FINAL REPORT

ENVIRONMENTAL BASELINE SURVEY REPORT

Camp Pedricktown, Reserve Enclave
Oldmans Township, New Jersey

Prepared for

U.S. Army Corps of Engineers
Baltimore District
Seattle District

May 2003

URS

1501 4th Avenue, Suite 1400
Seattle, Washington 98101-1616
Contract No. DACA67-98-D-1005
Delivery Order No. 0056

DEPARTMENT OF THE ARMY
HEADQUARTERS, FORT DIX
5417 ALABAMA AVENUE
FORT DIX, NEW JERSEY 08640-5000

JUL 11 2003

REPLY TO
ATTENTION OF

Engineering & Environmental Division

SUBJECT: Final Environmental Baseline Survey Report/Final Community Environmental Response Facilitation Act Letter Report for the Reserve Enclave at Camp Pedricktown, New Jersey

New Jersey Department of Environmental Protection
Bureau of Federal Case Management
Division of Responsible Party Remediation
ATTN: Mr. Greg Zalaskus
401 East State Street
P.O. Box 028
Trenton, New Jersey 08625-0028

Dear Mr. Zalaskus:

Please find enclosed one copy of the final *Environmental Baseline Survey* (EBS) report and the final *Community Environmental Response Facilitation Act* (CERFA) letter report, which presents the results of the EBS for the Reserve Enclave at Camp Pedricktown, New Jersey.

The EBS has been conducted to support the transfer of Army-owned utilities located in the 40-acre Reserve Enclave portion of Camp Pedricktown, also known as the Sievers-Sandberg U.S. Army Reserve Center, and is the second of two EBSs conducted at the 85-acre Installation. The first EBS included approximately 45 acres identified as excess and surplus property by the 1995 Base Realignment and Closure (BRAC) Commission. Because the boundaries of the Reserve Enclave were expanded from 22 acres to 40 acres after completion of the previous EBS, there is some overlap of areas between the previous EBS and current EBS.

If you have any questions, please contact the Fort Dix BRAC Environmental Coordinator, Mr. Paul Fluck, at (609) 562-3699; Fax (609) 5625345.

Sincerely,

Linda D. Chominski
Chief, Engineering & Environmental Division
RDPW, U.S. Army Fort Dix

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Camp Pedricktown Information Repository
Camp Pedricktown Local Redevelopment Authority
Camp Pedricktown Restoration Advisory Board

N.J.A.C. 7:26C-1.2 DOCUMENT CERTIFICATION

Document Title:	Final Environmental Baseline Survey Report
Document Date:	May 2003
Site:	Camp Pedricktown Reserve Enclave, Oldmans Township, New Jersey
Document Author:	URS

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Victor M. Bonilla
Chief, Environmental & Budget
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Base Realignment and Closure

29 July 03
Date

Notary:

STATE: GEORGIA
COUNTY: FULTON

Doris N. Douglas

Notary **Doris N. Douglas**

My Commission expires: 5 July 2006

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EXECUTIVE SUMMARY

This environmental baseline survey (EBS) is the second of two EBSs conducted at the 85-acre Camp Pedricktown (located in Oldmans Township, Salem County, New Jersey). The first EBS was conducted in 1996, after the 1995 Base Realignment and Closure (BRAC) Commission recommended closure of the facility, with the exception of the Sievers-Sandberg U.S. Army Reserve Center (USARC). The U.S. Army (Army) retained a portion of the property (the Reserve Enclave) to support the USARC, and an EBS was conducted on the remainder of the property (the BRAC parcel). Because of pending transfer of utilities at the camp, in 2000 the Army determined that an EBS of the Reserve Enclave was also needed. Therefore, a second EBS was conducted in 2001. The EBS summarized in this report covers the 40-acre Reserve Enclave. There is some overlap in coverage between the 1996 EBS and the 2001 EBS because the Reserve Enclave boundaries were expanded from 22 acres to 40 acres after the completion of the 1996 EBS.

The purpose of this EBS is to classify discrete areas of real property associated with the USARC (referred to in this report as the "Reserve Enclave") into one of the seven standard environmental condition of property area types (categories), as defined by Community Environmental Response Facilitation Act (CERFA) guidance and the U.S. Department of Defense (DoD) *BRAC Cleanup Plan (BCP) Guidebook.* The seven standard environmental condition of property area types (categories) are described in the EBS. Areas that are designated as Category 1, 2, 3, or 4 are suitable for transfer or lease, subject to consideration of the qualifiers. Areas that are currently designated as Category 5, 6, or 7 are not suitable for transfer.

Classification of areas is achieved by identifying, characterizing, and documenting the obviousness of the presence or likely presence of a release or threatened release of hazardous substances or petroleum products associated with the historical and current use of the Reserve Enclave. Releases at properties adjacent to the Reserve Enclave that could affect the environmental condition of the Reserve Enclave property are also identified, characterized, and documented. Additionally, areas containing or suspected of containing non-Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) contamination substances (e.g., asbestos-containing materials or lead-based paint) that may limit or preclude the transfer or lease of the property for unrestricted use are delineated separately as "qualified."

Camp Pedricktown has hosted Army facilities with diverse missions for nearly 80 years. Unfortunately, detailed records of many past environmentally significant activities are sparse. Vehicle maintenance and fueling appear to be the former activities at the Reserve Enclave with the greatest potential for environmental effects. Other activities (e.g., housing, administration, warehousing, and open space) appear to have little potential for environmental effects.

The BRAC parcel of Camp Pedricktown is located to the north and east of the Reserve Enclave. Beyond the BRAC parcel is the Pedricktown Dredged Materials Storage Areas, which are diked areas used for the storage of dredged sediments from the Delaware River. Adjacent to the Reserve Enclave on the west is a DoD Ponds Wildlife Management Area (a manmade lake), originally intended for the storage of dredged materials, but never used for that purpose. To the southeast, the Reserve Enclave is bounded by U.S. Route 130 and rural farmlands.

To prepare the EBS report, URS Corporation (URS) reviewed existing installation documents; federal, state, and local government databases; and aerial photographs. A site visit was conducted that included visual inspections of the property and surrounding properties, and employee interviews. A visual inspection of adjacent properties was conducted via automobile. No sampling activities were associated with this EBS. The information provided in this draft EBS report for the subject property is current as of February 2001.

The survey and parcelization of the Reserve Enclave identified 48 environmental parcels based on the environmental condition of the property. Table 5-1 and Figure 5-1 present the environmental parcels and corresponding categorizations. A summary of the acreage found in each of the seven CERFA categories is presented in Table ES-1. Additionally, the total "qualified parcel" acreage within each category and the acreage per individual qualified issue within each category are presented. As shown in Table ES-1, 4.87 acres of the Reserve Enclave fall into Category 7, 0.45 acre into Category 6, 0.95 acre into Category 5, and the remaining 34.15 acres into Categories 1 and 2.

Table ES-1
Reserve Enclave Acreage
Camp Pedricktown, New Jersey

Environmental Condition Category No./Qualifier	Total Acreage[a]
1	33.57
2	0.65
3	0
4	0
5	0.95
6	0.45
7	4.82
Total parceled acreage	40.44
Asbestos-containing material	1.99
Lead-based paint	2.38
Polychlorinated biphenyls	5.10
Radon	0
Unexploded ordnance and/or ordnance fragments	0
Radionuclides	0
Total qualified acreage[b]	5.42

[a]Acreage figures have been calculated to the nearest 0.01 acre, based on map coverage, not ground survey.
[b]Acreage may be qualified for more than one reason; therefore, total acreage is not the sum of individual acreages.

