on the National Register of Historic Places. These 260 acres are located on what is now known as the surplus property. Contributing structures are detailed in a report entitled "Literature Review, Architectural Evaluation, and Phase I Archaeological Reconnaissance of Selected Portions of Fort Sheridan, Illinois" (September 1993). A Programmatic Agreement between the Department of the Army, the Advisory Council on Historic Preservation, and the Illinois State Historic Preservation Officer concerning disposal of Fort Sheridan, Illinois, has been prepared. The Programmatic Agreement was signed in June 1995. A copy of the agreement is provided in Appendix F. Cultural resources at Fort Sheridan are shown in Figure F-1 in Appendix F.

Requirements of the Programmatic Agreement include a standard preservation covenant to be incorporated into the transfer documents and recorded in the real estate records of Lake County, Illinois. The Programmatic Agreement also includes a requirement for the recipient to agree to prepare and implement an approved development and management plan. It is designed to ensure protection and preservation of the historical district and other cultural resource values. The Programmatic Agreement requires the Army to take into account the effects of remedial activities in historic properties and to consult with the State Historic Preservation Officer if the effects will be adverse.

3.4 Environmental Condition of Property

In October 1992, Public Law 102-426, CERFA amended Section 120(h) of CERCLA and established new requirements with respect to contamination assessment, cleanup, and regulatory agency notification/concurrence for federal facility closures. CERFA requires the federal government, before termination of federal activities on real property owned, to identify property where no hazardous substances were stored, released, or disposed of. These requirements

**TABLE 3-10. STATE OF ILLINOIS THREATENED AND
ENDANGERED PLANT SPECIES KNOWN TO OCCUR ON OR ADJACENT TO
FORT SHERIDAN**

Common Name	Scientific Name	Last Status	Seen
Ground Juniper	<i>Juniperus communis</i> (*) L. var. <i>depressa</i> pursh.	Threatened	1978
Pale Vechling	<i>Lathyrus ochroleucus</i> (R)	Threatened	1977
Rice Grass**	<i>Oryzopsis racemosa</i>	Threatened	1976
Small Solomon's Seal	<i>Polygonatum pubescens</i> (R)	Endangered	1977
Arbor Vitae	<i>Thuja occidentalis</i> (*)	Threatened	1978
Star Flower	<i>Trientalis borealis</i> (R)	Threatened	1977
Dog Violet	<i>Viola conspersa</i> (R)	Threatened	1978
Canadian Buffalo-berry	<i>Sherpherdia canadensis</i> (B)	Endangered	1978
Weak Bluegrass**	<i>Poa languida</i> (R)	Endangered	1988
Grove Bluegrass**	<i>Poa alsodes</i>	Endangered	1988
Purple Flowering Raspberry**	<i>Rubus odoratus</i>	Endangered	1976

Key: (B) = Plants found on Bluff Ravine
(R) = Plants found in Janes Ravine
(*) = Found at Bluff and Janes Ravine

**These four species were found in McCormick Ravine - U.S. Army Corps of Engineers, 1989a.

Source: Illinois Department of Conservation, 1978 and 1988.

retroactively affect the U.S. Army BRAC 88 and BRAC 91 (military bases identified for closure and/or realignment in 1988 and 1991, respectively) environmental restoration activities, and are being implemented at BRAC 93 sites concurrently with their EnPAs. The primary CERFA objective is for federal agencies to expeditiously identify real property offering the greatest opportunity for immediate reuse and redevelopment. Although CERFA does not mandate the U.S. Army transfer of real property so identified, the first step in satisfying the objective is the requirement to identify real property where no CERCLA-regulated hazardous substances or petroleum products were stored, released, or disposed.

The U.S. Army has completed an investigation to identify the environmental condition of property at Fort Sheridan in compliance with CERFA. The final report was released April 1994. CERFA investigations included the following assessment procedures:

- ▶ A review of historical records, including an analysis of historical aerial photographs from the Installation Assessment;
- ▶ Interviews with current and past installation employees,
- ▶ A visual site inspection of the installation;
- ▶ A review of Federal government records;
- ▶ A review of the recorded chain of title documents;
- ▶ A physical inspection of adjacent property;
- ▶ A review of reasonably obtainable state and local government records for facilities where there has been a release or storage of hazardous substances or petroleum, oil, and lubricant (POL) products.

CERFA required a report identifying only uncontaminated parcels. The Department of the Army exceeded this requirement and designed four category (or parcel) types: CERFA Parcels, CERFA Parcel with Qualifiers, CERFA Disqualified Parcel, and CERFA Excluded Parcels. These parcels are defined below. The DOD later formulated seven categories, which are also described below.

An environmental condition of property map, provided as Figure 3-2, identifies property at the installation based on these four parcel categories. The parcels are delineated using a 1-acre square grid for boundary definition. Where CERFA Disqualified Parcels and CERFA Parcels with Qualifiers have coincided, the overlapped area has been designated CERFA disqualified.

IEPA has reviewed the CERFA Report for the installation and has concurred with the following CERFA parcels: 9P, 15P, 20P, 24P, 33P, 37P, 43P, 45P, 48P, 49P, 51P, 52P, 53P, 54P, 59P, 60P, 62P, 63P, 65P, 66P, 68P, 69P, and 71P, for a total of 24 acres. These parcels are all the clean parcels, with one exception. The IEPA did not concur with Parcel 5P as a CERFA Parcel identified on Figure 3-2. Additionally, in its final CERFA Report, the U.S. Army identified property on which buildings containing asbestos and lead-based paint may be present. These properties are designated as CERFA Parcels with Qualifiers.

The U.S. Army has not sought IEPA's concurrence on these CERFA Parcels under Section 120(h)(4) of CERCLA, 42 U.S.C. §9620(h)(4). Pursuant to CERCLA Sections 104 and 120 and USEPA policy, it may be possible to designate these parcels as uncontaminated property.



EXPLANATION

- Installation Boundary
-  CERFA Parcel
-  CERFA Parcel with Qualifier(s)
-  CERFA Disqualified Parcel
-  CERFA Excluded Parcel



0 650 1300
FEET

Environmental
Condition
of Property

Figure 3-2

The U.S. Army may request IEPA concurrence on CERFA Parcels with Qualifiers in the future, if the lead-based paint and the asbestos are part of the building structure and if there is no evidence that storage, disposal and/or release of lead-based paint or asbestos occurred or is occurring.

The following subsections provide a detailed description of each of the four categories used to classify property in the Environmental Condition of Property Map.

3.4.1 CERFA Parcels

CERFA Parcels are those portions of the installation real property for which investigation reveals no evidence of storage for 1 year or more, release, or disposal of CERCLA hazardous substances, petroleum, or petroleum derivatives and no evidence of being threatened by migration of such substances. CERFA Parcels also include any portion of the installation that once contained non-CERCLA hazards, including asbestos, UXO, lead-based paint, and radionuclides, but has since been fully remediated.

3.4.2 CERFA Parcels with Qualifiers

CERFA Parcels with Qualifiers are those portions of the installation real property for which investigation reveals no evidence of storage for 1 year or more, release, or disposal of CERCLA hazardous substances, petroleum, or petroleum derivatives and no evidence of being threatened by migration of such substances. Parcels with Qualifiers do, however, contain non-CERCLA related hazards including the presence of asbestos, UXO, lead-based paint, radionuclides, radon, or stored (not in use) PCB containing equipment.

3.4.3 CERFA Disqualified Parcels

CERFA Disqualified Parcels are those portions of the installation real property for which there is evidence of CERCLA hazardous substance, petroleum, or petroleum derivative storage for 1 year, release or disposal, or threatened by such release or disposal. CERFA Disqualified Parcels also include any portion of the installation containing a PCB release or disposal, any Explosive Ordnance Disposal (EOD) locations, any storage sites of chemical ordnance, and any areas in which CERCLA hazardous substances or petroleum products have been released or disposed and subsequently fully remediated.

3.4.4 CERFA Excluded Parcels

CERFA Excluded Parcels are those portions of the installation real property retained by the DOD, and therefore not explicitly investigated for CERFA. CERFA Excluded Parcels also include any portion of the installation that has already been transferred by deed to a party outside the federal government, or by transfer assembly to another federal agency.

3.4.5 Suitability of Installation Property for Transfer by Deed

SARA Title I, Section 120 to CERCLA addresses the transfer of federal property on which any hazardous substance was stored during any 1 year period, or was released or disposed. Section 120 also requires any deed for the transfer of this federal property to contain, to the extent such information is available based on a complete search of agency files, the following information:

- ▶ A notice of the type and quantity of any hazardous substance storage, release, or disposal,
- ▶ Notice of the time at which such storage, release, or disposal took place,
- ▶ A description of what, if any, remedial action has occurred, and
- ▶ A covenant warranting that appropriate remedial action will be taken.

The U.S. Army has begun the identification of property suitable for transfer under CERCLA through the CERFA identification process. Those properties, designated CERFA Parcels and CERFA Parcels with Qualifiers, have had no activities which could potentially preclude them from transfer under SARA Title I, Section 120 to CERCLA.

The U.S. Army is currently in the process of refining the classification of CERFA Disqualified Parcels to better identify those suitable for transfer under CERCLA. Through this refinement process, properties are being defined as one of the following seven categories:

- ▶ **Category 1:** Areas where no storage, release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).
- ▶ **Category 2:** Areas where only storage of hazardous substances or petroleum products has occurred (but no release, disposal, or migration from adjacent areas has occurred).
- ▶ **Category 3:** Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require a removal or remedial action.
- ▶ **Category 4:** Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken.
- ▶ **Category 5:** Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are under way, but all required remedial actions have not yet been taken.
- ▶ **Category 6:** Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but all required response actions have not yet been implemented.

- ▶ **Category 7:** Areas that are unevaluated or require additional evaluation.

Figure 3-3, which is provided in Appendix F, identifies property at Fort Sheridan based on the DOD seven parcel categorization. Under SARA Title I, Section 120 to CERCLA, those parcels that are Category 1, 2, 3, 4 and 5 (if the remedy in place has been approved by the Administrator), meet the CERCLA criteria of suitability for transfer. Category 6 and 7 properties that involve releases of hazardous substances as defined in CERCLA cannot be transferred under CERCLA until environmental restoration is initiated.

3.5 Status of Community Involvement

Community relations activities that have taken place at Fort Sheridan to date include the following:

- ▶ **EIS Process.** During the development of the Closure EIS and the Disposal and Reuse EA, public scoping meetings were held. Public comments were received by the U.S. Army on draft EIS documents and were addressed in final versions of these documents.
- ▶ **Community Relations Plan.** The Fort Sheridan Community Relations Plan (CRP) was completed July 1994 and is currently being updated by the U.S. Army. The CRP is available for review at the information repositories.
- ▶ **Restoration Advisory Board (RAB).** The RAB has been formed and the first RAB meeting was 17 January 1995. RAB meetings are held on the third Tuesday of every month at 7:30 p.m. in a conference room of Building 47 at Fort Sheridan. Meeting minutes are placed in the information repositories. All RAB meetings are open to the public. See the glossary for a definition of the RAB.
- ▶ **Mailing List.** A mailing list of community members interested in the Fort Sheridan environmental restoration program is maintained by the BEC and updated regularly. The list is generated during RAB meetings.
- ▶ **Workshops.** A workshop with homeless assistance organizations and advocates was held in February 1994 to present options and capability of Fort Sheridan to meet the needs of the homeless under the McKinney Act requirements. Additional technical workshops for the public will be held; these workshops are announced during RAB meetings and are open to the public.
- ▶ **Information Repositories.** Four public repositories for information regarding the environmental restoration program at Fort Sheridan have been established. The four repositories were opened in February 1995 and are located at Building 48G at Fort Sheridan and the following public libraries: Highland Park, Lake Forest, and Highwood.

- ▶ **Public Announcements.** The RAB meetings and Notices of Availability of CERCLA Documents are broadcast as public announcements in local newspapers.
- ▶ **Fact Sheets.** Fact sheets are sent to RAB members on the mailing list and also are located at the information repositories. Fact sheets discuss particular studies or activities of the restoration program and are designed to better inform the community of these activities.
- ▶ **Administrative Record.** An Administrative Record File is being established at Building 48G at Fort Sheridan in accordance with CERCLA requirements. A copy of the Administrative Record File index will be on file at USEPA Region V headquarters, IEPA, Fort Sheridan, and the information repositories.

CHAPTER 4

► ENVIRONMENTAL RESTORATION AND COMPLIANCE STRATEGIES ◀

This chapter describes the installation-wide environmental restoration and surplus property compliance strategy for Fort Sheridan.

Prior to the official recommendation of closure in December 1988, restoration projects were underway to identify, characterize, and remediate environmental contamination at Fort Sheridan. The restoration strategy implemented during this period focused on protection of human health and the environment at the installation with consideration of the ongoing and continued use of the installation by the U.S. Army. With the closure announcement, the installation's strategy shifted from supporting an active U.S. Army mission to responding to disposal and reuse considerations. This strategy has included the preparation of the EnPA in 1984 and the initiation of an RI/FS for the surplus and DOD properties, and will potentially include the development of DDs, preparation of RDs, and implementation of RAs.

Fort Sheridan was well advanced in the environmental restoration process prior to the initiation of the BCP. Upon formation of the BCT in February 1994, a "Bottom Up" review of the restoration strategy for Fort Sheridan was completed to verify that the appropriate restoration actions and regulatory programs applicable to the areas of environmental contamination have been considered and that all possible fast-track cleanup opportunities were taken in the Fort Sheridan environmental restoration program.

The overall environmental restoration and compliance strategy for Fort Sheridan is currently reviewed by the BCT and the Project Team (see Section 1.3). The U.S. Army Garrison, Fort McCoy currently maintains overall responsibility for implementing and completing the restoration program. The USAEC provides assistance in the area of site investigation support at the installation. The USACE is providing support in areas including RD, RA, compliance program management, and natural and cultural resource management. Fort Sheridan's strategy is designed to ensure that all regulatory requirements are met and that adequate and cost-effective restorations are implemented as quickly as possible to provide for the expedited disposal and reuse of Fort Sheridan in compliance with U.S. Army and community goals. The current strategy aims for the completion of all site restoration activities installation-wide by the end of 1999, with areas of the surplus property complete 1 to 3 years earlier.

4.1 Zone/OU Designation and Strategy

Zones define an installation's investigative and remedial strategy. They are tools for organizing and defining areas of investigation. They are derived from an evaluation of hydrogeologic and chemical analytical data within an investigative zone, or by comparing data between zones. OU types may be based on geographic area, common media (soil, groundwater, surface water,

other), common treatment technology, priorities, or schedules. Properly defined, OUs establish a logical sequence of actions that address contamination releases in a comprehensive fashion.