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ABBREVIATIONS AND ACRONYMS

AA	alternatives analysis
Army	U.S. Army
ARCOM	Army Reserve Command
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
BCP	BRAC Cleanup Plan
bgs	below ground surface
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
DoD	Department of Defense
DRMO	Defense Reutilization and Marketing Office
EA	environmental assessment
EBS	environmental baseline survey
EDR	Environmental Data Resources, Inc.
EI	environmental investigation
EM	Enlisted Men
EOD	Explosive Ordnance Disposal
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification System
°F	degree Fahrenheit
FINDS	Facility Index System
FORSCOM	U.S. Army Forces Command
GIS	geographic information system
gpm	gallons per minute
GPR	ground penetrating radar
HR	hazardous substance release or disposal
HS	hazardous substance storage
IRP	Installation Restoration Program
LRA	Local Redevelopment Authority
LUST	leaking underground storage tank
mg/kg	milligram per kilogram
NCO	Noncommissioned Officer
NEPA	National Environmental Policy Act
NJDEP	New Jersey Department of Environmental Protection

ABBREVIATIONS AND ACRONYMS (Continued)

NORAD	North American Air Defense Command
NPL	National Priorities List
PCB	polychlorinated biphenyl
PCE	perchloroethene (tetrachloroethene)
pCi/L	picocurie per liter
PL	Public Law
PR	petroleum release or disposal
PS	petroleum storage
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
RSC	Regional Support Command
SHWS	State Hazardous Waste Sites
TPH	total petroleum hydrocarbons
URS	URS Corporation
USACE	U.S. Army Corps of Engineers
USAR	U.S. Army Reserve
USARC	U.S. Army Reserve Center
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service
UST	underground storage tank
VOC	volatile organic compound

1.0 INTRODUCTION

This environmental baseline survey (EBS) report for the U.S. Army Reserve Enclave at Camp Pedricktown, New Jersey, was prepared by URS Corporation (URS) for the U.S. Army Corps of Engineers (USACE) under Contract No. DACA67-98-D-1005, Delivery Order No. 0033. The location of Camp Pedricktown is shown in Figure 1-1. (Figures and tables are provided at the end of the section in which they are first mentioned.)

The EBS summarized in this report is the second of two EBSs conducted at the 85-acre Camp Pedricktown, which is located in Oldmans Township, Salem County, New Jersey. The first EBS was conducted in 1996, after the 1995 Base Realignment and Closure (BRAC) Commission recommended closure of the facility, with the exception of the Sievers-Sandberg U.S. Army Reserve Center (USARC). The U.S. Army (Army) retained a portion of the property (the Reserve Enclave) to support the USARC, and an EBS was conducted on the remainder of the property (Woodward-Clyde 1997). The local community has established the Camp Pedricktown Local Redevelopment Authority (LRA) to develop and implement a reuse plan for the excess BRAC property.

Because of pending transfer of utilities at the camp, in 2000 the Army determined that an EBS of the Reserve Enclave was also needed. Therefore, a second EBS was conducted in 2001. The EBS summarized in this report covers the 40-acre Reserve Enclave. There is some overlap in coverage between the 1996 EBS and the 2001 EBS because the Reserve Enclave boundaries were expanded from 22 acres to 40 acres after the completion of the 1996 EBS.

To reduce the potential for confusion regarding the two EBSs of the facility, this report adheres to certain naming conventions. The area covered in the 1996 EBS is referred to as the "BRAC parcel." The subject of this report, the USARC, is referred to as the "Reserve Enclave," shown in Figure 1-2. The name "Camp Pedricktown" is used to refer to the entire Army property (85 acres), which consists of the 1996 BRAC parcel (46 acres) and the Reserve Enclave (40 acres). To facilitate the discussion in this EBS, the Reserve Enclave has been divided into four geographic areas: Military Vehicle Parking Area, Housing and Recreation Area, Administrative Area, and Warehousing Area. The information provided in this draft EBS report for the subject property is current as of February 2001.

1.1 PROPERTY TRANSFER OVERVIEW

The BRAC environmental restoration program is similar to the Army Installation Restoration Program (IRP), but it has been expanded to include non–Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) contamination substances that are not

normally addressed under the IRP, including asbestos-containing material, lead-based paint, polychlorinated biphenyls (PCBs), radon, unexploded ordnance and/or ordnance fragments, radionuclides, and pesticides.

The Community Environmental Response Facilitation Act (CERFA) (Public Law [PL] 102-426), which was enacted in 1992 and amends Section 120 of CERCLA, directs federal agencies to evaluate all BRAC property to identify uncontaminated parcels and allows the transfer or lease of remediated parcels when the successful operation of an approved remedy has been demonstrated. The CERFA identification process considers the release and disposal of hazardous substances and petroleum substances.

1.2 PURPOSE AND SCOPE OF ENVIRONMENTAL BASELINE SURVEY

This EBS was conducted to document the environmental condition of the subject property for potential lease or transfer by the Army. Whenever any department of the United States enters into any contract for transfer of real property that is owned by the United States and on which any hazardous substance was known to have been stored for 1 year or more or known to have been released or disposed of, a notice of the type and quantity of such hazardous substance and the time at which such release or disposal took place (to the extent such information is available on the basis of a complete search of agency files) is required by CERCLA Section 120(h)(1), Section 42 United States Code (U.S.C.) 9620(h)(1). However, this is not a requirement for a transfer from one federal agency to another federal agency.

This EBS included the review of existing installation environmental documents; federal, state, and local government databases; and aerial photography. A site visit, which included a visual inspection and employee interviews, was also conducted. Additionally, reasonably obtainable federal, state, and local government databases for adjacent properties were reviewed, and a visual inspection of adjacent properties was conducted via automobile.

The EBS classifies the subject parcels of the Reserve Enclave into one of seven standard environmental condition of property area types, as defined by CERFA guidance and the U.S. Department of Defense (DoD) *BRAC Cleanup Plan (BCP) Guidebook* (DoD 1995). This is achieved by the following:

- Identifying, characterizing, and documenting the obviousness of the presence or likely presence of a release or threatened release of a hazardous substance or petroleum product associated with the historical and current use of the parcels

- Identifying, characterizing, and documenting the obviousness of the presence or likely presence of a release or threatened release of a hazardous substance or

petroleum product from an adjacent property that is likely to cause or contribute to contamination of the parcels

No sampling or analysis activities were conducted during this survey. However, some available sampling data were reviewed to help evaluate the current environmental status of the property.

1.3 DEFINITIONS

The following definitions are used in this report:

- **Property area.** The installation real property that is subject to transfer or lease. Real property includes land and rights in land, ground improvements, utility distribution systems, pipes or pipelines, buildings, and other structures located on the property and affixed to the land.

- **Adjacent properties.** Those properties, on or off the installation, contiguous to or nearby the property area being surveyed that are likely to cause or contribute to contamination and affect the results of the EBS or the classification of the property area into standard environmental condition of property area types.

- **Environmental parcel.** A portion of the property area that can be segregated from its surrounding areas based on its environmental condition.

- **Hazardous substances.** As defined in CERCLA § 101(14) by reference to other federal statutes: (i) Section 311 of the Clean Water Act, 33 U.S.C. § 1321, (ii) Section 102 of CERCLA, 42 U.S.C. § 9609, (iii) Section 3001 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6921, (iv) Section 307 of the Clean Water Act, 33 U.S.C. § 1317, (v) Section 112 of the Clean Air Act, 42 U.S.C. § 7412, and (vi) any other hazardous substances or mixture that the U.S. Environmental Protection Agency (EPA) chooses to list under 15 U.S.C. § 2606.

- **Hazardous waste.** A waste that meets the criteria or exhibits the characteristics as defined in RCRA regulations in Title 40 Code of Federal Regulations (CFR), Subpart 261.3.

- **Petroleum.** Any petroleum substance or its derivatives, including aviation fuel and motor oil.

- **Environmental condition of property area type.** Any of the seven standard environmental condition of property area types (categories), as defined in the

CERFA guidance and the DoD BCP Guidebook (DoD 1995) and presented in Table 1-1.

- **Suitable for transfer.** Environmental parcels that are designated as Category 1, 2, 3, or 4 are suitable for transfer or lease, subject to consideration of the non-CERCLA qualifiers.

- **Not suitable for transfer.** BRAC parcels that are currently designated as Category 5, 6, or 7.

- **Reserve Enclave.** An area of the installation real property that will be retained by DoD.

- **Parcel labels.** Each environmental parcel has been given a number to which appropriate descriptive labels are attached. The numbers consist of a unique parcel identification number and an environmental condition of the property category number. The labels consist of a designation describing the type of contamination or storage, if applicable. The following designations are used to indicate the type of contamination or storage present in a parcel:

  PR = petroleum release or disposal
  PS = petroleum storage
  HR = hazardous substance release or disposal
  HS = hazardous substance storage

  Examples of this identification system follow:

  - 2(1) indicates that the second environmental parcel is designated as a Category 1 parcel.

  - 12(3)HR indicates that the twelfth environmental parcel is designated as a Category 3 parcel because of a documented hazardous substance release, but the concentrations do not warrant remediation.

- **Qualified parcels.** Areas containing or suspected of containing non-CERCLA contamination substances that may limit or preclude the transfer or lease of the property for unrestricted use. These parcels are delineated separately and labeled with the letter "Q" for "qualified." Any qualified parcels are superimposed on the environmental condition of the property categories (i.e., Categories 1 through 7), and the boundaries of qualified parcels may overlap the boundaries of one or

more environmental condition of property categories. The qualified parcel labels are identified with the following designators, as applicable:

A	=	asbestos-containing material
L	=	lead-based paint
P	=	PCBs
R	=	radon
X	=	unexploded ordnance and/or ordnance fragments
RD	=	radionuclides

For all parcels, "(P)" is used to indicate that the presence of a contaminant is possible but that data are unavailable for verification.

For example, the fifth qualified parcel with the presence of asbestos-containing material and the possible presence of lead-based paint would be labeled 5A/L(P).

1.4 GENERAL GEOGRAPHIC AND ENVIRONMENTAL SETTINGS

Camp Pedricktown is located in northwestern Oldmans Township, Salem County, New Jersey, about 18 miles southwest of Philadelphia, Pennsylvania, and about 50 miles southwest of Trenton, New Jersey. The camp is bounded on the south by U.S. Route 130 (Figure 1-1); on the west by a DoD Ponds Wildlife Management Area and, within 0.5 mile, the Delaware River; on the north by the major portion of the BRAC parcel; and on the east by the remaining portion of the BRAC parcel and Salem Community College property, beyond which lie marshes and farmlands. The topography of Camp Pedricktown is relatively flat, sloping gently to the northwest. An aerial view of Camp Pedricktown and the surrounding area is shown in Figure 1-3.

1.4.1 Climate

The climate of Salem County is generally typified by mild winters; warm, humid summers; and a moderate amount of precipitation that is evenly distributed throughout the year. January is generally the coldest month, with an average daily minimum temperature of 26 degrees Fahrenheit (°F). The period from December through February is usually the coldest part of the year. With an average daily maximum temperature of 87°F, July is usually the hottest month of the year. The average date of the last frost is April 23, and the average date of the first frost is October 19. The county receives 37 inches of annual rainfall and 17 inches of annual snowfall. During the growing season, rainfall is not uniformly distributed, and long wet and dry spells can occur (Versar 1993a).

1.4.2 Hydrology

Surface water features in the site area include two unnamed intermittent streams or drainage swales along the northern and western boundaries of Camp Pedricktown: the DoD Ponds Wildlife Management Area, containing a manmade lake immediately southwest of the site; and the Delaware River, about 0.5 mile west of the site (Figure 1-1). Surface water runoff from Camp Pedricktown generally follows the site topography. The drainage swale along the northern boundary of the camp flows to the northwest into the Delaware River, from the northeast corner of the site. This swale is intersected at the northwest corner of the camp by the west swale, which flows to the northwest from the south corner of the camp (ARCADIS Geraghty & Miller 2000). There is no surface water on the Reserve Enclave itself.

1.4.3 Geology and Soils

Camp Pedricktown is located on the southwestern edge of the Atlantic Coastal Plain Physiographic Province. The flat to gently undulating terrain is underlain by unconsolidated sediment that ranges in age from the Cretaceous to the Holocene (0 to 146 million years old). The basement rock beneath these sediments is metamorphic schist of the Wissahickon Formation, which is Precambrian in age (570 to 900 million years old) (ARCADIS Geraghty & Miller 2000).

Unconformably overlying this formation is the upper to early Cretaceous-age Potomac-Raritan-Magothy Formation. Both the Potomac and Raritan Formations are continental in origin, while the Magothy Formation is continental and marine in nature. In New Jersey, the sediments of the three lithologic units that make up this formation are typically described as a single formation because they are virtually indistinguishable from one another (ARCADIS Geraghty & Miller 2000).

The alluvial deposits of the Pleistocene-age Cape May Formation (11,000 to 1.8 million years old) unconformably overlie the Potomac-Raritan-Magothy Formation. The Cape May Formation consists of silty sands and gravels. The Cape May Formation at Camp Pedricktown is about 20 to 35 feet thick (ARCADIS Geraghty & Miller 2001a, 2001b). Soil borings completed as part of previous site investigations indicate that in the area of the site, the Cape May Formation is separated from the uppermost portion of the Potomac-Raritan-Magothy Formation by over 30 feet of predominantly reddish-orange clay.

A more detailed discussion of the geology of the Camp Pedricktown area is provided in the environmental investigation/alternatives analysis (EI/AA) for the BRAC parcel (ARCADIS Geraghty & Miller 2000).

Soils at Camp Pedricktown generally coarsen with depth and consist of fine- to medium-grained silty sands to coarse sand and gravel, locally interspersed with clay lenses (U.S. Army, Fort Dix, 2001a).

1.4.4 Hydrogeology

Groundwater in the Camp Pedricktown area is relatively shallow (an average of 3 feet below ground surface [bgs]). The saturated soils of the Cape May Formation make up the unconfined aquifer at the site. Groundwater flows in a west-northwesterly direction toward the Delaware River (ARCADIS Geraghty & Miller 2001a). A comparison of water table elevation and surface water elevation indicate that shallow groundwater at Camp Pedricktown contributes to the surface water flow in an off-site drainage swale to the north. Surface water in the drainage swale discharges to the Delaware River, with negligible effects from tidal influences (U.S. Army, Fort Dix, 2001a).

The Wissahickon Formation is not considered a significant aquifer in Salem County. Because of its confining nature, movement of water can occur only through joints and fractures within the bedrock. No water wells in Salem County are known to be installed in this formation (Versar 1993a).

One of the most productive aquifer systems in all of New Jersey is found in the Potomac-Raritan-Magothy Formation. At a few places throughout this aquifer system in New Jersey, thin bands of lenticular sand lenses exist at the uppermost portion of the formation, where confining clays are absent. This provides a direct hydraulic connection with the overlying Pleistocene deposits of the Cape May Formation (Versar 1993a).