4.1.1 Zone Designations

Zone designations were not utilized during the Phase I RI at Fort Sheridan because of the relatively small size of the installation, and because it was under single ownership at the time of initiation of the Phase I RI. All sites were effectively investigated during the RI as a single unit.

4.1.2 OU Designations

Two OUs have been designated during the Phase II RI as sources for potential contamination at Fort Sheridan. The factor considered in the OU designation process at Fort Sheridan was geographic location. Additional OUs may be designated as needed to facilitate and expedite environmental restoration or property transfer. The sites within the two OUs designated at Fort Sheridan, the Surplus OU and the DOD OU, are identified in Figure 3-1. The relationship between restoration study areas, OUs and reuse parcels is provided in Table 4-1.

4.1.3 Sequence of OUs

A comprehensive environmental restoration strategy has been developed by the Fort Sheridan BCT. This strategy consolidates sites or AREEs identified in the EnPA and the RI/FS, and then defines a logical sequence of OU remedial actions to address all past releases associated with these sites. The following sections outline this sequencing strategy.

4.1.3.1 Sequencing Strategy. The Fort Sheridan BCT has developed an approach to identify the logical sequence of OU site investigation and restoration activities. To meet the goals of property redevelopment, the OU strategy was implemented at this time to focus restoration efforts and priorities on the surplus property.

The two OUs at Fort Sheridan were initially assessed at the same time and included in the Phase I RI (1992). The sequencing of OUs was determined using the following criteria:

- ▶ Expedited completion of RAs to mitigate any identified risk to human health and the environment
- ▶ Consideration of community reuse planning priorities
- ▶ Completion of short-term site restoration at locations where environmental condition directly impacts reuse in advance of long-term site restoration activities that may not affect site reusability
- ▶ Use of existing contracts with modifications to expedite the restoration process.

**TABLE 4-1. RELATIONSHIP BETWEEN RESTORATION
STUDY AREAS, OUS, AND PARCELS**

Reuse Parcel	Operable Unit	Study Area
SURPLUS PARCEL		
McKinney Act and Local Screening Parcel	Surplus Operable Unit	No sites located in this parcel
Cemetery/Nike Parcel	Surplus Operable Unit	Former Nike Silos 908 and 909
Golf Course Parcel	Surplus Operable Unit	Landfill No. 2/UXO Area, Water Treatment Facility, Building 126 (Golf Course Pesticide Storage), Janes Ravine, Airport Drain, Hutchinson Ravine, Former Skeet Range, Former Small Arms Ranges, Disturbed Areas, Nike Site, Buildings 171, 172, 173, 117, 911, 912, Beach Ammo Burn Area/Mask Test Area
Historic District Parcel	Surplus Operable Unit	Landfills No. 3 & 4, Coal Storage Area 2 and 3, western portion of Coal Storage Area 1 Vehicle and Equipment Storage 1 and 2, Yard at Building 216, Scott Loop Drain, and Buildings 43, 2, 707, 42, 154, 40, 77, 112, 135, 86, and 51
DOD PARCEL		
U.S. Navy	DOD Operable Unit	Part of Landfill No. 5 and 6, Landfill No. 7, Coal Storage Area 4, Yard at Building 377, Yard at Building 368, Building 142, Building 361, Sewage Treatment Plant and Sludge Drying Beds
U.S. Army Reserves	DOD Operable Unit	Landfill No. 1, part of Landfill No. 5 and 6, eastern portion of Coal Storage Area 1, Vehicle and Equipment Storage 5, 6, 7, and 9, Building and yard at 122, 137, and 193, Yard at Building 128, yard at Building 902, Building 43, Building 70, Free Standing Water Tower (Structure 566)

In addition to defining OUs, the environmental response strategy:

- ▶ Evaluates the need to target the UXO area for early response action
- ▶ Streamlines the document review process by defining an 8- to 9-month review cycle between submittal of a draft FS and the submittal of a draft ROD
- ▶ Initiates RD during the proposed plan and ROD review process so that final designs can be in place as soon as possible after the ROD is signed. This initiative is only applicable for sites where the proposed response or remedial action has general approval from regulators and the public.

The OU cleanup sequence at the installation is summarized in Table 4-2.

4.1.3.2 Remediation Timelines and Documents. A number of environmental studies have been completed at this installation in an effort to identify sites, determine degree and extent of contamination, evaluate risk, and identify and implement RAs. Figure 4-1 identifies the timeline for the completion of those documents.

The schedule was developed using a critical path analysis method with the following components:

- ▶ **Critical.** Critical jobs are those in which any extension in their duration will cause an equivalent delay in the project. Often referred to as the critical path.
- ▶ **Noncritical.** Noncritical jobs are usually subtasks required to accomplish the critical job. The start and end dates may be varied within the project parameters.
- ▶ **Baseline.** A set of "original" schedule dates that can be compared with the current schedule to determine if the project has slipped.
- ▶ **Completed Duration.** A measure in time periods of the portion of a job that is completed.
- ▶ **Milestone.** A project event that represents a checkpoint, a major accomplishment, or a deliverable result.
- ▶ **Total Float.** The total length of time that a noncritical job can be delayed before it causes the project or a critical job to slip or causes a job to not meet its target date.
- ▶ **Free Float.** The length of time a noncritical job can be delayed without affecting another job.
- ▶ **Delay.** A waiting period that prevents the job from starting at its earliest possible start time.

TABLE 4-2. CLEANUP SEQUENCE

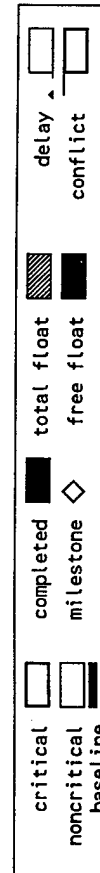
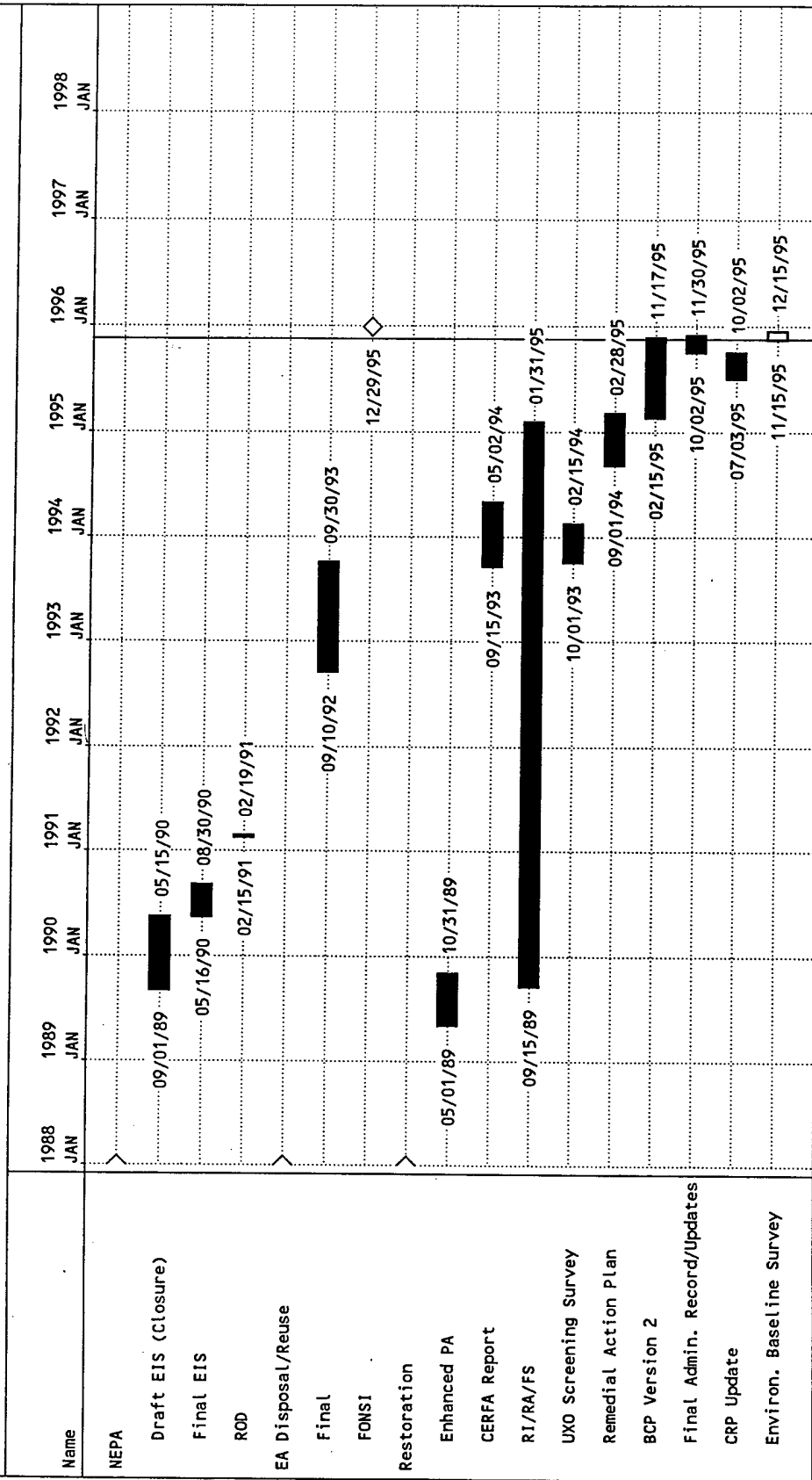
Reuse Parcel	OU	Environmental Risk	Cleanup Sequence	Reconcile Comments
Surplus Parcel	Surplus OU	TBD	1	RI has been initiated. RAs pending. Removal actions underway.
DOD Parcel	DOD OU	TBD	2	RI has been initiated. RAs pending. Interim remedial actions and removal actions underway.

Key: TBD = To Be Determined

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Figure 4-1 Primary Documents



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- **Conflict.** The amount of time a job overruns its target date. This is also called "negative float".

The graphical information regarding the primary documents generated for each OU at Fort Sheridan which is shown in Figure 4-1 is summarized below.

- **OU 1 - Surplus OU**

RI Report	August 1996
FS Report	October 1996
Proposed Plan	November 1996
ROD	January 1997
Remedial Design	Fall 1997
- **OU 2 - DOD OU**

RI Report	February 1997
FS Report	April 1997
Proposed Plan	May 1997
ROD	June 1997
Remedial Design	Summer 1998

4.1.4 Environmental Restoration Early Actions Strategy

The environmental studies to characterize environmental conditions at Fort Sheridan have been comprehensive. It is not anticipated that any currently unidentified contamination will arise in the surplus OU; however, additional investigations to identify any additional sites in the DOD OU are underway. Those sites which have been identified at Fort Sheridan are being effectively managed through the implementation of the restoration strategy described in Section 4.1.3 of this plan. Should any additional environmental contamination be identified at the installation, the BCT will evaluate the need for early actions. The strategy for developing these early actions will be based on the risk posed to human health and the environment, and the impacts that the action, both negative and positive, will have on future use of the parcel. Any such future environmental restoration early actions planned for the installation will be identified in Table 4-3. Currently, environmental restoration planned early actions include the closure of Landfill No. 6 and No. 7, a UXO survey, and sewer clean-outs at two buildings.

4.1.5 Remedy Selection Approach

The EnPA has been completed, and the RI is still underway. Remedies will be selected in accordance with CERCLA and the NCP. The Fort Sheridan Project Team will involve all parties who have an impact on the remedies selected at the installation in the remedy selection process. Particular attention will be given to the following during the evaluation of alternatives:

- **Applicable or Relevant and Appropriate Requirements (ARARs).** Site-specific applicable requirements for anticipated RAs are being identified throughout the RI/FS process. The effectiveness of alternatives in reducing concentrations of contaminants to chemical-specific ARARs are being evaluated. Chemical-specific

TABLE 4-3. ENVIRONMENTAL RESTORATION PLANNED EARLY ACTIONS

Site	OU	Action	Objective	Time Frame
UXO (38-acre parcel)	Surplus	Survey/clearance	Time-critical removal action	1996
Building 43	Surplus	Sewer clean-out	Time-critical removal action	1995
Building 368	DOD	Sewer clean-out	Time-critical removal action	1995
Landfills 6 and 7	DOD	Closure	Interim Remedial Action	FS 1995/ RA 1996

ARARs "set health- or risk-based concentration limits or discharge limitations in various environmental media for specific hazardous substances, pollutants, or contaminants".

- ▶ **Future Land Use/Risk Assessment.** The reuse of any parcel of land defines the required level of remediation. Final risk assessment exposure scenarios to be developed during the Phase II RI will be consistent with reuse scenarios as defined and agreed upon by the Army in the JPC's Conceptual Land Use Plan (1994).
- ▶ **Remedy Selection.** The FS for each OU identify and screen the feasibility of a variety of remedial technologies to address the potential risk to human health and the environment posed by the contamination present at Fort Sheridan. The FS will consider factors including cost, implementability and treatment effectiveness.

The BEC will hold Project Team meetings to discuss conceptual remedies early in the FS process (initial screening of alternatives [ISA] stage) to ensure the FS focuses on the appropriate types of remedies for each site or OU.

4.2 Compliance Strategy

This section describes the strategies for addressing compliance related environmental issues in the surplus property prior to property transfer. These environmental compliance strategies have been developed to ensure that installations are compliant with federal and state regulatory programs, DOD and U.S. Army directives and regulations throughout the BRAC process.

A detailed discussion of strategies and schedules for individual compliance programs is provided in the following sections.

4.2.1.1 USTs. The compliance strategy for USTs on the surplus property is being implemented. All known USTs are being investigated for soil contamination. All known leaking and abandoned USTs will be removed prior to transfer.

4.2.1.2 ASTs. Some of the heating oil USTs were replaced with ASTs with secondary containment. All ASTs on the surplus property have been provided with secondary containment.

4.2.2 Hazardous Material Management

Hazardous materials handled in the surplus property are managed in accordance with federal requirements outlined in the SARA Title III and SPCC requirements in 40 CFR 110 and 112, IEPA regulations, AR 200-1 and other applicable federal, state, and local regulations.

4.2.3 Hazardous Waste Management

Hazardous waste generated on the surplus property will continue to be managed in compliance with federal, state, and U.S. Army regulations. The installation is closed and hazardous waste

generation is minimal (less than 5 gallons per month). The quantity will vary, however, depending on generation of wastes during the Phase II RI field work and any subsequent RAs.

4.2.4 Solid Waste Management

A licensed solid waste contractor continues to collect solid waste in the surplus property and dispose of it off-site in a permitted landfill.

4.2.5 Polychlorinated Biphenyls (PCBs)

Four PCB-containing transformers remain in operation on the surplus property. They will be regularly monitored by the Army until they are replaced or until property transfer.

4.2.6 Asbestos

Asbestos at Fort Sheridan will continue to be managed in compliance with the Department of the Army policy "Asbestos, Lead Paint, and Radon Policies at BRAC Properties," 31 October 1994. DOD policy with regard to ACM is to manage ACM in a manner protective of human health and the environment, and to comply with all applicable Federal, State, and local laws and regulations governing ACM hazards. Therefore, unless it is determined by competent authority that the ACM in the property does pose a threat to human health at the time of transfer, all property containing ACM will be conveyed, leased, or otherwise disposed of as is through the BRAC process. The U.S. Army policy on asbestos is to manage in place. All damaged and friable asbestos on the surplus property is being removed prior to property transfer. A list of all buildings currently identified as requiring asbestos abatement in the surplus property is included in Section 3.2.6.

4.2.7 Radon

In response to concerns with the potential health effects associated with radon exposure, and in accordance with the Indoor Radon Abatement provisions of Subchapter III of the Toxic Substances Control act, 26 USC 2661 to 2671, the DOD conducted a study to determine radon levels in a representative sample of its buildings. In addition, as part of DOD's voluntary approach to reducing radon exposure, DOD has applied the USEPA guidelines for residential structures with regard to remedial actions.

DOD policy is to ensure that any available and relevant radon assessment data pertaining to BRAC Property being transferred shall be included in property transfer documents.,

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

4.2.8 RCRA Facilities

There are no RCRA treatment, storage, or disposal facilities located at Fort Sheridan.

4.2.9 Wastewater Discharges

The surplus property does not currently require a NPDES permit. There are no plans to obtain a NPDES permit for any activities within the disposal and reuse parcels. If the Nike Silos must be drained to conduct interior environmental sampling, a NPDES permit will be obtained. Fort Sheridan will continue to discharge sanitary wastewater to the North Shore Sanitary Sewer District Systems.

4.2.10 Oil/Water Separators

There is a sump in Building 51 that was used historically to separate oil and water. The sump has not been used since 1989. The sump will be investigated as part of the surplus OU restoration program.

4.2.11 Pollution Prevention

The appropriate elements of the SPCC plan will be updated and will continue to be implemented until the disposal and reuse parcels are transferred.

Fort Sheridan will continue to recycle used oils, solvents, and solid waste. The possibility of recycling any materials during remedial activities will to be considered during the design phase.

4.2.12 NRC Licensing

There are no NRC licenses specific for Fort Sheridan. However, numerous radioactive commodities such as watches, compasses, etc., used in the surplus property are governed by U.S. Army-wide NRC permits. In accordance with these permit requirements, a radiation survey is being conducted in areas where these commodities were stored. If contamination is found, remediation will be conducted in accordance with NRC and environmental regulatory requirements.

4.2.13 Mixed Wastes

There is no mixed waste generated on the surplus property; therefore, there are no compliance requirements or strategies under this program for the installation.

4.2.13 Radiation

Radiation sources on the surplus property could include damaged commodities, such as compasses, which would be sent, in accordance with NRC and Department of Transportation requirements, to the U.S. Army Rock Island arsenal and await proper disposal. There are

currently no radioactive wastes being generated on the surplus property. A radiation survey, conducted in August 1995, identified potential releases of radioactive wastes.

4.2.14 Lead-Based Paint

The Fort Sheridan lead-based paint management program will continue to be conducted in accordance with Title X of the Housing and Community Development Act, the Illinois Lead Poisoning Protection Act, and the Department of the Army guidance, "Asbestos, Lead Paint, and Radon Policies at BRAC Properties," 31 October 1994. As required, all target housing buildings (as determined by the JPC's Conceptual Land Use Plan (1994)) built prior to 1978 will be inspected for the presence of lead-based paint and lead-based paint hazards. This inspection on the surplus property was completed in August 1995. The inspection results will be made available to the prospective purchasers and future property owners. Abatement of lead-based paint hazards will be required prior to residential use.

4.2.16 Medical Waste

There is no medical waste generated on the surplus property; therefore, there are no compliance requirements or strategies under this program for the installation.

4.2.17 Unexploded Ordnance

Results of the ordnance survey (February 1994) indicate that a 100 percent survey should be conducted on the previously surveyed 50-acre parcel. The systematic and complete survey that was originally planned was modified due to circumstances encountered at the project site. As a result, only 10 percent of the 50-acre parcel was surveyed. An additional UXO survey is planned for the fall of 1995.

4.2.18 National Environmental Policy Act (NEPA)

Fort Sheridan has completed all NEPA documentation for closure. The FONSI for the EA is awaiting final signature. Currently, Fort Sheridan does not have plans to produce additional NEPA documentation. Fort Sheridan will, however, continue to evaluate all applicable U.S. Army actions at the installation in compliance with NEPA requirements. Following the U.S. Army's review of the FONSI, action will be taken as needed.

4.2.19 Air Emissions

Under the requirements of Title V of the CAA, a Federally Enforceable State Operating Permit (FESOP) application was submitted in June 1995. The property is currently in interim status while the state processes the application, which according to IEPA could take 6 months to 2 years.

4.3 Natural and Cultural Resources Strategy(ies)

This section describes the strategies for natural and cultural resource programs at Fort Sheridan developed to manage these resources throughout the BRAC cleanup and property transfer process.

4.3.1 Vegetation

The Army will continue to conduct environmental remediation efforts in a manner that minimizes impacts to the existing vegetation on the surplus property.

4.3.2 Wildlife

The Army will continue to conduct environmental remediation efforts in a manner that minimizes impacts to the existing wildlife habitat and populations on the surplus property.

4.3.3 Wetlands

Although the two wetland areas on the surplus property are un-delineated wetlands, they are still protected areas. The Army will continue to coordinate and comply with restrictions on environmental restoration work in the designated wetland areas on the fort. Parcels containing wetlands and permitting requirements would be indicated in the FOST and deed.

4.3.4 Designated Preservation Areas

The Army will continue to conduct environmental remediation efforts in a manner that minimizes impacts to the Janes Ravine and Lake Shore Bluff habitats listed in the INAI as being of state-wide importance and value. Parcels containing these designated preservation areas would be indicated in the FOST and deed.

4.3.5 Threatened and Endangered Species

Any federally listed threatened and endangered plant or animal species will be protected if observed to be present on Fort Sheridan. State-listed plant species known to be present on the fort will be considered, and efforts will be taken to preserve these species during remedy selection and remedial action activities. The BCT will evaluate the need to update available information on the presence and distributions of sensitive plant and animal species occurring in the Surplus Parcel. This will assist the BCT during the reuse planning process and could expedite the transfer of sensitive habitats to the appropriate organizations.

4.3.6 Cultural Resources

Fort Sheridan will continue to preserve and protect the cultural resource values within the Historic District and elsewhere in the surplus property. The planning process will follow the requirements of the PA and the suggestions in the September 1993 report entitled "Literature Review, Archaeological Evaluation and Phase I Archaeological Reconnaissance."

4.3.7 Other Resources

No other significant resources are known to be present within the Surplus Parcel.

4.4 Community Involvement/Strategy

The CRP was completed July 1994 and updated September 1994 to facilitate communication among the U.S. Army, other federal, state, or local agencies, the Fort Sheridan RAB, and interested groups and other community residents concerning restoration activities and reuse planning at Fort Sheridan. Additionally, a RAB was established in December 1994 to facilitate community involvement in the environmental restoration process. The implementation of the CRP and the RAB ensures that all parties involved or interested in the Fort Sheridan environmental restoration process are provided mechanisms to discuss their concerns with the Army. They also ensure the public is provided accurate, consistent information in a timely manner concerning related cleanup activities, contaminants, and possible effects of any contamination.

In addition to the CRP and RAB, the Fort Sheridan BCT has adopted the following strategy to support a proactive community relations program in accordance with the CERCLA requirements:

- ▶ Review and update the CRP as needed.
- ▶ Maintain the information repositories at the installation and the local community libraries.
- ▶ Publish fact sheets on the progress of environmental restoration and disposal programs.
- ▶ Continue coordination with the Joint Planning Committee and concerned local agencies.
- ▶ Continue to issue public notices two weeks in advance of public comment periods on these plans in local newspapers.
- ▶ Continue to hold 30-day public comment periods on proposed plans, and respond to all comments in a responsiveness summary.
- ▶ Continue to inform the public of RAB meetings and solicit information from the public during the RAB meetings.
- ▶ Maintain an Administrative Record at the installation.

CHAPTER 5

► ENVIRONMENTAL PROGRAM MASTER SCHEDULES ◀

This chapter presents the Fort Sheridan Master Schedules of anticipated activities in the installation's environmental programs. These schedules are simplified from detailed network and operational schedules developed to support OU-specific work plans and compliance requirements. Each of these schedules displays the critical path analysis for the respective installation program. Components in each analysis include critical and noncritical path, baseline, completed duration, milestones, float, delay and conflict. These components are defined in Section 4.1.3.

5.1 Environmental Restoration Program

This section presents response schedules and outlines fiscal year requirements for Fort Sheridan's environmental restoration program.

5.1.1 *Response Schedules*

The installation's ability to meet the milestones shown on the schedule in Figure 5-1 hinges on a number of factors including (1) completion of IRP activities without discovery of additional contamination sources for any OU; (2) timely contract awards for RAs; (3) signing of the appropriate DD; (4) resolution of issues related to real estate transfer of property with the possibility of long-term RAs, including access, liability, impact on redevelopment and conflicts with construction; (5) regulatory, public, and installation document review times; and (6) site-specific conditions (weather, additional contamination, etc.).

5.1.2 *Requirements by Fiscal Year*

The detailed requirements information by fiscal year is contained in the Fort Sheridan Work Plan and is incorporated into this document by reference. The tables in Appendix A are taken directly from the Work Plan and provide summary information on funding requirements.

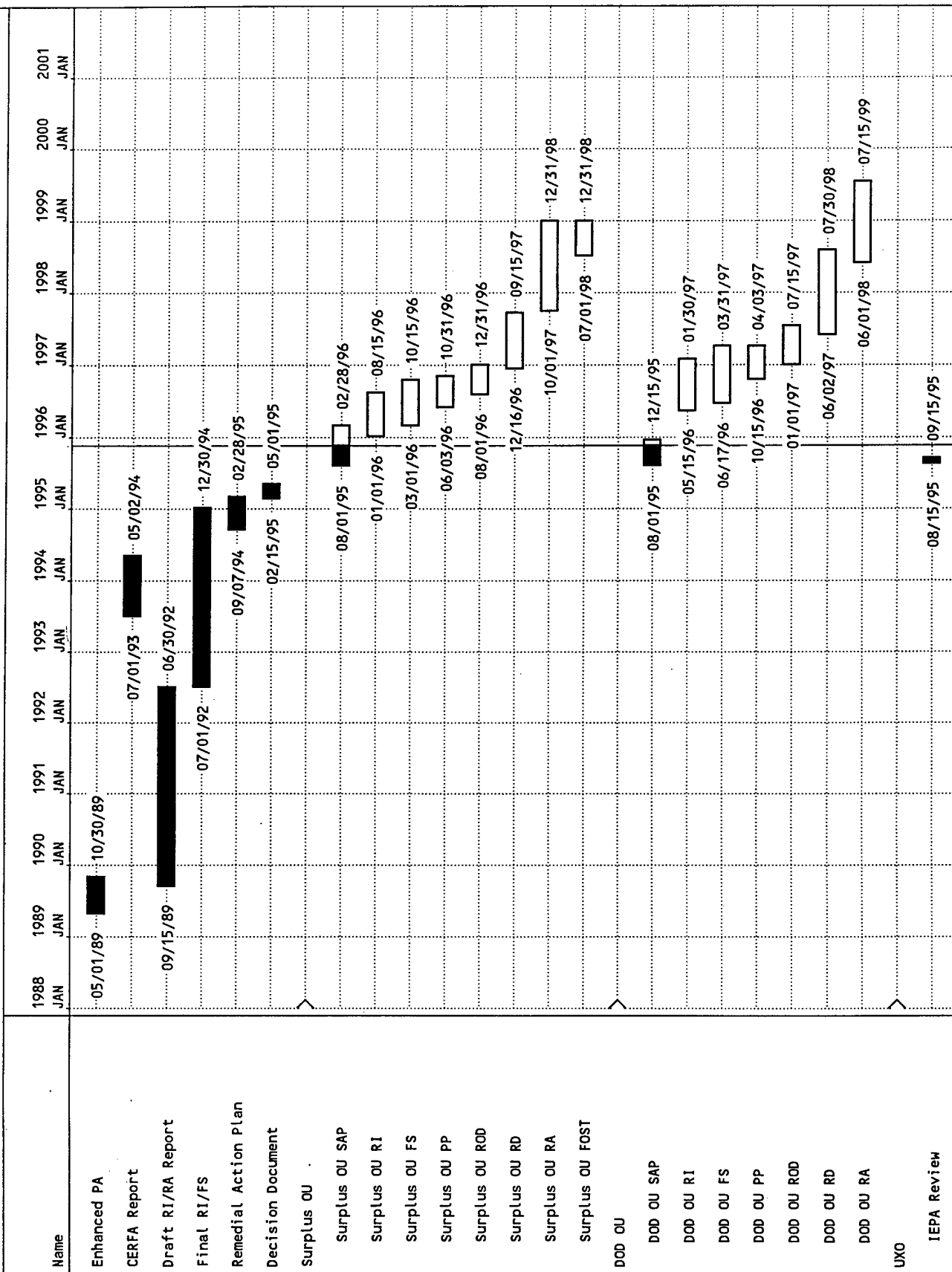
5.2 Compliance Programs

This section presents master compliance schedules and outlines fiscal year requirements for Fort Sheridan's environmental compliance programs in the surplus property.

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PROJECT: Fort Sheridan
 MANAGER: Colleen Reilly
 CURRENT DATE: 11/17/95

Figure 5-1 Environmental Rest.



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5.2.1 Master Compliance Schedules

No mission/operation-related compliance programs at Fort Sheridan include hazardous waste generation, air emissions, and radioactive materials management (Figure 5-2). The compliance schedule for closure-related compliance programs is provided as Figure 5-3.

5.2.2 Requirements by Fiscal Year

The detailed requirements information by fiscal year is contained in the Fort Sheridan Work Plan and is incorporated into this document by reference. The tables in Appendix A to this document are taken directly from the Work Plan and provide summary information on funding requirements.

5.3 Natural and Cultural Resources

This section presents master natural and cultural resources activity schedules and outlines fiscal year requirements for Fort Sheridan natural and cultural resource programs.

5.3.1 Natural and Cultural Resources Schedule(s)

The natural and cultural resources schedule for past projects at Fort Sheridan is provided in Figure 5-4. There are currently no cultural resources projects planned at Fort Sheridan. The BCT will evaluate the need for studies to update the biological information available for the Fort Sheridan disposal and reuse parcels.