The Cape May Formation is also a very important aquifer system in the Penns Grove area. Precipitation recharges the Cape May aquifer and can infiltrate to the underlying formations in areas where local confining clays are absent.

According to the work plan for a pilot demonstration at the BRAC parcel (ARCADIS Geraghty & Miller 2000), the average hydraulic gradient across the site has been reported as 0.0044 feet per foot, with an average hydraulic conductivity of 5.9 feet per day for the shallow soils of the unconfined aquifer and an average hydraulic conductivity of 23.9 feet per day for the deeper soils. The overall average hydraulic conductivity for the water table aquifer was 11.8 feet per day.

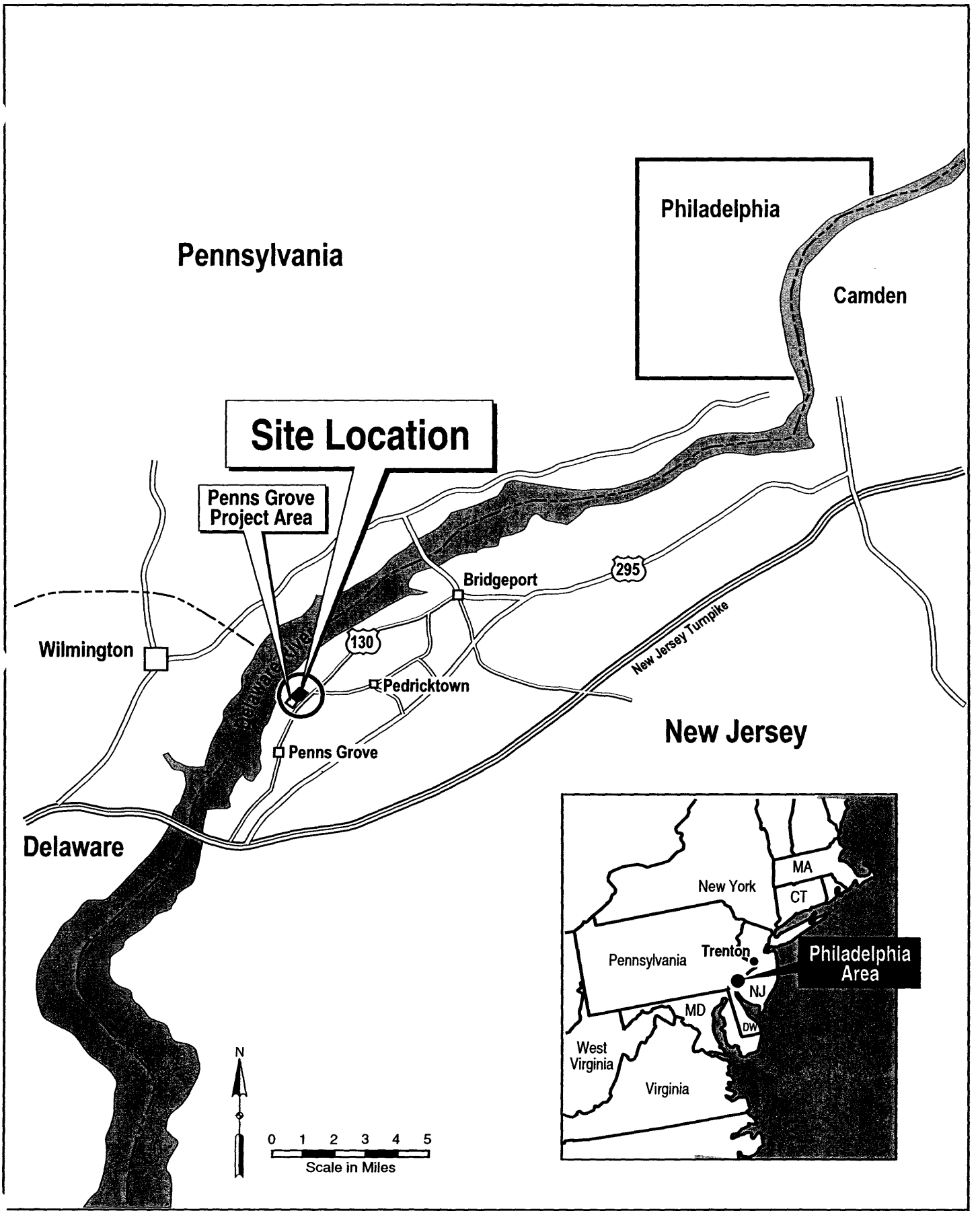
1.5 SENSITIVE ENVIRONMENTS

In a baseline ecological evaluation, Camp Pedricktown was characterized as highly urbanized because it is covered almost entirely by buildings, pavement, and seeded lawns, therefore providing low-quality habitat for typical threatened or endangered species (U.S. Army, Fort Dix, 2001a). The surrounding area, which includes the DoD Ponds Wildlife Management Area, the swales, and the Delaware River, provides good habitat for wildlife. For the BRAC parcel, an environmental assessment (EA) prepared under the National Environmental Policy Act (NEPA) assessed the potential effects of the transfer of the BRAC parcel on plants and wildlife (USACE Mobile District 2000).

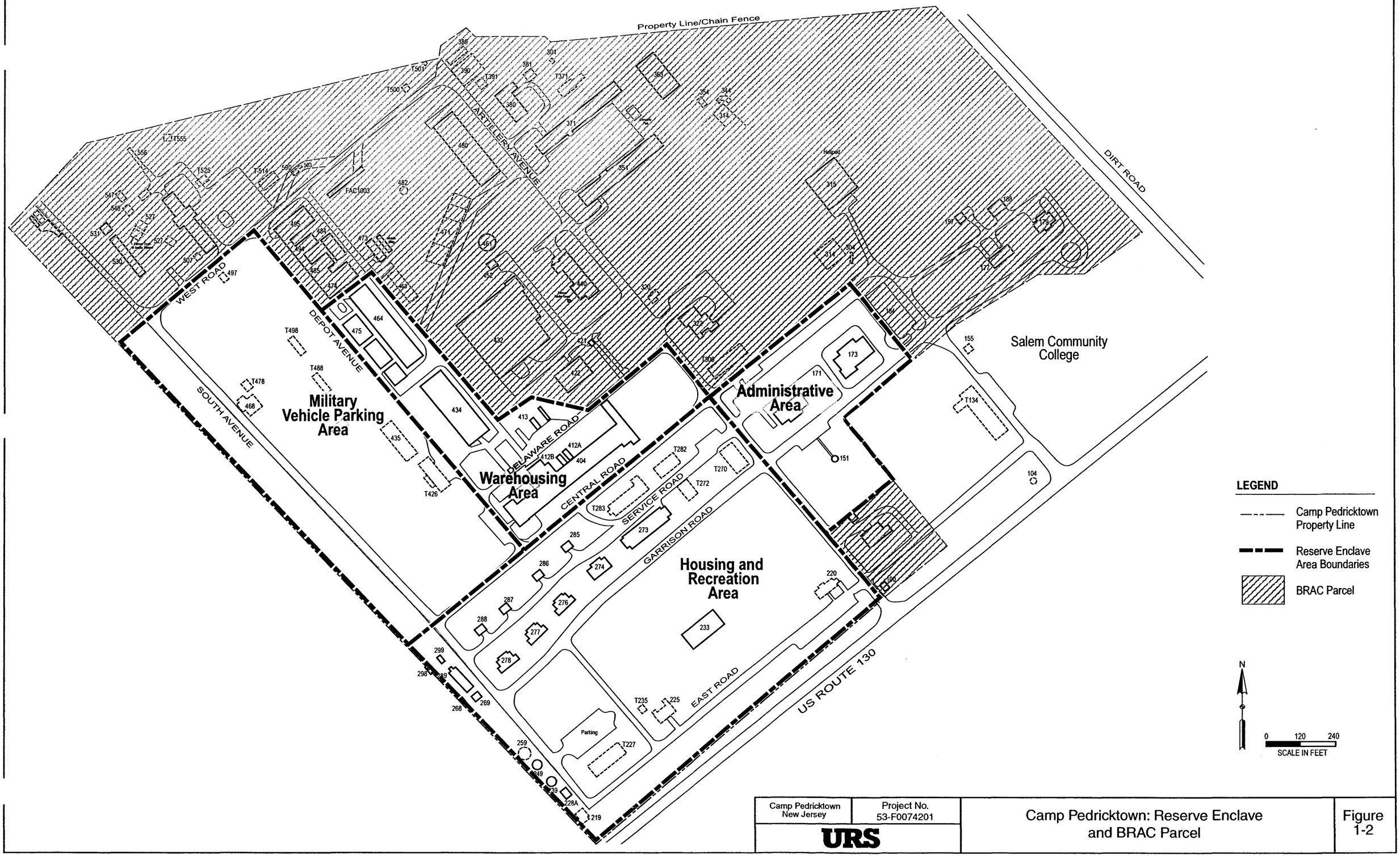
Several cultural resources studies (a 1996 archaeological survey and a 1997 historic architectural inventory) have been conducted at Camp Pedricktown recently. In February and March 1999, the Army and the local reuse authority (LRA) signed a Memorandum of Agreement (MOA) with the New Jersey State Historic Preservation Officer (SHPO), governing the management of cultural resources at the installation. The MOA states that Facilities 422, 432, 452, and 461 have been determined to be eligible for listing in the National Register of Historic Places. Additional details are provided in Section 4.11.3 of the August 2000 EA.