5.3.2 Requirements by Fiscal Year

The detailed requirements information by fiscal year is contained in the Fort Sheridan Work Plan and is incorporated into this document by reference. The tables in Appendix A to this document are taken directly from the Work Plan and provide summary information on funding requirements.

5.4 Meeting Schedule

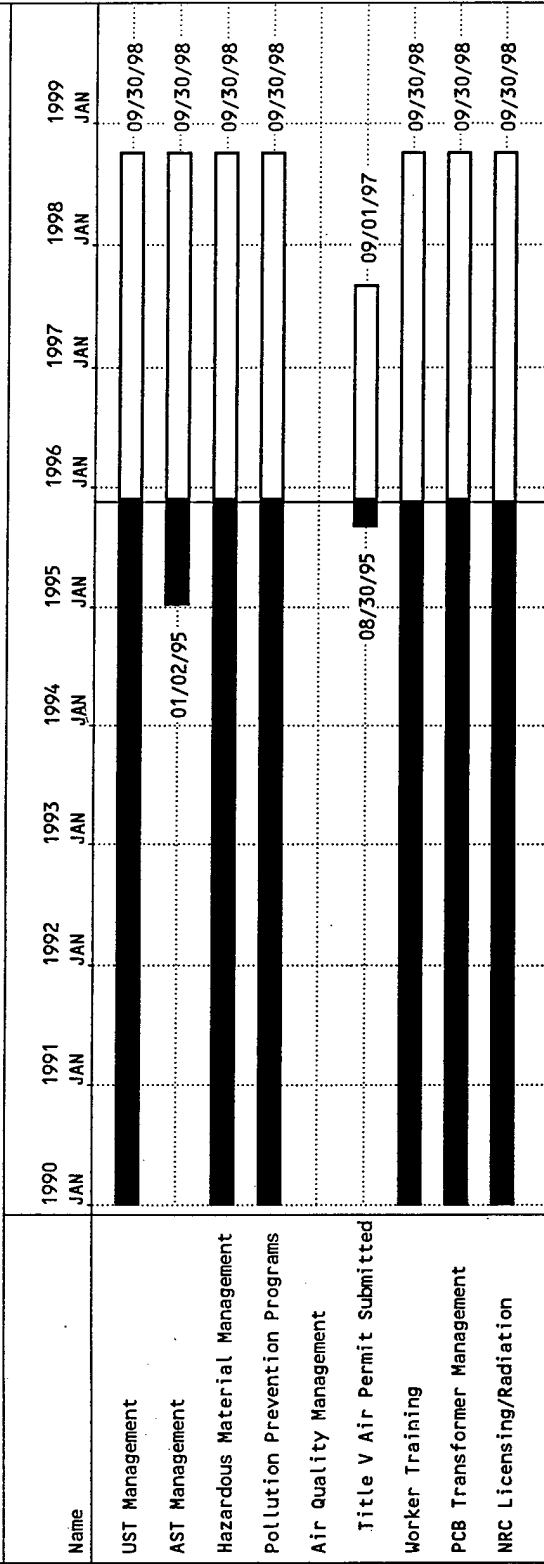
Meetings are scheduled to promote an expedited restoration schedule for Fort Sheridan. Meetings are typically held as follows:

- ▶ BCT Meetings - Monthly (the third Tuesday and Wednesday)
- ▶ Technical/Issue Resolution Meetings - As necessary to facilitate continued progress on restoration/compliance and planning related activities
- ▶ BRAC In-Progress Review Meetings - Monthly as part of the BCT meetings
- ▶ RAB meetings - monthly (the third Tuesday).

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PROJECT: Fort Sheridan
 MANAGER: Colleen Reilly
 CURRENT DATE: 11/20/95

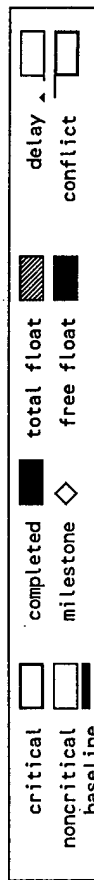
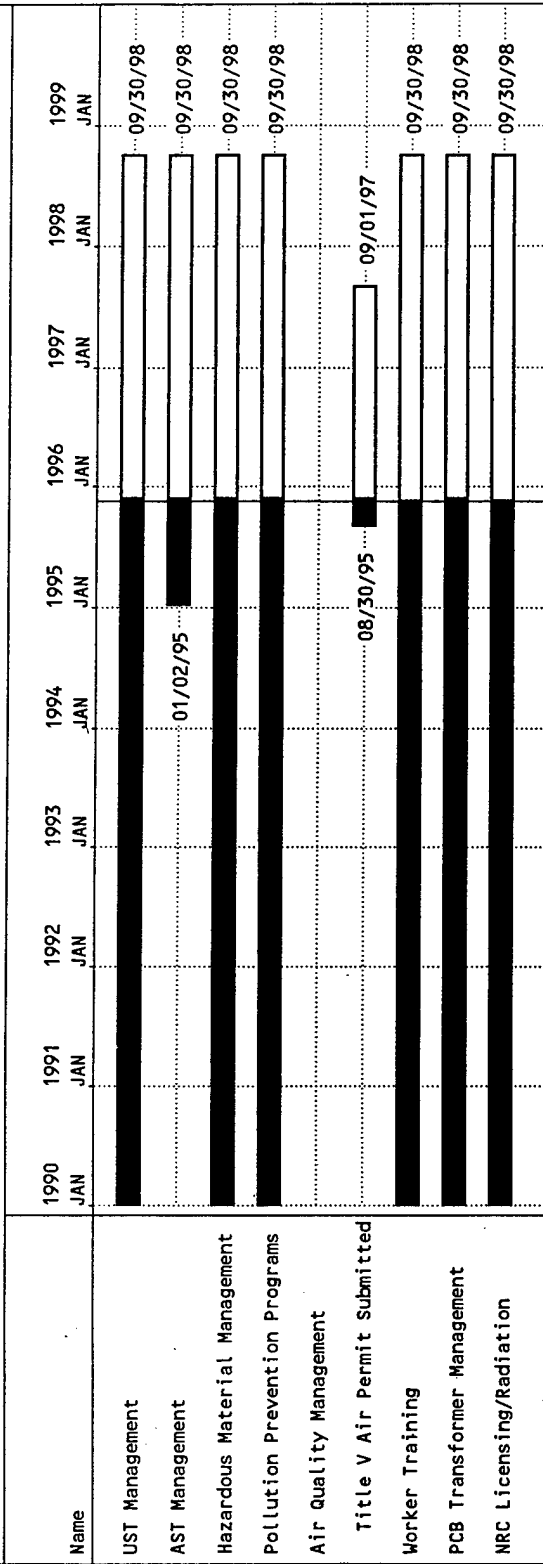
Figure 5-2 Mission-Operational



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PROJECT: Fort Sheridan
 MANAGER: Colleen Reilly
 CURRENT DATE: 11/20/95

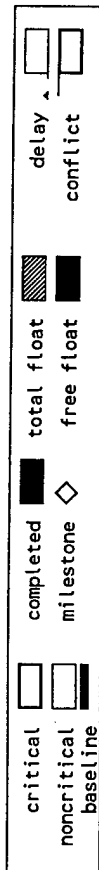
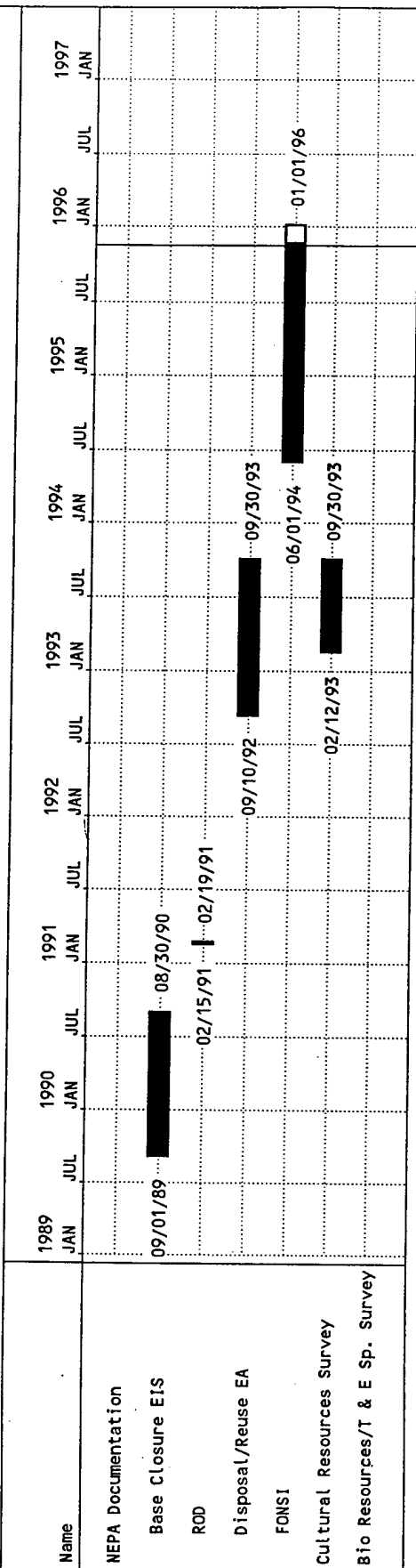
Figure 5-3 Closure-Compliance



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PROJECT: R. J. Sheridan
 MANAGER: Colleen Reilly
 CURRENT DATE: 11/17/95

Fig 5-4 Natural/Cultural Res.



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CHAPTER 6

► TECHNICAL AND OTHER ISSUES TO BE RESOLVED ◀

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

Table 6-1 lists technical and other issues typically found at BRAC installations. The table identifies the applicability and current status of each of these issues for Fort Sheridan. Many of these technical issues for Fort Sheridan have been resolved and others are not an outstanding issue at this time. Outstanding technical issues at Fort Sheridan are provided in the following subsections. Table 6-1 will be updated as needed in future versions of the BCP.

6.16 Identification of Clean Properties

The identification of clean properties has been completed at Fort Sheridan. The status and strategy for the continued evaluation of these properties is described in the following subsections.

6.16.1 BCT Action Items

As areas on the surplus property are remediated, the BCP and associated environmental condition of property and property suitable for transfer maps will be updated to reflect the changes. Similarly, if additional contamination is identified at the installation, appropriate modifications to the maps will be made.

6.16.2 Rationale

It is necessary to identify clean properties as part of the property transfer effort. SARA Title I, Section 120 to CERCLA addresses the transfer of federal property on which any hazardous substances were stored during any one year period, or is known as the site of any release or disposal of hazardous substances. SARA Title I, Section 120 to CERCLA also requires any deed for the transfer of this federal property to contain, to the extent such information is available on the basis of a complete search of agency files, the following information:

- ▶ A notice of the type and quantity of any hazardous substance storage, release, or disposal.
- ▶ Notice of the time at which such storage, release, or disposal took place.
- ▶ A description of what, if any, RA has occurred, and
- ▶ A covenant warranting that appropriate RA will be taken.

TABLE 6-1. TECHNICAL AND OTHER ISSUES TO BE RESOLVED

Technical Issue	Not An Issue At This Time	Resolved (Yes/No)	Date Resolved	How Issue Was Resolved
6.1 Data Usability	✓	Yes	August 1994-December 1994	Army will validate all Phase I RI data
6.2 Information Management	✓			
6.3 Data Gaps	✓	Yes	August 1994	Army will implement a Phase II RI
6.4 Background Levels	✓	Yes	August 1994	Army will resample for background levels
6.5 Risk Assessments	✓	Yes	November 1994	JPC finalized a Reuse Plan and Army will conduct Phase II RI
6.6 Installation-wide Remedial Action Strategy	✓			
6.7 Interim Monitoring of Groundwater and Surface Water	✓			
6.8 Excavation of Contaminated Materials	✓			
6.9 Protocols for Remedial Design Reviews	✓			
6.10 Conceptual Models	✓			
6.11 Cleanup Standards	✓	Resolution will be addressed in Risk Assessment. Groundwater classification determines cleanup objectives		
6.12 Initiatives for Accelerating Cleanup	✓			
6.13 Remedial Actions	✓			
6.14 Review of Selected Technologies for Application of Expedited Solutions	✓			
6.15 Hot Spot Removals	✓			
6.16 Identification of Clean Properties		No		
6.17 Overlapping Phases of the Cleanup Process	✓			
6.18 Improved Contracting Procedures	✓			
6.19 Interfacing with the Community Reuse Plan	✓			
6.20 Bias for Cleanup Instead of Studies	✓			
6.21 Expert Input on Contamination and Potential Remedial Actions	✓			
6.22 Generic Remedies	✓			

TABLE 6-1. TECHNICAL AND OTHER ISSUES TO BE RESOLVED**Continued**

Technical Issue	Not An Issue At This Time	Resolved (Yes/No)	Date Resolved	How Issue was Resolved
6.23 Partnering (Using Innovative Management, Coordination, and Communication Techniques)	✓	Yes	December 1994	
6.24 Updating the CERFA Report and Natural/Cultural Resources Documentation		No		
6.25 Implementing the Policy for On-Site Decision Making	✓			
6.26 Structural and Infrastructure Constraints to Reuse		No		
6.27 Other Technical Reuse Issues to be Resolved	✓			
6.28 UXO Surveys	✓	Yes		

Under CERCLA Section 120, federal property which has had a release can not be transferred unless the release has been remediated or has a remedy in place.

In October 1992, Public law 102-426, CERFA amended Section 120(h) of CERCLA and established new requirements with respect to contamination assessment, cleanup, and regulatory agency notification/concurrence for federal facility closures. CERFA requires the federal government, before termination of federal activities on real property, identify property where no hazardous substances were stored, released, or disposed of. The primary CERFA objective is for federal agencies to expeditiously identify real property offering the greatest opportunity for immediate reuse and redevelopment.

6.16.3 Status/Strategy

Sections 3.4 and 3.5, Environmental Condition of Property and Suitability of Property for Transfer, outline the steps Fort Sheridan has taken to define the environmental condition of property and identify property that is suitable for transfer as required under CERCLA Section 120 and CERFA.

The IEPA has reviewed the CERFA Report. See Section 3.4 for IEPA's concurrence and non-concurrence of the CERFA parcels.

The CERFA Investigation for the installation was completed in April 1994. An environmental condition of property map was generated as part of that effort and is provided as Figure 3-2 in Section 3.4 of the BCP. The map identifies property in four environmental categories on a one-acre grid basis.

The CERFA map has been further refined as part of the BCP process. A property suitable for transfer map has been developed using information from the CERFA investigation, the installation RI and FS and other sources. The map identifies Fort Sheridan properties in seven categories based on historical evidence of storage or release of hazardous materials or POL and the status of related restoration activities. This map is provided in Appendix F as Figure 3-3. The map was created using geographic information system (GIS).

The environmental condition of property map and property suitable for transfer map will be updated as areas of Fort Sheridan are remediated so that an accurate visual portrayal of property available for transfer is maintained.