1.6 LIMITATIONS

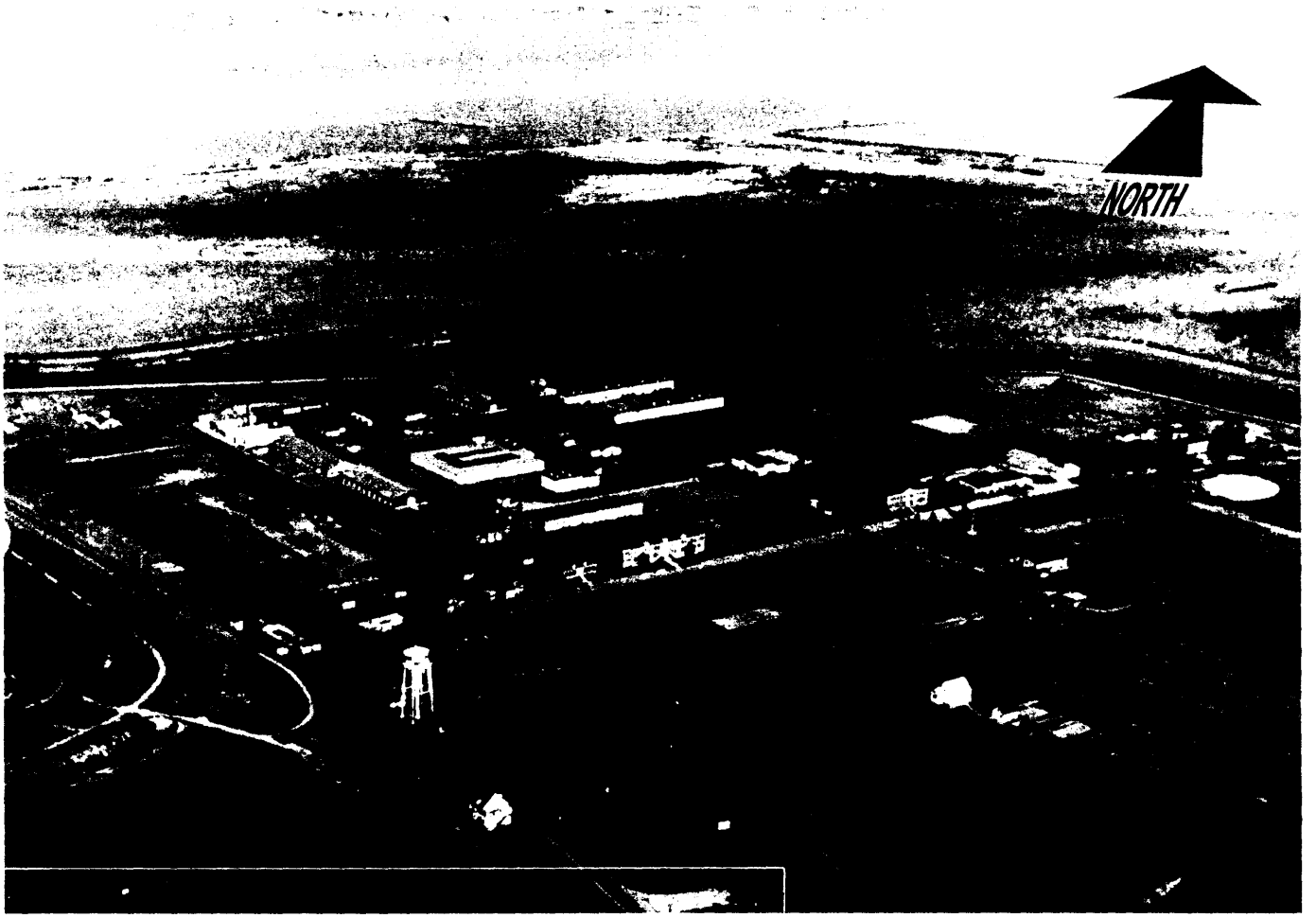
Although this EBS was performed professionally, no investigation may be considered so comprehensive as to guarantee complete information regarding the possible presence of materials on the installation that currently or in the future may be considered hazardous. The conclusions presented in this EBS are based on information that was reasonably available from the designated installation contacts and other public sources at the time the EBS was conducted. In addition, information obtained from the records review and interviews has been assumed to be correct and complete, unless contradictory information was obtained through other sources.



Camp Pedricktown New Jersey	Project No. 53-F0074201	General Site Location	Figure 1-1
URS			



Camp Pedricktown New Jersey	Project No. 53-F0074201	Camp Pedricktown: Reserve Enclave and BRAC Parcel	Figure 1-2
URS			



Camp Pedricktown New Jersey	Project No. 53-F0074201	Oblique View of Camp Pedricktown and Vicinity	Figure 1-3
URS			

Table 1-1
Environmental Condition of Property Definitions

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

2.0 SOURCES OF INFORMATION

The EBS investigation at the Camp Pedricktown Reserve Enclave meets the requirements of CERCLA Section 120(h), as amended by CERFA and implemented by DoD. This section describes the specific sources of information that were used in the study.

The approach for the EBS is limited to a review of available information (including documents, photographs, and maps), interviews with current and former employees involved in operations, and an on-site visual inspection to assess the environmental condition of the property.

Relevant documents used for the EBS are identified in the following subsections. The information reviewed includes environmental studies; federal, state, and local regulatory databases; interviews of installation personnel; and visual inspections within 0.25 mile of the subject parcel area.

2.1 EXISTING DOCUMENTS

The primary sources of information for this EBS are listed in Table 2-1. Those sources used for specific information are also provided in the reference list (Section 6).

2.2 FEDERAL, STATE, AND LOCAL REGULATORY DATABASES

URS contracted with Environmental Data Resources, Inc. (EDR), to conduct a review of the agency databases provided in Table 2-2. The results of the search are shown in Appendix A. The database search was conducted within specific radii of the site, depending on the requirements of the American Society for Testing and Materials (ASTM) standard 1527-00 for environmental site investigations. The search maps the location of any sites listed in the databases in relation to the subject property.

2.2.1 Reserve Enclave and BRAC Parcel (Camp Pedricktown)

Camp Pedricktown appeared in the following agency databases: Facility Index System (FINDS), Resource Conservation and Recovery Information System—Large Quantity Generator (RCRIS-LQG), Comprehensive Environmental Response Compensation, and Liability Information System—No Further Remedial Action Planned (CERCLIS-NFRAP), Underground Storage Tanks (UST), Leaking Underground Storage Tanks (LUST), and State Hazardous Waste Sites (SHWS). In other words, the Camp/Reserve Enclave/BRAC Parcel is listed as a large-quantity generator of hazardous waste, a New Jersey cleanup site, a site investigated under CERCLA but

with no further action planned, and a regulated UST contamination site. The information represented by these lists is documented in Appendix A.

2.2.2 Adjacent Properties Other Than BRAC Parcel

Two properties within the search radii appeared in agency databases. The first, Tomah Products, Inc., was listed in both the CERCLIS and SHWS databases. The property is between 0.5 and 1 mile east-northeast of the Reserve Enclave. A CERCLA preliminary assessment and site inspection were conducted there in the late 1980s and early 1990s. Details from the database indicate that groundwater contamination at the site was reduced significantly after implementation of a groundwater remediation program by the New Jersey Department of Environmental Protection (NJDEP). Lower priority for further action was recommended. No further details are provided regarding Tomah Product's listing on the SHWS. The site appears to be hydraulically upgradient or crossgradient of the Reserve Enclave. Because of the distance of Tomah Products from the Reserve Enclave and the fact that groundwater remediation has been conducted at the site, the likelihood of subsurface contamination at the Reserve Enclave from this site is relatively low. However, detailed information was unavailable to make a more definitive statement.

The second property within the search radii is Xerxes Fiberglass Inc., located within 0.5 to 1 mile south-southwest of the Reserve Enclave. Xerxes Fiberglass is listed in the CERCLIS-NFRAP, RCRIS, and SHWS databases. A preliminary assessment and site inspection were completed there under CERCLA in 1990. As a result of these studies, EPA determined that no further action was warranted at the site. Xerxes Fiberglass was registered as a RCRA large-quantity hazardous waste generator in 1981. A compliance inspection in 1988 resulted in one violation being recorded for the site. The nature of the violation is not provided. The site is on the New Jersey hazardous waste sites list, but no further information is provided. The property is likely to be hydraulically crossgradient of the Reserve Enclave, and there is no information available regarding whether subsurface contamination exists at the site. Because of the distance of Xerxes Fiberglass from the Reserve Enclave and the likelihood that the site is not upgradient of the subject property, this site is not expected to represent a significant environmental issue for the Reserve Enclave.

2.3 PHOTOGRAPHS

Photographs taken during the site reconnaissance on March 1, 2001, that illustrate points of discussion are provided in Appendix B of this report. They are specifically referenced in Section 4 as the subject matter they illustrate is discussed.

Available historical aerial photographs were reviewed for the original 1996 EBS for evidence of past activities that may have involved excavations, dumping areas, or any unexplained disturbance of the ground. The results of the aerial photograph review were then compared to the results of the records review, interviews, and visual inspections. An aerial photograph of the property and vicinity from an oblique angle is provided as Figure 1-3.

2.4 EXISTING PROPERTY MAPS

Existing installation property maps were used to assist in identifying past property use and practices at the Camp Pedricktown Reserve Enclave that may have affected environmental conditions. For example, these maps helped to establish the locations of former buildings, subsurface utilities, former USTs, and monitoring wells. Since substantial information was obtained from property maps, they are listed as primary documents in Table 2-1.

No geographic information system (GIS) maps were available for the Reserve Enclave from which to create a base map for CERFA parcels. Therefore, we used the map from the 1996 EBS, created with AutoCAD Release 12 from a digitized map entitled "General Site Map: Grounds Maintenance/Snow Removal" (DEH, Fort Dix, 1989a). This map has been used as the base for the CERFA map included in Section 5 of this report. Acreage estimates were calculated using the digitized map. The Military Vehicle Parking Area, Housing and Recreation Area, Administrative Area, and Warehousing Area acreages total approximately 40 acres, and the BRAC parcel acreage is approximately 50 acres.

2.5 INTERVIEWS

To facilitate the review of the installation's environmental history and practices, interviews with employees of Fort Dix and the 77th Regional Support Command (USAR) were conducted. Table 2-3 provides a list of the individuals who were interviewed. To ensure the thoroughness of the interview process, an interview form was used (Appendix C).

2.6 VISUAL INSPECTIONS

As required by CERCLA 120(h)(4)(A)(iv) and (v) and DoD guidance, a visual inspection of the subject property and adjacent properties must be performed. This inspection was conducted by URS staff on March 1, 2001. The visual inspection included a walking review of the grounds, buildings, structures, and equipment in the Reserve Enclave. Observations of adjacent properties were made from an automobile. Table 2-4 provides a list of the installation facilities and adjacent properties that were visually inspected. To ensure the thoroughness of the visual inspection, a visual inspection form was used (Appendix C).

Table 2-1
Primary Documents Reviewed

	Author and Reference	Date	Fort Dix BRAC Office Environmental Document No.	EBS Source of Evidence Document Identification No.
Preliminary Site Assessment of the Pedricktown Support Facility, Sievers-Sandberg USARC	RMC Environmental Services	1991	03-100-120	1
Installation Spill Prevention Control and Countermeasure Plan	EA Engineering, Science, and Technology	1995	03-200-002	2
Memorandum From L.S. Meredeth Regarding Oil Spill at Sievers-Sandberg Building 184	Camp Pedricktown, Building 184, AST Historical Records: 1984, 1985, 1996, Fort Dix BRAC Office	1984	03-102-020	3
Asbestos Materials Assessment at Sievers-Sandberg USARC	Galson Technical Services, Inc.	1988	03-107-200	5
Map: Sewer System, Barracks and Shops Areas	Office of the Post Engineer, Delaware Ordnance Depot	1945	Not applicable[a]	6
Final Expanded Site Inspection Report, Pedricktown Support Facility	Versar, Inc.	1993	03-101-116	7
Letter Regarding Spill at Building 184	L.S. Riggins Oil Co.	1985	Not applicable[a]	8
DA Forms 5-47, 5-49, and 2877; Real Property Records	Fort Dix Real Property Office	Varies	Not applicable[a]	9
Report on Comprehensive Asbestos Survey of 17 Buildings for Sievers-Sandberg USARC, Pedricktown Support Facility, Volume 1 ,2, and 3, Salem County, New Jersey	Versar, Inc.	1993	03-107-110, 03-107-111, 03-107-112	10
Asbestos Survey Off-Post Housing Areas, Volume 1, 2, and 3, Fort Dix, New Jersey	JACA Corporation	1990	03-107-120, 03-107-121, 03-107-122	11
Radon Monitoring Report	Landauer	1992	Not applicable[a]	12
Plot Plan and Details, Electrical, Water and Sewage Facilities, Missile Master	U.S. Army Corps of Engineers, Philadelphia District	1960	Not applicable[a]	13
Map: Water Distribution System, Barracks and Shops Areas	Office of the Post Engineer, Delaware Ordnance Depot	1945	Not applicable[a]	4
Results of GPR Surveys and Exploratory Excavations, Camp Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth-Tech Inc.	1997	Not applicable[a]	14