6.24 Updating the CERFA Report and Natural/Cultural Resources Documentation

This section summarizes updating the unresolved issues pertaining to updating the CERFA report and natural/cultural resources documentation.

6.24.1 BCT Action Items

There are no regulatory requirements to update the CERFA report. However the BCT will update the environmental condition of property and property suitable for transfer maps. Updating natural/cultural resources are not an issue at this time.

6.24.2 Rationale

Updates of the environmental condition of property and the property suitable for transfer maps are necessary to reflect changes in site restoration and category reclassification after completion of RAs. It is anticipated that through site restoration and category reclassification, all of Fort Sheridan's surplus property will be eligible for property transfer.

6.24.3 Status/Strategy

The environmental condition of property map and associated CERFA regulatory concurrence map are provided as Figure 3-2 in Chapter 3 of this BCP.

The property suitable for transfer map is included as Figure 3-3 in Appendix F of this BCP. The BCT will periodically review the CERFA report, environmental condition of property and property suitable for transfer maps, in conjunction with new data from RAs to determine if parcels can be reclassified to allow property transfer.

6.26 Structural and Infrastructural Constraints to Reuse

This section discusses unresolved issues related to structural and infrastructural constraints to the reuse of Fort Sheridan.

6.26.1 BCT Action Items

Structural and cosmetic changes to historical structures are restricted. Any structural changes need to be approved by the State Historic Preservation Officer and the Advisory Council on Historic Preservation.

6.26.3 Status/Strategy

The BCT must ensure that all environmental remedial designs and response actions in the surplus property Historic District are conducted in accordance with the PA and/or coordinated with the SHPO.

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CHAPTER 7

► PRIMARY REFERENCES ◀

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Chemical Systems Laboratory, Aberdeen Proving Ground. 1982. Installation Assessment of Fort Sheridan and Joilet Training Area, Illinois.

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APPENDIX A

► FISCAL YEAR FUNDING REQUIREMENTS/COSTS ◄

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TABLE A-1. TOTAL ENVIRONMENTAL PROGRAM SUMMARY

FUND REQUIREMENTS (\$000)								
Program	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	Total
IRP DERA	0	0	0	0	0	0	0	0
IRP BRAC	2,485	6,723	11,186	5,575	0	0	0	25,969
EC-CR	0	-	3,008	125	0	0	0	3,133
EC-MR	0	0	10	10	0	0	0	20
NAT/CULT	117	40	10	0	0	0	0	167
Total	2,602	6,763	14,214	5,710	0	0	0	29,289

TABLE A-2. HISTORICAL ENVIRONMENTAL PROGRAM EXPENDITURES SUMMARY

FUND REQUIREMENTS (\$000)								
Program	FY 1986	FY 1987	FY 1988	FY 1989	FY 1990	FY 1991	FY 1992	Total
IRP DERA	0	0	0	0	0	0	0	0
IRP BRAC	0	0	0	0	2,999	512	513	4,024
EC-CR	0	0	0	0	0	0	0	0
EC-MR	0	0	0	0	0	0	0	0
NAT/CULT	0	0	0	0	0	0	0	0
Total	0	0	0	0	2,999	512	513	4,024

Key: IRP DERA = Installation Restoration Program Defense Environmental Restoration Account
 IRP BRAC = Installation Restoration Program Base Realignment and Closure
 EC-CR = Environmental Compliance - Closure-Related
 EC-MR = Environmental Compliance - Mission-Related
 NAT/CULT = Natural/Cultural

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APPENDIX B

► INSTALLATION ENVIRONMENTAL RESTORATION DOCUMENT SUMMARY TABLES ◄

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TABLE B-1. PROJECT DELIVERABLES

Year	CERCLA Phase/ Program Area	Project Title	Report No.	Delivery Date/Contractor
1982	IA	Installation Assessment of Fort Sheridan and Joliet Training Area	1	1982/Chemical Systems Laboratory
1984	PA	Enhanced Preliminary Assessment Report: Fort Sheridan	2	1989/Argonne National Laboratory
1990	NEPA	Fort Sheridan, IL Base Closure Final Environmental Impact Statement	3	1990/U.S. Army
1992	RI/RA	Draft Final Remedial Investigation (RI)/Risk Assessment (RA) Report Remedial Investigation/Feasibility Study, Fort Sheridan, IL	4	1992/Environmental Science and Engineering, Inc., U.S. Army Corps of Engineers
1992	RI/RA	Report of Findings for PCB Transformer Sampling Conducted at Fort Sheridan	5	1992/Environmental Science and Engineering, Inc.
1992	UST	Closure Report/Remove Underground Storage Tanks, Fort Sheridan, IL	6	1992/Allstates Environmental Services, Inc.
1993	NEPA	Final Environmental Assessment for Disposal and Reuse of Fort Sheridan, IL	7	1993/U.S. Army Corps of Engineers
1993	Cultural Resources	Literature View, Architectural Evaluation and Phase I Archaeological Reconnaissance of Selected Portions of Fort Sheridan, IL	8	1993/USACERL
1994	CERFA	CERFA Report	9	1994/EARTH TECH
1994	RI/RA	Fort Sheridan Ordnance Survey (50-acre parcel)	10	1994/International Technology Corporation
1995	RI/RA	Overall Quality Assurance Project Plan	11	1995/Environmental Science and Engineering
1992	Asbestos	Final Report of Asbestos Inspection and Survey	12	1995/Environmental Science and Engineering
1995	Lead-based Paint	Lead-Based Paint Testing and Risk Assessment	13	1995/Recon Environmental Corporation

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APPENDIX C

► DECISION DOCUMENT/ROD SUMMARIES ◀

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APPENDIX C

► DECISION DOCUMENT/ROD SUMMARIES ◀

A decision document, action memorandum, dated September 1995, has been prepared for Buildings 43 and 368 at Fort Sheridan. The document in its entirety, as included in this appendix.

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ACTION MEMORANDUM
Buildings 43 and 368
Fort Sheridan, Illinois

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval to conduct a time critical removal action at Fort Sheridan. This removal action is necessary to mitigate an imminent and substantial threat to public health and the environment posed by the presence of hazardous wastes in storm sewer manways and a chemical separator adjacent to Building 43 and in the storm sewer manhole adjacent to Building 368, Fort Sheridan, Illinois. The subject sediments and liquid at Building 43 contain listed and characteristically hazardous wastes. Sediments from Building 368 contain characteristically hazardous wastes. These sites are located directly upgradient from ravines which carry storm water into Lake Michigan.

The proposed removal action will eliminate the immediate threats posed by the contaminated liquids and sediments within the sewer manholes, chemical separator and any associated sewer lines, pipes, and drainage areas found to be similarly contaminated within and around Buildings 43 and 368.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Removal site evaluation

Fort Sheridan officially closed in May, 1993. Between 1960 and 1992, Building 43 served as the post General Support Shop, where activities such as furniture repair and typewriter repair were conducted. Solutions containing methylene chloride and xylene were used in the south side of Building 43 for furniture stripping. Subsequent to stripping operations, the spent solutions were reportedly poured into the floor drain located in the wash room of the building. The floor drain is suspected to drain into the storm sewers adjacent to the building.

A chemical separator is located immediately outside the east door

ACTION MEMORANDUM Request for a Time-Critical Removal Action at Buildings 43 and 368, Fort Sheridan, IL

of Building 43 below the concrete entrance stairs. During a February, 1995 site assessment, a strong "solvent-type" odor was detected around the chemical separator manhole cover and around the storm sewer manhole covers east of the building. These manholes are not secured and are exposed to storm water flow. Sediment and liquid samples were collected from the separator in March, 1995.

The analysis revealed the sediments from the separator are both reactive (because of high concentrations of sulfides) and flammable (a flashpoint of 108°F). The separator appears to be approximately 6 feet by 4 feet by 7 feet deep. 6 to 8 inches of sediment was noted at the bottom and lower sides of the separator. The quantity of the sediment is estimated to be between 50 and 100 gallons. It is unknown when the separator was put into or taken out of service, however, reportedly the liquids have been periodically cleaned out by a private contractor. The "solvent-type" odor can be detected around one of the manhole covers directly east across Chapman Road.

The storm sewer manhole located immediately adjacent to Building 43 to the east (south of the subject chemical separator) is approximately 3 feet in diameter and 8 feet deep. This storm sewer was sampled in 1992 as part of the on-going Remedial Investigation (RI) at the installation. The analysis revealed extremely high concentrations of volatile and semi-volatile organic compounds (including methylene chloride (>100000 µg/l) and xylene (49000 µg/l) in the liquid samples. No samples were taken from Bartlett Ravine because there was no water flowing at the time.

Building 368 was the base auto craft and hobby shop. During the February, 1995 site assessment standing oil was present in a manhole adjacent to the Building. In March, 1995, sediment and liquid samples were collected from the storm sewer manhole. The analysis revealed the sediments contain high concentrations of sulfides causing them to be reactive. The site is immediately upgradient from Van Horne Ravine, however, it is unknown if this

**ACTION MEMORANDUM Request for a Time-Critical Removal Action at
Buildings 43 and 368, Fort Sheridan, IL**

storm sewer leads to the ravine. The sampling revealed that only about 1 inch of oil was floating on the surface of standing water in the manhole.

2. Physical Location

Building 43 is bordered on the east by Chapman Road and the south by Thorpe Road. The north and west sides of the building are adjacent to Buildings 42 and 63, respectively. Building 43 is presently unoccupied. Building 43 is located directly north-northwest of Bartlett ravine, which drains directly into Lake Michigan. No residential areas exist in the immediate area of Building 43. The locations of the subject manhole and chemical separator are illustrated on Figure 1. Building 43 is located within Fort Sheridan property which has been declared surplus and is awaiting transfer outside the federal government.

Building 368 is located at the east end of McKibben Road on Ft. Sheridan Navy property. The building is surrounded on the south, east and north by an asphalt parking area. The west side is bordered by a grassy area, with a ditch leading to Van Horne Ravine. The ravine is located directly north of Building 368 and extends to the northeast down to Lake Michigan. The location of the subject manhole at this building is illustrated on Figure 2. No residents are living in the direct vicinity of the building. However, residential areas are located across the ravine to the north. The building is currently occupied by U.S. Navy Public Works personnel.

3. Site Characteristics

During operation as the base General Support Shop, it appears that solvents from furniture stripping activities at Building 43 were discharged into the manhole via a 4 inch diameter pipe. In addition, two other storm sewer lines drain into the manhole. The pipe leading away from the manhole extends southeast and crosses under Chapman Road about 12 feet southeast of the manhole via an 8 inch diameter tile pipe. This pipe, in turn, connects to a 12 inch diameter pipe which runs east by northeast. This

**ACTION MEMORANDUM Request for a Time-Critical Removal Action at
Buildings 43 and 368, Fort Sheridan, IL**

combined sewer extends approximately 50 feet before it reaches its outfall in Bartlett Ravine (See Figure 1). The origin of lines entering into or the destination of lines leaving the chemical separator is unknown.

Prior to 1993, Building 368 was the base auto hobby shop, used by base personnel to conduct maintenance on personal vehicles. The source of the high concentrations of sulfides is assumed to be waste oil. The origin of lines entering into or the destination of lines leaving the storm sewer manhole is unknown.

**4. Release or Threatened Release Into the Environment of a
Hazardous Substance, or Pollutant or Contaminant**

The analytical results from Buildings 43 and 368 have indicated the presence of listed (F002) and/or characteristically (D003 and/or D001) hazardous wastes. Hazardous wastes classify as hazardous substances according to Section 101 (14) of CERCLA. These wastes are being released to the environment through volatilization and through contact with storm water. They are potentially being carried into the ravines via these storm sewer manways and eventually, into Lake Michigan.

5. National Priorities List (NPL) Status

Fort Sheridan has not been proposed for the NPL. The hazard ranking system (HRS) score is reportedly underway.

6. Maps, Pictures and Other Graphic Representations

The general diagram of Building 43 and its associated chemical separator and storm sewer manways are indicated in Figure 1 (attached). The general diagram of Building 368 and its associated storm sewer manhole is indicated in Figure 2 (attached)

B. State and Local Authorities' Roles

1. State and Local Actions to Date

**ACTION MEMORANDUM Request for a Time-Critical Removal Action at
Buildings 43 and 368, Fort Sheridan, IL**

No state or local actions have been initiated to date.

2. Potential For Continued State/Local Response

The Illinois Environmental Protection Agency (IEPA) will provide assistance in reviewing all documents associated with the removal of the sediments in the manway. No monetary assistance is expected from state or local authorities.

**III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND
STATUTORY AND REGULATORY AUTHORITIES**

Conditions observed at Buildings 43 and 368 which may be considered in determining the appropriateness of a removal action as specified in section 300.415 paragraph (b)(2) of the National Oil and Hazardous Substance Pollution Contingency Plan (NCP) include:

- (i) Actual or potential exposure to nearby human population, animals, or the food chain from hazardous substances, pollutants, or contaminants:**

Potential exposure of workers and nearby populations to hazardous wastes exists at Buildings 43 and 368. Analytical results indicate the presence of elevated levels of volatile organic compounds. Extremely high levels of methylene chloride and xylene were found at building 43. These volatile organics are considered hazardous through inhalation, ingestion, and direct contact. Methylene chloride is a suspected carcinogen and exposure is known to cause fatigue and numbness of the extremities. Exposure to xylene is known to cause irritation to the eyes, nose and throat, headaches, dizziness, nausea, and may result in breathing difficulty. The area is unsecured, the fort is open to the public and there are residences who live on the fort.

- (ii) Weather conditions that may cause hazardous substances, pollutants, or contaminants to migrate or be**

**ACTION MEMORANDUM Request for a Time-Critical Removal Action at
Buildings 43 and 368, Fort Sheridan, IL**

released.

When the subject storm sewer manhole at Building 43 is exposed to rainwater, the water becomes contaminated from the VOC and SVOC liquids and sediments in the bottom of the manhole. This water is discharged into Bartlett Ravine as described previously and illustrated in Figure 1. Bartlett Ravine provides a direct pathway to Lake Michigan.

(iii) Threat of fire or explosion.

Analytical results of samples collected from the sediments of the Building 43 chemical separator indicate a flashpoint of 108°F. This flashpoint is below the RCRA limit for ignitibility of 140°F as specified by 40 CFR 261.21. Therefore, these materials are RCRA D001 characteristic waste. In addition, the analytical results of samples collected from the sediments of the Building 43 chemical separator and the Building 368 storm sewer manway indicate these sediments are reactive (as specified by 40 CFR 261.21) because of the high concentrations of sulfides.