Table 2-1 (Continued)
Primary Documents Reviewed

	Author and Reference	Date	Fort Dix BRAC Office Environmental Document Nos.	EBS Source of Evidence Document Identification No.
Ordnance, Ammunition and Explosives Archives Search Report, Conclusions and Recommendations, Pedricktown Support Facility, Salem County, New Jersey	U.S. Army Corps of Engineers, St. Louis District	1997	03-104-003	15
Summary of Lease Information on BRAC Property, Camp Pedricktown, New Jersey	Fort Dix BRAC Office	2001	Not applicable[a]	16
Summary of Environmental Investigation/Alternatives Analysis dated February 2000—AR File	ARCADIS Geraghty & Miller, Inc.	2001	Unknown	17
Status of BRAC Environmental Program—Summary	Fort Dix BRAC Office	2001	Not applicable[a]	18
Arsenic and Lead Soil Sampling Investigation, Facility 239 (Water Tower), Camp Pedricktown, New Jersey	Fort Dix BRAC Support Team, Prepared for DPW/EED, AFRC-FA-PWN	2000	03-101-050	19
Remedial Action Workplan for Pilot Demonstration of the Clean Base Program at Camp Pedricktown	ARCADIS Geraghty & Miller, Inc.	2000	Not applicable[a]	20
Asbestos Abatement Final Summary Report, Camp Pedricktown, New Jersey	ARCADIS Geraghty & Miller, Inc.	2000	03-107-022	21
BRAC Industrial Radiation Facility Close-Out and Termination Survey, Report for Camp Pedricktown, New Jersey—Letter	Fort Dix—DPW/EED, AFRC-FA-PWN	1998	03-106-003	22
Industrial Radiation Survey No. 27-MH-4940-R-98, Facility Close-Out and Termination Survey, Camp Pedricktown, New Jersey—Report	U.S. Army Center for Health Promotion and Preventive Medicine	1998	NA	23
Erratum for Industrial Radiation Survey No. 27-MH-4940-R-98, Facility Close-Out and Termination Survey, Camp Pedricktown, New Jersey, Building 480—Attachment 1	U.S. Army Center for Health Promotion and Preventive Medicine	1998	NA	24
Letter transmitting Arsenic and Lead Soil Sampling Investigation Facility 239 (Water Tower), Camp Pedricktown, New Jersey	Fort Dix—DPW/EED, AFRC-FA-PWN	2000	NA	25

Table 2-1 (Continued)
Primary Documents Reviewed

	Author and Reference	Date	Fort Dix BRAC Office Environmental Document No.	EBS Source of Evidence Document Identification No.
Sampling Results for Camp Pedricktown PCB Transformer Survey	ICF Kaiser Engineers, Inc.	1997	03-103-001	26
Ground Penetrating Radar Survey, Pedricktown Army Support Facility, Salem County, New Jersey	VERSAR, Inc., and International Exploration	1993	Not applicable[a]	27
Asbestos Assessment and Abatement Prioritization Program Report, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Argonne National Laboratory for 77th Regional Support Command, USARC, Fort Totten, New York	1997	Not applicable[a]	28
Architectural Survey of 56 Buildings and Structures, Pedricktown Support Facility	77th Regional Support Command, USARC, Fort Totten, New York	Unknown	Not applicable[a]	29
Inventory of Underground and Above Ground Storage Tanks, Pedricktown Support Facility and Vicinity, Oldman's Township, Salem County, New Jersey	77th Regional Support Command, USARC, Fort Totten, New York	Unknown	Not applicable[a]	30
New Jersey Department of Environmental Protection, Historic Preservation Office, Individual Structure Survey Form for Building Number 432 Missile Master	New Jersey Department of Environmental Protection, Historic Preservation Office	1995	Not applicable[a]	31
Focused Remedial Investigation Report, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey, Building Numbers 404 and 413—Final	EA Engineering, Science, and Technology	2000	Not applicable[a]	32
General Site Diagram, Building Numbers 273, 274, and 404	Earth Tech Remediation Services	1997	Not applicable[a]	33
Underground Storage Tank Closure Report, Building Number 235, UST Number 235-1, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth Tech, Inc.	1997	Not applicable[a]	34
Underground Storage Tank Closure Report, Building Number 413, UST Number 413-NW, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth Tech, Inc.	1997	Not applicable[a]	35

Table 2-1 (Continued)
Primary Documents Reviewed

	Author and Reference	Date	Fort Dix BRAC Office Environmental Document No.	EBS Source of Evidence Document Identification No.
Underground Storage Tank Closure Report, Building Number 413, UST Number 413-W, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth Tech, Inc.	1997	Not applicable[a]	36
Underground Storage Tank Closure Report, Building Number 229, UST Number 229-1, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth Tech, Inc.	1997	Not applicable[a]	37
Underground Storage Tank Closure Report, Building Number 404, UST Number 404-1, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth Tech, Inc.	1997	Not applicable[a]	38
Underground Storage Tank Closure Report, Building Number 273, UST Number 273-N, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth Tech, Inc.	1997	Not applicable[a]	39
Underground Storage Tank Closure Report, Building Number 274 UST Number 274, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth Tech, Inc.	1997	Not applicable[a]	40
Underground Storage Tank Closure Report, Building Number 404, UST Number 404, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth Tech, Inc.	1997	Not applicable[a]	41
Underground Storage Tank Closure Report, Building Number 413, UST Number 413-SW, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth Tech, Inc.	1997	Not applicable[a]	42
Underground Storage Tank Closure Report, Building Number 276, UST Number 276-N, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth Tech, Inc.	1997	Not applicable[a]	43

Table 2-1 (Continued)
Primary Documents Reviewed

	Author and Reference	Date	Fort Dix BRAC Office Environmental Document No.	EBS Source of Evidence Document Identification No.
Underground Storage Tank Closure Report, Building Number 276, UST Number 276-S, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth Tech, Inc.	1997	Not applicable[a]	44
Underground Storage Tank Closure Report, Building Number 277, UST Number 277-N, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth Tech, Inc.	1997	Not applicable[a]	45
Underground Storage Tank Closure Report, Building Number 277, UST Number 277-S, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth Tech, Inc.	1997	Not applicable[a]	46
Underground Storage Tank Closure Report, Building Number 278, UST Number 278-N, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth Tech, Inc.	1997	Not applicable[a]	47
Underground Storage Tank Closure Report, Building Number 278, UST Number 278-S, Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey	Earth Tech, Inc.	1997	Not applicable[a]	48
Camp Pedricktown Underground Storage Tank Closure Report, Final—18 UST Removals	ICF Kaiser Engineers	1997	Not applicable[a]	49
Closure Report, Removal of Three Heating Oil USTs and Appurtenant Piping for Sievers-Sandberg USARC Buildings 171 & 173, Route 130 South, Pedricktown, Camden County, New Jersey	EnSolutions, Inc.	1998	Not applicable[a]	50
Remedial Investigation Report, Sievers-Sandberg USARC, Pedricktown, Salem County, New Jersey, at Building Numbers: 413-SW, 413-NW, 413-W, and 404-1	Brinkerhoff Environmental Services, Inc.	1998	Not applicable[a]	51