IV. ENDANGERMENT DETERMINATION

The current site conditions, the nature of the hazardous substances on-site, and the potential exposure pathways to the workers or individuals accessing the chemical separator or the storm sewer manways described in sections II and III, if not addressed by implementing the response actions selected in this Action Memorandum, present an imminent and substantial endangerment to public health, or welfare or to the environment. Implementation of the response actions selected in this Action Memorandum will mitigate the actual and/or threatened releases of hazardous substances from this site and the threat of fire/explosion.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

ACTION MEMORANDUM Request for a Time-Critical Removal Action at Buildings 43 and 368, Fort Sheridan, IL

A. Proposed Actions

1. Proposed Action Description

A licensed hazardous waste removal contractor will be retained to conduct this proposed action. A work plan and a health and safety plan will be prepared. The liquids and contaminated sediments would be removed from the storm sewer manways at Buildings 43 and 368 and the chemical separator at Building 43 to alleviate the potential and actual threats to public health. Contaminated sediments in sewer lines adjacent to or connected with the subject manholes at Buildings 43 and 368, found to be similarly affected, will also be cleaned out under this removal action. Following the waste removal, the manways and chemical separator will be properly decontaminated/cleaned.

All contaminated wastes will be appropriately containerized, securely and safely stored, fully characterized and then transported to a licensed RCRA treatment, storage, and disposal (TSD) facility. It is estimated that between 100 to 300 gallons of contaminated sediments will be taken to an off-site RCRA TSD facility under this time critical removal action. Post removal site control will not be needed.

2. Contribution to Remedial Performance

The on-going installation Remedial Investigations (RI) will evaluate whether sediments, soils, and groundwater outside the manholes at Buildings 43 and 368 and outside the chemical separator at Building 43 have been similarly affected. The contaminated sediments within the storm sewer manholes and the chemical separator present the most immediate threat at these buildings to public health and the environment. This removal action will remove the source of contamination and, therefore, will not be inconsistent with any required future response actions.

3. Description of Alternative Technologies

**ACTION MEMORANDUM Request for a Time-Critical Removal Action at
Buildings 43 and 368, Fort Sheridan, IL**

Based on the minimal quantity of contaminated sediments and the nature of the contamination, no alternative technologies are being considered.

4. Engineering Evaluation and Cost Analysis (EE/CA)

This removal action is classified as time critical, therefore, an EE/CA is not applicable.

**5. Applicable or Relevant and Appropriate Requirements
(ARARs)**

State and federal ARARs include the Resource Conservation and Recovery Act (RCRA), the Clean Water Act (CWA), and the National Contingency Plan (NCP). To the extent practicable, compliance with all ARARs of federal and state statutes will be observed during this removal action.

6. Project Schedule

This removal action is tentatively scheduled for September, 1995. It is estimated that it will be completed within 14 working days. This estimate does not include off-site disposal schedules. Detailed schedules will be developed prior to the initiation of the removal action.

7. Public/Community Involvement

It is Army and Department of Defense policy to involve the local community as early as possible and throughout the Installation Restoration process at an installation. To accomplish this for this removal action, Fort Sheridan will comply with the public participation requirements of the National Oil and Hazardous Substance Pollution Contingency Plan (NCP) Sections 300.415(m) and 300.820. This action has been coordinated and communicated to the public through the Fort Sheridan Restoration Advisory Board, the Fort Sheridan Joint Planning Committee, and through a public notice.

ACTION MEMORANDUM Request for a Time-Critical Removal Action at Buildings 43 and 368, Fort Sheridan, IL

B. Estimated Costs

Cost for the subject activity is estimated to be between \$25,000 to \$50,000.

VI. CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Due to the presence of RCRA listed and/or characteristic wastes contained in the storm sewer manways and chemical separator of Buildings 43 and 368, delayed action may result in the continued exposure of hazardous substances to the public and the environment and the continued threat of fire or explosion.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues at these sites.

VIII. ENFORCEMENT

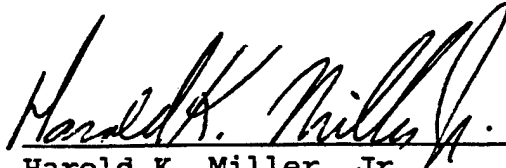
The Department of Defense (DOD) is the sole potentially responsible party (PRP) for this action. At this time, there are no ensuing enforcement actions pending at these sites.

IX. RECOMMENDATION

This decision document represents the selected removal action for Buildings 43 and 368 located on Fort Sheridan, Illinois, developed in accordance with CERCLA as amended by the Superfund Amendments and Reauthorization Act (SARA), and is not inconsistent with the NCP. The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants or contaminants at the site which may pose an imminent and substantial endangerment to public health and to the environment. This decision is based on the

Administrative Record for the site. Attachment 3 identifies the items that comprise the Administrative Record upon which the selection of the removal action is based. Conditions at Buildings 43 and 368 meet one or more of the NCP, 40 CFR, Section 300.415 (b) (2) criteria for a removal action. Recommend your approval of the proposed removal action. Please indicate your decision by signing below.

APPROVE:


Harold K. Miller, Jr.
Colonel, U.S. Army
Commanding Officer

DATE: 21 SEP 95

DISAPPROVE:

Harold K. Miller, Jr.
Colonel, U.S. Army
Commanding Officer

DATE: _____

Attachments: I. Figure 1
II. Figure 2
III. Administrative Record Index

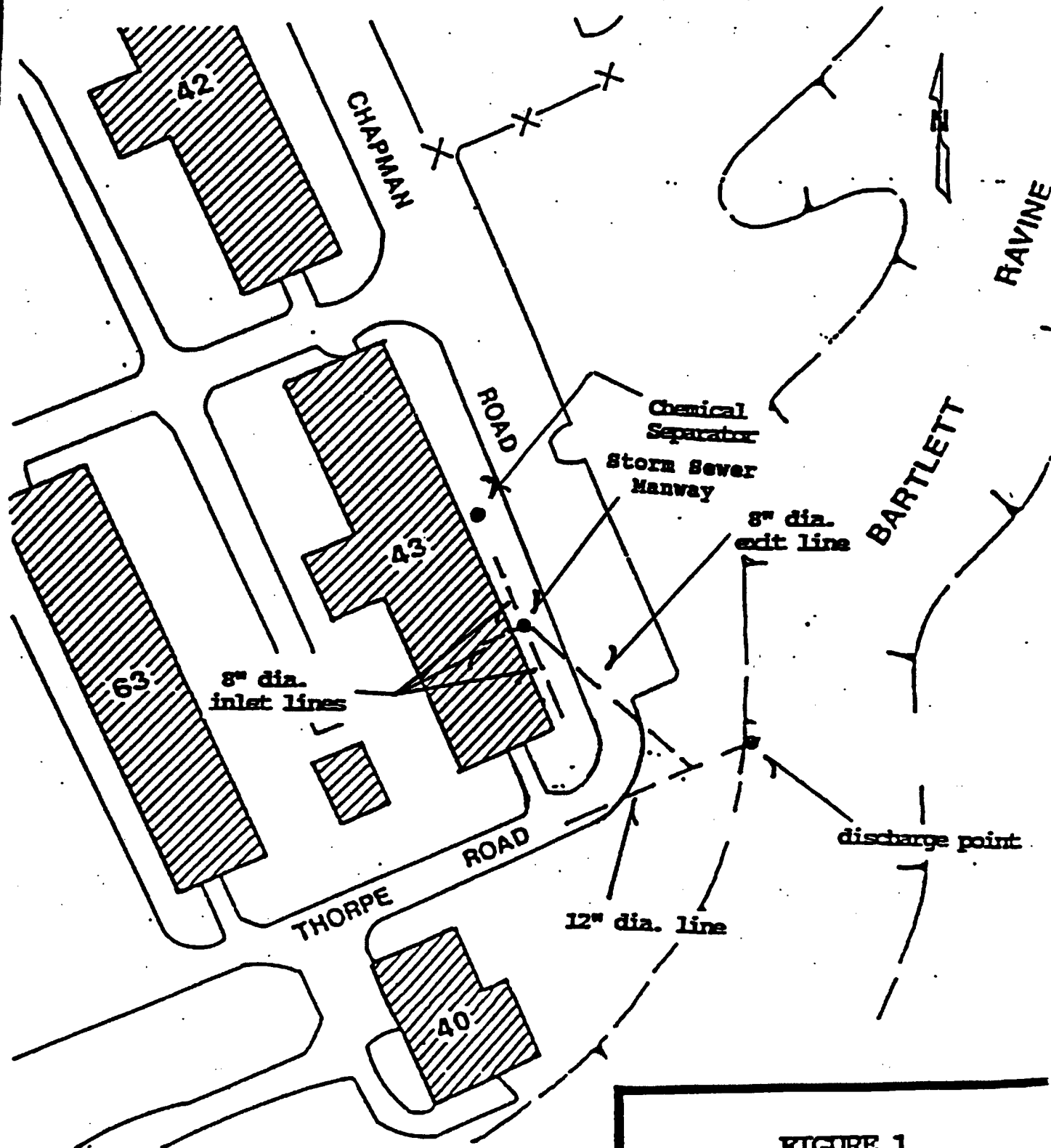
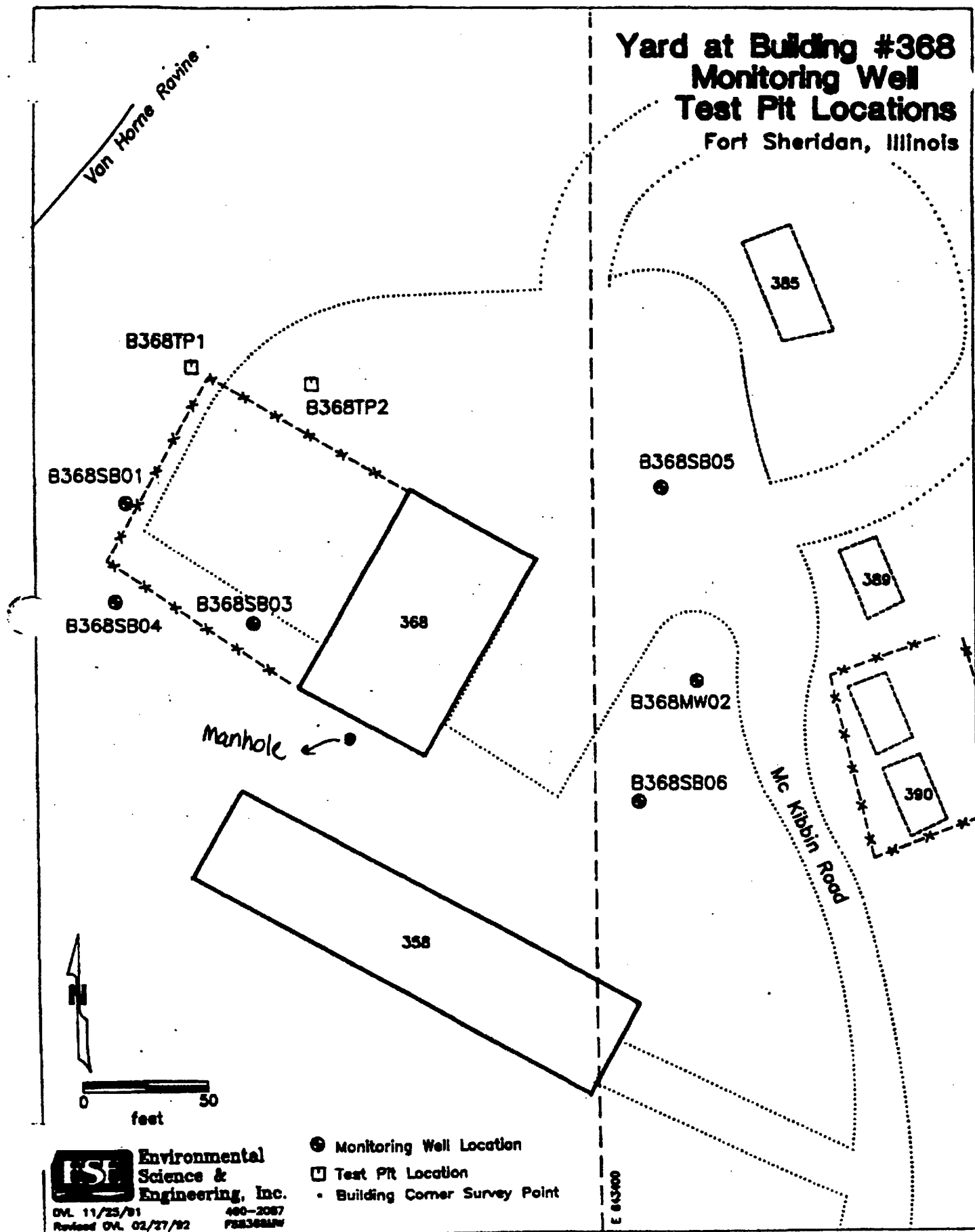


FIGURE 1

**BUILDING 43 AND BARTLETT RAVINE
PIPING NETWORK
FT. SHERIDAN, ILLINOIS**

Figure 2



**ACTION MEMORANDUM Request for a Time-Critical Removal Action at
Buildings 43 and 368, Fort Sheridan, IL**

**Administrative Record Index for Time-Critical Removal Action,
Buildings 43 and 368, Fort Sheridan, Illinois**

1. Excerpt (page 38) regarding Building 43 from the "Enhanced Preliminary Assessment Report: Fort Sheridan, Fort Sheridan, Illinois," 1989, Argonne National Laboratory
2. Figure 2-33 from the "Fort Sheridan Remedial Investigation-Risk Assessment/Feasibility Study, Draft Final, June 10, 1992, Environmental Science and Engineering
3. Figure 2-29 from the "Fort Sheridan Remedial Investigation-Risk Assessment/Feasibility Study, Draft Final, June 10, 1992, Environmental Science and Engineering
4. Excerpts (pages 2-11, 2-12, 4-31, 4-32, 4-101, 4-102, 4-103, and 9-14) regarding Building 43 from the "Fort Sheridan Remedial Investigation-Risk Assessment/Feasibility Study, Draft Final, June 10, 1992, Environmental Science and Engineering
5. Excerpts (pages 2-10, 2-11, 4-26, 4-27, 4-28, 4-29, 4-89, 4-90, 4-91, 4-92, 4-93, and 4-94) regarding Building 368 from the "Fort Sheridan Remedial Investigation-Risk Assessment/Feasibility Study, Draft Final, June 10, 1992, Environmental Science and Engineering
6. Table 4-47 ("Building 43 Stormwater and Sediment" analytical results) from the "Fort Sheridan Remedial Investigation-Risk Assessment/Feasibility Study, Draft Final, June 10, 1992, Environmental Science and Engineering
7. Analytical results and Tentatively Identified Compounds from the March, 1995 sampling effort for Buildings 43 and 368.

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APPENDIX D

► NO FURTHER RESPONSE ACTION PLANNED (NFRAP) SUMMARIES ◄

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APPENDIX D

► NO FURTHER RESPONSE ACTION PLANNED (NFRAP) SUMMARIES ◀

No formal NFRAP Decision Documents have been prepared.

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APPENDIX E

► CONCEPTUAL SITE MODEL DATA SUMMARIES ◀

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APPENDIX E

► CONCEPTUAL SITE MODEL DATA SUMMARIES ◀

No conceptual site models have been prepared for Fort Sheridan activities.

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APPENDIX F

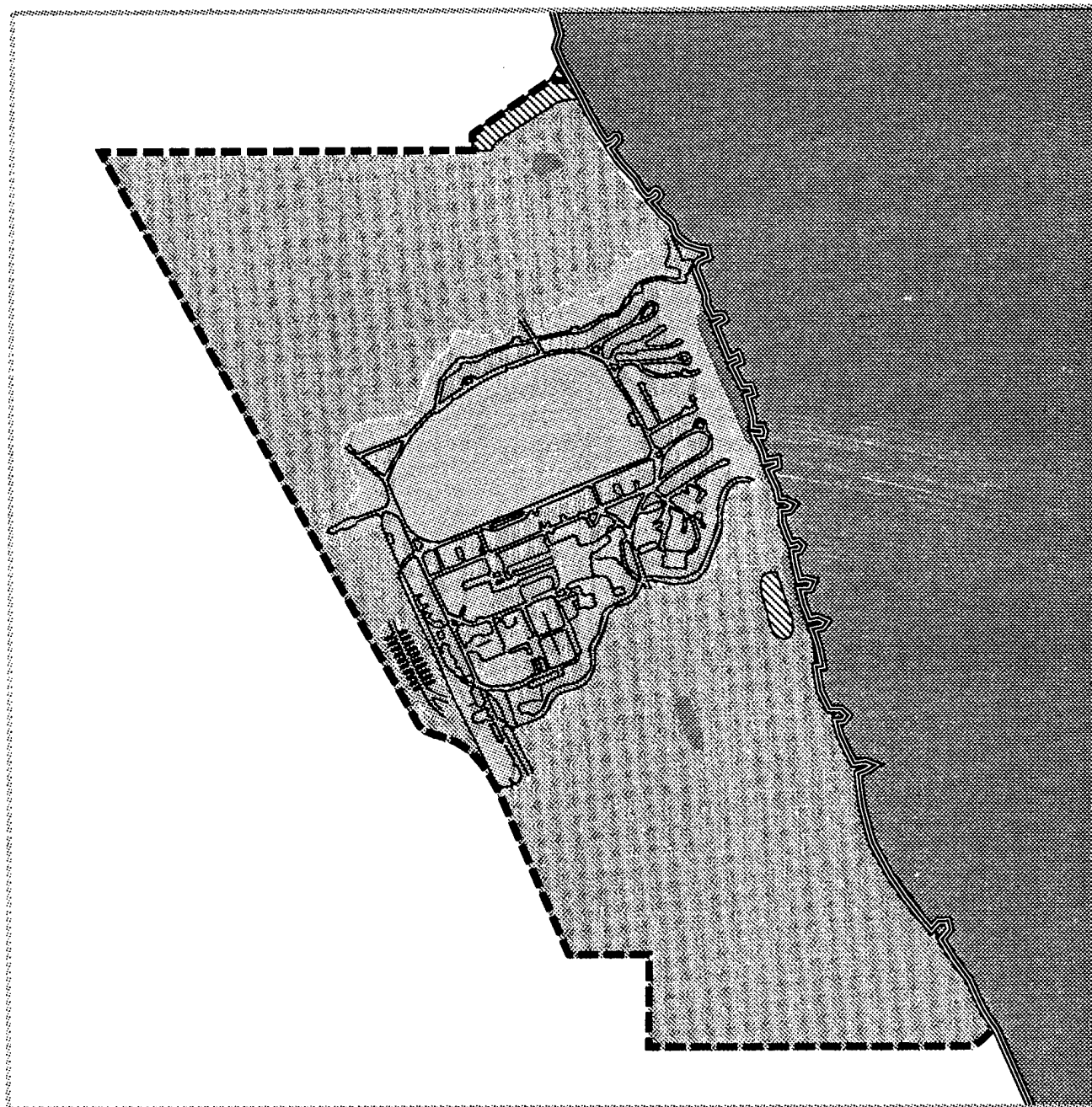
▶ ANCILLARY BCP MATERIALS ◀

- ▶ Figure F-1 Distribution of Sensitive Natural Areas, Wetlands, and Cultural Resources on Fort Sheridan
- ▶ Figure 3-3 Property Suitable for Transfer
- ▶ Table F-1 BCP Distribution List
- ▶ Table F-2 Disposal Milestones
- ▶ Table F-3 Cultural/Historic Resources on Fort Sheridan
- ▶ Environmental Justice Issues at Fort Sheridan
- ▶ Programmatic Agreement for Cultural Resources
- ▶ Text from CERCLA § 120

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**► FIGURE F-1, DISTRIBUTION OF SENSITIVE
NATURAL AREAS, WETLANDS, AND CULTURAL
RESOURCES ON FORT SHERIDAN ◀**

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EXPLANATION

-  Wetlands
-  INAI Natural Areas
-  Historic District and National Register Eligible Buildings
-  Installation Boundary

Distribution of
Sensitive Natural
Areas, Wetlands
and Cultural
Resources
on Fort Sheridan



0 425 850
FEET

Figure F-1

Fort Sheridan, Illinois - November 1995

► TABLE F-1, BCP DISTRIBUTION LIST ◀

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TABLE F-1. BCP DISTRIBUTION LIST

Name	Title	Address
Colleen Reilly	BEC	Fort Sheridan BRAC Office c/o Sheridan Building 475 Fort Sheridan, IL 60037
Owen Thompson	Remedial Project Manager, U.S. Environmental Protection Agency (USEPA)	USEPA, Region V 77 W. Jackson Blvd. HSRL-6J Chicago, IL 60604
Paul Lake	Environmental Protection Engineer, Illinois Environmental Protection Agency (IEPA)	IEPA Division of Remediation Service 2200 Churchill Road, P. O. Box 19276 Springfield, IL 62794-9276
PROJECT TEAM MEMBERS		
Russell Fendick	U.S. Army Environmental Center (USAEC) Project Officer	USAEC Attn: SFIM-AEC-BCA Bldg. E-4480 Aberdeen Proving Ground, MD 21010-5401
Victor Bonilla	FORSCOM Headquarters	Commander FORSCOM ATTN: AFPI-BC (Mr. Bonilla) Marshall Hall, Building 20 Fort McPherson, GA 30330-6000
Ron Gierthy	Fort Sheridan	Building 202 Philip Sheridan Reserve Center Fort Sheridan, IL 60087-5000
Susan Toutant	Project Manager, Louisville District	Department of Army U.S. Army Engineer District, Louisville 600 Martin Luther King Jr. Place Louisville, KY 40202
Mike Lambert	Real Estate Specialist, U.S. Army Corps of Engineers (USACE) Louisville District	Department of Army U.S. Army Engineer District, Louisville 600 Martin Luther King Jr. Place Louisville, KY 40202
Nadine Smith	Real Estate Specialist, USACE Louisville District	Department of Army U.S. Army Engineer District, Louisville 600 Martin Luther King Jr. Place Louisville, KY 40202
Jenny Ross	U.S. Navy, Great Lakes Training Center	Engineering Field Activity-Midwest Building 1-A, Code 920 Great Lakes, IL 60088-5600
LTC Linda Olson	Base Transition Coordinator	BRAC Office DAIM-BO, Pentagon 20655 Washington, D.C. 20310-0600
Al Balliett	Chief Environmental Management Division, Fort McCoy	Headquarters Fort McCoy Attn: AFRC-FM-PWE 2160 S. J Street Fort McCoy, WI 54656-5162

TABLE F-1. BCP DISTRIBUTION LIST**Continued**

Name	Title	Address
PROJECT TEAM MEMBERS (CONTINUED)		
Bill Evers	Environmental Manager	U.S. Army Reserve Command Attn: AFRC-AIL-EN 7402 W. Roosevelt Road Forest Park, IL 60130
Kathline King	Executive Administrator, Joint Planning Committee	Fort Sheridan Joint Planning Committee P.O. Box 160 Highwood, IL 60040

► TABLE F-2, DISPOSAL MILESTONES ◀

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TABLE F-2. DISPOSAL MILESTONES

Action	Completion Date
Army awards contract for Fort Sheridan Historic Preservation Survey	May 1993
Transfer of approximately 100 acres to U.S. Army Reserves	May 1993
Contractor completes Survey and submits report to Corps	September 1993
Environmental Assessment for disposal/reuse	September 1993
Army seeks approval of Historic Preservation Survey by Illinois Historic Preservation Agency (IHPA) and Advisory Council	December 1993
Complete Housing Transfer to Navy (206.38 acres/152 buildings)	January 1994
HUD Determination of Suitability for Homeless	January 1994
Memorandum of Agreement (MOA) to IHPA and Advisory Council for review	February 1994
Draft lease prepared for interim operation of golf course by Lake County Forest Preserve (LCFP)	February 1994
Completion of review process by IHPA and Advisory Council of Survey and MOA	February 1994
Workshop for Homeless Agencies	February 1994
Notice of Surplus Determination	February 1994
McKinney Act Screening	February 1994
Published in Federal Register (begins 60-day "freeze" period)	March 1994
Lease golf course to LCFP	May 1994
Approval by IHPA and Advisory Council of Survey and MOA	April 1994
Make available to the JPC	May 1994
State and Local Screening	July 1994
400 acres Declared Surplus Government Property	July 1994
State and Local interest determined (2 groups receive buildings)	September 1994
State and Local Screening	September 1994
Screening by Local Redevelopment Authority	April 1995

**► TABLE F-3, CULTURAL/HISTORIC RESOURCES
ON FORT SHERIDAN ◀**

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TABLE F-3. CULTURAL/HISTORIC RESOURCES ON FORT SHERIDAN

Building	Year Constructed	Function
Contributing Buildings Within the National Historic Landmark District		
01	1893	Library
02	1893	Education Center
03	1890	Officers Quarters
04	1890	Officers Quarters
05	1890	Officers Quarters
06	1890	Officers Quarters
07	1890	Officers Quarters
08	1890	Officers Quarters
09	1890	Officers Quarters
10	1890	Officers Quarters
11	1890	Officers Quarters
12	1890	Officers Quarters
13	1890	Officers Quarters
15	1890	Officers Quarters
16	1890	Officers Quarters
17	1891	Officers Quarters
18	1890	Officers Quarters
19	1890	Officers Quarters
20	1890	Officers Quarters
21	1890	Officers Quarters
22	1890	Officers Quarters
23	1890	Officers Quarters
24	1890	Officers Quarters
25	1890	Officers Quarters
26	1890	Officers Quarters
27	1890	Officers Quarters
28	1905	Officers Quarters

TABLE F-3. CULTURAL/HISTORIC RESOURCES ON FORT SHERIDAN**Continued**

Building	Year Constructed	Function
29	1890	Pump Station
30	1890	Officers Quarters
31	1892	Community Club
32	1907	Guest Housing
33	1890	Museum
34	1890	Child Care
35	1890	Civilian Office
36	1890	Warehouse
37	1892	Non-commissioned Officers Quarters
38	1890	Post Office
39	1891	Warehouse
42	1890	Repair Warehouse and Office
43	1890	Repair Warehouse
44	1892	Non-commissioned Officers Quarters
45	1910	Non-commissioned Officers Quarters
46	1890	Non-commissioned Officers Quarters
47	1891	Post Exchange
48	1890	Administration
49	1891	Water Tower
50	1890	Administration
52	1891	Officers Quarters
53	1891	Officers Quarters
54	1891	Officers Quarters
56	1891	Officers Quarters
57A	1892	Magazine
59	1892	Non-commissioned Officers Quarters
60	1893	Gymnasium
61	1910	Veterinarians Office

TABLE F-3. CULTURAL/HISTORIC RESOURCES ON FORT SHERIDAN**Continued**

Building	Year Constructed	Function
62	1892	Administration
63	1892	Computer Facility
65	1893	Computer Facility
66	1907	Administration
72	1892	Officers Quarters
73	1892	Officers Quarters
74	1892	Officers Quarters
75	1892	Officers Quarters
76	1892	Officers Quarters
77	1892	Vehicle Repair
78	1892	Non-commissioned Officers Quarters
79	1893	Fire Station
80	1893	Warehouse
81	1905	Administration
82	1905	Administration
83	1905	Administration
84	1905	Administration
85	1905	Warehouse
86	1905	Warehouse
87	1893	Storage
88	1893	Storage
89	1892	Storage
90	1893	Non-commissioned Officers Quarters
91	1893	Non-commissioned Officers Quarters
92	1905	Officers Quarters
93	1905	Officers Quarters
94	1905	Officers Quarters
95	1905	Officers Quarters

TABLE F-3. CULTURAL/HISTORIC RESOURCES ON FORT SHERIDAN**Continued**

Building	Year Constructed	Function
96	1905	Officers Quarters
97	1905	Officers Quarters
98	1910	Warehouse
100	1897	Storage
102	1906	Non-commissioned Officers Quarters
103	1907	Administration
104	1907	Administration
105	1907	Administration
106	1907	Administration
107	1907	Administration
108	1907	Administration
Buildings Recommended for Historic District Eligibility		
339	1939	Non-commissioned Officers Quarters
341	1939	Non-commissioned Officers Quarters
342	1939	Non-commissioned Officers Quarters
343	1939	Non-commissioned Officers Quarters
344	1939	Non-commissioned Officers Quarters
345	1939	Non-commissioned Officers Quarters
346	1939	Non-commissioned Officers Quarters
347	1939	Non-commissioned Officers Quarters
348	1939	Non-commissioned Officers Quarters
349	1939	Non-commissioned Officers Quarters
350	1939	Non-commissioned Officers Quarters
351	1939	Non-commissioned Officers Quarters
352	1939	Non-commissioned Officers Quarters
353	1939	Non-commissioned Officers Quarters
355	1939	Non-commissioned Officers Quarters

TABLE F-3. CULTURAL/HISTORIC RESOURCES ON FORT SHERIDAN**Continued**

Building	Year Constructed	Function
Contributing Landscapes		
Parade Ground (Golf Course) Streetscapes and Landscapes Surrounding the Parade Ground/Golf Course and those associated with the Officers Housing Bartlett and Hutchinson Ravines Cemetery		
Background Buildings Within the National Historic Landmark Area		
119	1913	Administration
140	1939	Administration
180	1932	Theater
Buildings Eligible for Individual Inclusion in the National Register of Historic Places		
142	1939	Administration
Non-contributing Buildings within the National Historic Landmark Area At Fort Sheridan		
29A	Unknown	Powerhouse
40	1967	Heating Plant
46C	1969	Detached Garage
51	1931	Motor Repair Shop
55	1932	Vehicle Storage
57C	1929	Fixed Ammunition Magazine
58	1931	Vehicle Storage
64	1928	General Purpose
71	1981	Powerhouse
112	1932	Vehicle Storage
115	1932	Diesel Station
118	1935	Administration
121	1943	Scale House
134	1941	Administration
135	1940	Oil House
154	1964	Pool Filter Building

TABLE F-3. CULTURAL/HISTORIC RESOURCES ON FORT SHERIDAN**Continued**

Building	Year Constructed	Function
156	1964	Bathhouse
157	1919	General Storage
159	1964	Outdoor Swimming Pool
170	1941	Chapel
200	1978	Sentry House
201	1943	Bachelors Officers Quarters
202	1934	Exchange Service Outlet
204	1919	Family Housing
205	1941	Enlisted Service Club
206	1966	Water Storage Tank
207	1966	Water Storage Tank
210	1929	Detached Garage
216	1941	Small Arms Repair Shop
216A	1941	Flammable Materials Storehouse
296	Unknown	Underground Holding Tank
297	Unknown	Powerhouse
298	1946	Beach House
370	1941	Vehicle Storage
400-417	1940	Detached Garage
700	1941	Administration
701	1941	Administration
702	1941	Administration
703	1941	Administration
707	1967	Dispensary
718	1941	General Storage
723	1941	General Storage
724	1942	Administration
725	1942	Skill Development Center
726	1945	Condemned

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**► ENVIRONMENTAL JUSTICE ISSUES
AT FORT SHERIDAN ◀**

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ENVIRONMENTAL JUSTICE ISSUES AT FORT SHERIDAN

There has been growing concern during the past decade about the effect of environmental pollution on particular economically disadvantaged population groups. A movement to ensure environmental justice for all individuals is the outgrowth of a widespread belief that minority and low-income communities bear a disproportionately high risk of exposure to health hazards related to contamination or pollution.

The President issued Executive Order 12898 on Environmental Justice on 11 February 1994. The Order and its accompanying Presidential memorandum marked a significant step toward focusing the attention of Federal agencies on concerns of environmental justice. The order requires certain Federal agencies, including the DOD, to the greatest practicable and permitted by law, to make environmental justice part of their missions by identifying and addressing disproportionately high and adverse health or environmental effects on minority and low-income populations.

At closing installations such as Fort Sheridan derations of environmental justice must be examined in the context of cleanup activities, including their relationship to plans for reuse of land and community redevelopment initiatives. The decision-making processes for establishing cleanup priorities, determining relative risk, developing reuse plans, and other actions related to installation closure, must ensure that environmental protection and environmental justice are adequately addressed.

The Defense Environmental Response Task Force of the DOD formed the Environmental Justice Subworking Group to determine whether concerns related to environmental justice are being adequately addressed at installations affected by BRAC. The subworking group has identified a number of significant issues related to environmental justice that are applicable to environmental restoration at BRAC installations. These include:

- ▶ Outreach
- ▶ Cultural Resources
- ▶ Risk Assessment
- ▶ Cleanup Priorities
- ▶ Risk Communication
- ▶ Epidemiology
- ▶ Natural Resources
- ▶ Brownfield or Urban Revitalization
- ▶ Deed and Lease Restrictions.

Fort Sheridan has proactively addressed many of these issues in its current BRAC environmental restoration, compliance, and natural resources strategies. The Fort Sheridan approach for

addressing each of the issues is summarized below and is also addressed in context, in applicable sections of the BCP.

Outreach. Fort Sheridan has an active outreach program. A CRP was prepared in July 1994. The plan establishes the procedures for effective communication with all elements of the surrounding community on environmental issues. A RAB has been formed at the installation and meets monthly to promote public involvement and provide a forum for public input on the Fort Sheridan IRP. During the formation of the RAB, particular attention was placed on ensuring balanced community representation. Public hearings will continue to be conducted to obtain community input on particular environmental documents including EISs and Proposed Plans. The installation also keeps community members informed through Open Houses and Installation Tours, the issuance of Fact Sheets and the maintenance of information repositories.

Cultural Resources. Investigations conducted at Fort Sheridan to date including an archeological survey completed in August 1992 have not identified any religious sites or sacred lands at the installation which could have environmental justice impacts. In the event that any significant cultural resource sites are identified at Fort Sheridan in the future, those sites will be protected in compliance with regulatory requirements and with consideration of cultural impacts. Environmental justice issues such as the provision of installation access to interested parties will be investigated.

Risk Assessment. The draft final baseline risk assessment conducted during the Draft Final RI did not discriminate in its evaluation of risk. An exposure pathway analysis was conducted to identify all potential on-site or off-site receptor population. The risk assessment then calculated risk caused by each restoration site and installation total risk for each of the identified receptor populations. The potential for varying patterns of consumption or other risk factors relative to particular population groups in the Fort Sheridan area were considered in the RI risk assessment exposure pathway analysis. This ensured that the risk assessment accurately evaluated risk for all potential receptor populations.

In addition, qualitative risk assessments will be conducted during FS preparation and during the review of the remedial action proposed plan to identify any risk to on-site or off-site populations which might be caused by proposed remedial actions.

Cleanup Priorities. The prioritization of environmental restoration at Fort Sheridan versus other BRAC installations is conducted on a programmatic level by the Department of the Army and DOD through relative risk evaluation. The U.S. Army is working in partnership with Howard University to identify U.S. Army installations located near minority and low-income communities so that environmental justice can be incorporated in the prioritization process.

On an installation basis, the Fort Sheridan Reuse Plan provides the basis for determining cleanup priority. The Draft Final RI baseline risk assessment identified site specific and installation-wide risks to on-site and off-site populations. This information was evaluated in conjunction with community reuse goals presented in the Reuse Plan. A restoration strategy was then developed that accomplish two goals; prioritization of cleanup to mitigate any immediate risks to receptor populations, and prioritization of cleanup based on community reuse planning goals and priorities.

Risk Communication. Issues relative to human health risks are fully disclosed to the public through the various outreach activities conducted by the installation.

Epidemiology: The most current risk assessment data and epidemiological studies will be used in the preparation of the Final RI Risk Assessments. The potential for differences in contaminant impacts based on racial or demographic differences in receptor populations will be considered in the risk assessments.

Natural Resources. The baseline risk assessments will evaluate potential contaminant pathways to on-site and off-site receptors via ingestion of any vegetation and fish on the installation. Assumptions on potential consumption patterns were made with consideration of any cultural variations.

Brownfield and Urban Revitalization. Fort Sheridan is located within an urban area outside of Chicago, Illinois. In order to maximize the reuse opportunities for Fort Sheridan, the Towns of Highwood and the cities of Highland Park and Lake Forest established the Joint Planning Committee whose goal is to plan and implement reuse of Fort Sheridan in a manner that mitigates the negative impacts of installation closure and meets the communities long-term goals. Full community participation was solicited in the reuse planning process by establishing broad-based community representation on the Committee and by conducting numerous public meetings to obtain community input.

As part of the DOD disposal process, screening in accordance with the Stewart B. McKinney Act has been conducted to identify potential use of the property by providers for the homeless. Providers for the homeless expressed interest in 45 buildings. The Catholic Charity of the Archdiocese of Chicago (CCAC) has requested and been awarded the Nicholos Housing Complex, which includes Buildings 220 through 247 and Building 356. The Community and Economic Development Association of Cook County has requested and been awarded Buildings 9-13, 31, 32, 92-94, 210, 400, 414, 416, and 417. The Chicago Vietnam Veterans and Family Assistance Program (CVVFAP) has requested and been awarded Building 32.

Deed and Lease Restrictions. Deed and lease restrictions are a critical element in the disposal planning process for Fort Sheridan because RA at the installation may continue past installation closure and property disposal. Issues such as access, liability for RA equipment and operation, impacts on redevelopment, and conflicts with construction are being investigated as bid documents for the sale/development of Fort Sheridan property are prepared. Small, small disadvantaged and minority-owned business impacts from potential deed and lease restricts will be considered by the U.S. Army throughout the disposal process.

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**► PROGRAMMATIC AGREEMENT FOR
CULTURAL RESOURCES ◀**

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► **TEXT FROM CERCLA § 120** ◄

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§ 9620. [CERCLA § 120] Federal facilities

Except for authorities which are delegated by the Administrator to an officer or employee of the Environmental Protection Agency, no authority vested in the Administrator under this section may be transferred, by executive order of the President or otherwise, to any other officer or employee of the United States or to any other person.

(h) Property transferred by Federal agencies

(1) Notice

After the last day of the 6-month period beginning on the effective date of regulations under paragraph (2) of this subsection, whenever any department, agency, or instrumentality of the United States enters into any contract for the sale or other transfer of real property which is owned by the United States and on which any hazardous substance was stored for one year or more, known to have been released, or disposed of, the head of such department, agency, or instrumentality shall include in such contract notice of the type and quantity of such hazardous substance and notice of the time at which such storage, release, or disposal took place, to the extent such information is available on the basis of a complete search of agency files.

(2) Form of notice; regulations

Notice under this subsection shall be provided in such form and manner as may be provided in regulations promulgated by the Administrator. As promptly as practicable after October 17, 1986, but not later than 18 months after October 17, 1986, and after consultation with the Administrator of the General Services Administration, the Administrator shall promulgate regulations regarding the notice required to be provided under this subsection.

(3) Contents of certain deeds

After the last day of the 6-month period beginning on the effective date of regulations under paragraph (2) of this subsection, in the case of any real property owned by the United States on which any hazardous substance was stored for one year or more, known to have been released, or disposed of, each deed entered into for the transfer of such property by the United States to any other person or entity shall contain --

(A) to the extent such information is available on the basis of a complete search of agency files --

- (i) a notice of the type and quantity of such hazardous substances,
- (ii) notice of the time at which such storage, release, or disposal took place, and
- (iii) a description of the remedial action taken, if any;

(B) a covenant warranting that --

- (i) all remedial action necessary to protect human health and the environment with respect to any such substance remaining on the property has been taken before the date of such transfer, and
- (ii) any additional remedial action found to be necessary after the date of such transfer shall be conducted by the United States; and

(C) a clause granting the United States access to the property in any case in which remedial action or corrective action is found to be necessary after the date of such transfer.

The requirements of subparagraph (B) shall not apply in any case in which the person or entity to whom the property is transferred is a potentially responsible party with respect to such real property. For purposes of subparagraph (B)(i), all remedial action described in such subparagraph has been taken if the construction and installation of an approved remedial design has been completed, and the remedy has been demonstrated to the Administrator to be operating properly and successfully. The carrying out of long-term pumping and treating, or operation and maintenance, after the remedy has been demonstrated to the Administrator to be operating properly and successfully does not preclude the transfer of the property.

(4) Identification of uncontaminated property

(A) In the case of real property to which this paragraph applies (as set forth in subparagraph (E)), the head of the department, agency, or instrumentality of the United States with jurisdiction over the property shall identify the real property on which no hazardous substances and no petroleum products or their derivatives were stored for one year or more, known to have been released, or disposed of. Such identification shall be based on an investigation of the real property to determine or discover the obviousness of the presence or likely presence of a release or threatened release of any hazardous substance or any petroleum product or its derivatives, including aviation fuel and motor oil, on the real property. The identification shall consist, at a minimum, of a review of each of the following sources of information concerning the current and previous uses of the real property:

- (i) A detailed search of Federal Government records pertaining to the property.
- (ii) Recorded chain of title documents regarding the real property.
- (iii) Aerial photographs that may reflect prior uses of the real property and that are reasonably obtainable through State or local government agencies.
- (iv) A visual inspection of the real property and any buildings, structures, equipment, pipe, pipeline, or other improvements on the real property, and a visual inspection of properties immediately adjacent to the real property.
- (v) A physical inspection of property adjacent to the real property, to the extent permitted by owners or operators of such property.
- (vi) Reasonably obtainable Federal, State, and local government records of each adjacent facility where there has been a release of any hazardous substance or any petroleum product or its derivatives, including aviation fuel and motor oil, and which is likely to cause or contribute to a release or threatened release of any hazardous substance or any petroleum product or its derivatives, including aviation fuel and motor oil, on the real property.
- (vii) Interviews with current or former employees involved in operations on the real property.

Such identification shall also be based on sampling, if appropriate under the circumstances. The results of the identification shall be provided immediately to the Administrator and State and local government officials and made available to the public.

(B) The identification required under subparagraph (A) is not complete until concurrence in the results of the identification is obtained, in the case of real property that is part of a facility on the National Priorities List, from the Administrator, or, in the case of real property that is not part of a facility on the National Priorities List, from the appropriate State official. In the case of a concurrence which is required from a State official, the concurrence is deemed to be obtained if, within 90 days after receiving a request for the concurrence, the State official has not acted (by either concurring or declining to concur) on the request for concurrence.

(C)(i) Except as provided in clauses (ii), (iii), and (iv), the identification and concurrence required under subparagraphs (A) and (B), respectively, shall be made at least 6 months before the termination of operations on the real property.

(ii) In the case of real property described in subparagraph (E)(i)(II) on which operations have been closed or realigned or scheduled for closure or realignment pursuant to a base closure law described in subparagraph (E)(ii)(I) or (E)(ii)(II) by the date of the enactment of the Community Environmental Response Facilitation Act, the identification and concurrence required under subparagraphs (A) and (B), respectively, shall be made not later than 18 months after such date of enactment.

(iii) In the case of real property described in subparagraph (E)(i)(II) on which operations are closed or realigned or become scheduled for closure or realignment pursuant to the base closure law described in subparagraph (E)(ii)(II) after the date of the enactment of the Community Environmental Response Facilitation Act, the identification and concurrence required under subparagraphs (A) and (B), respectively, shall be made not later than 18 months after the date by which a joint resolution disapproving the closure or realignment of the real property under section 2904(b) of such base closure law must be enacted, and such a joint resolution has not been enacted.

(iv) In the case of real property described in subparagraphs (E)(i)(II) on which operations are closed or realigned pursuant to a base closure law described in subparagraph (E)(ii)(III) or (E)(ii)(IV), the identification and concurrence required under subparagraphs (A) and (B), respectively, shall be made not later than 18 months after the date on which the real property is selected for closure or realignment pursuant to such a base closure law.

(D) In the case of the sale or other transfer of any parcel of real property identified under subparagraph (A), the deed entered into for the sale or transfer of such property by the United States to any other person or entity shall contain --

(i) a covenant warranting that any response action or corrective action found to be necessary after the date of such sale or transfer shall be conducted by the United States; and

(ii) a clause granting the United States access to the property in any case in which a response action or corrective action is found to be necessary after such date at such property, or such access is necessary to carry out a response action or corrective action on adjoining property.

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**► FIGURE 3-3, PROPERTY SUITABLE FOR
TRANSFER ◀**

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