Table 2-1 (Continued)
Primary Documents Reviewed

	Author and Reference	Date	Fort Dix BRAC Office Environmental Document No.	EBS Source of Evidence Document Identification No.
Drawing: Sievers-Sandberg USARC Pedricktown, New Jersey, Building 273, Asbestos Removal/New Insulation Piping Plan, PR Number BB-000030-7J	Sterns Catalytic Division of United Engineers & Constructors	1998	Not applicable[a]	52
Drawing: Sievers-Sandberg USARC Pedricktown, New Jersey, Building 273 & 274 Upgrade of Heating & Ventilating Sys., PR Number BB-000030-7J	Sterns Catalytic Division of United Engineers & Constructors	1998	Not applicable[a]	53
Drawing: Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey, Utility Map	Text in Title Block Illegible	Unknown	Not applicable[a]	54
Drawing: Sievers-Sandberg Army Support Facility, Wastewater/ Stormwater Evaluation Study	USACE, Baltimore District/Woolpert	1999	Not applicable[a]	55
Drawing: Sievers-Sandberg U.S. Army Reserve Center, Pedricktown, New Jersey, Utilities Site Map, Water Line Map, Underground Fuel Tanks	Robert Couch Associates	1989	Not applicable[a]	56
Drawing: Sanitary Sewer Improvements, Sievers-Sandberg USARC, Pedricktown, New Jersey, Reference Drawings, Site Map, 88-3333-03	Directorate of Engineering & Housing, Fort Dix, New Jersey	1989	Not applicable[a]	57
Drawing: Delaware Ordnance Depot, Pedricktown, New Jersey, Office of the Post Engineer, Water Distribution System Barracks & Shops Area—DM-74	USACE/Office of the Post Engineer	1945	Not applicable[a]	58
U.S. Army Base Realignment and Closure 95 Program, Environmental Baseline Survey Report, Camp Pedricktown, New Jersey—Final	Woodward-Clyde Federal Services	1997	03-100-003	59
Proposed Plan for the Camp Pedricktown Base Realignment and Closure Property	U.S. Army	2001	Not applicable[a]	60
Remedial Action Workplan Addendum for Groundwater: Pilot Demonstration of the Clean Base Program at Camp Pedricktown	ARCADIS Geraghty & Miller	2001	Not applicable[a]	61

Table 2-1 (Continued)
Primary Documents Reviewed

	Author and Reference	Date	Fort Dix BRAC Office Environmental Document No.	EBS Source of Evidence Document Identification No.
Remedial Action Workplan Addendum for Soil: Pilot Demonstration of the Clean Base Program at Camp Pedricktown	ARCADIS Geraghty & Miller	2001	Not applicable[a]	62
Untitled Map of Delaware Ordnance Depot	Unknown	Circa 1942	Not applicable[a]	63
Untitled Map of Delaware Ordnance Depot	Unknown	1942	Not applicable[a]	64
Memorandum From Richard Sample Transmitting Comments Regarding Significant Issues to be Addressed in the Environmental Baseline Survey	Department of the Army	1995	Not applicable[a]	65
General Site Plan and Vicinity Map, Buildings No. 422 and 432, Miscellaneous Alterations	U.S. Army Corps of Engineers, New York District	1963	Not applicable[a]	66
Transfer and Acceptance of Military Real Property Forms	Engineering Division, Fort Dix	1965	Not applicable[a]	67
Questionnaire	U.S. Army Reserve Center	1985	Not applicable[a]	68
General Site Map	U.S. Army Reserve Center	1995	Not applicable[a]	69
Map: AN/FSG-1 Facilities, Missile Master Operations Area Mechanical Utilities	Sanders and Thomas Associates	1958	Not applicable[a]	70
Plan, Bachelor Officer's Quarters Rehabilitation of Building No. T426	U.S. Army Corps of Engineers, Philadelphia District	1962	Not applicable[a]	71
Plot Plan, Missile Master Facilities	U.S. Army Corps of Engineers, Philadelphia District	1960	Not applicable[a]	72
BRAC 95 Facilities Requirement Statement	U.S. Army Forces Command	1995	Not applicable[a]	73
Building Information Schedule	Camp Pedricktown, New Jersey	1996	Not applicable[a]	74
Letter Responding to Assessment "91"	New Jersey Department of Environmental Protection	1991	Not applicable[a]	75
Installed Property—Pedricktown, New Jersey	Office of the Engineer, Fort Dix	1964	Not applicable[a]	76

Table 2-1 (Continued)
Primary Documents Reviewed

	Author and Reference	Date	Fort Dix BRAC Office Environmental Document No.	EBS Source of Evidence Document Identification No.
Map: Upgrade Lighting System, Sievers-Sandberg USARC	Directorate of Engineering and Housing, Fort Dix	1983	Not applicable[a]	77
Camp Pedricktown	U.S. Army Forces Command	1995	Not applicable[a]	78
Partial Plot Plan, Missile Master Facilities	U.S. Army Corps of Engineers, Philadelphia District	1962	Not applicable[a]	79
Army Air Defense Program, Basic Information Maps, General Topography I	U.S. Army Corps of Engineers, New York District	1962	Not applicable[a]	80
Basic Information Maps, Sanitary Sewer Map	U.S. Army Corps of Engineers, New York District	1962	Not applicable[a]	81
Memorandum Concerning Transfer of Real Property	Elizabeth J. Inman	1964	Not applicable[a]	82
Results of Inventory of NORAD Center Philadelphia (Pedricktown)	Engineering Division, Fort Dix	1967	Not applicable[a]	83
Lead Based Paint Risk Assessment Report for Building Nos. 120, 177, 179, 276, 277, 278	Ogden Environmental and Energy Services	1994	Not applicable[a]	84
Email 6/29/01 to Susan King, URS, concerning Building T498 – original information in handwritten ledger	Paul Fluck, Fort Dix	2001	Not applicable	85

[a]Document is available from 77th Regional Support Command, U.S. Army Reserve Center, Fort Totten, New York.

Notes:
BRAC - Base Realignment and Closure
DA - Department of the Army
EBS - environmental baseline survey
GPR - ground penetrating radar
NORAD - North American Air Defense Command
USACE - U.S. Army Corps of Engineers
USARC - U.S. Army Reserve Center

Table 2-2
Regulatory Databases Reviewed

Database	Date	Radius (mile)	Contents
NPL	January 2001	1	Lists sites that are identified by the EPA for priority remedial actions under the Superfund program.
Proposed NPL	January 2001	1	Lists sites that are proposed for inclusion on the NPL.
CERCLIS	December 2000	0.5	Contains information on CERCLA sites that are on or proposed for the NPL or have gone through the screening and assessment phase for possible inclusion on the NPL.
CERCLIS-NFRAP	December 2000	0.25	Provides sites on the CERCLIS list at which, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the sites to be placed on the NPL, or contamination was not serious enough to require federal Superfund action.
Emergency Response Notification System	August 2000	Target property only	Repository for information on releases of hazardous substances and oil. This information is based on reports filed by local agencies (e.g., municipal fire, police, or environmental departments), county agencies, state entities, and federal agencies (e.g., U.S. Coast Guard, National Response Center, and EPA).
RCRA Treatment, Storage, or Disposal CORRACTS database	April 2000	1	Reports RCRA corrective action sites at which releases of hazardous waste or constituents have occurred.
RCRIS LQG and RCRIS SQG	June 2000	0.25	Provide lists of RCRA generators. Large-quantity generators generate over 1,000 kg of hazardous waste per month, or greater than 1 kg of acutely hazardous waste as defined by RCRA. Small-quantity generators generate more than 100 kg and less than 1,000 kg of hazardous waste during any calendar month.
RCRA Treatment, Storage, or Disposal	June 2000	0.5	Lists RCRA facilities that treat, store, or dispose of hazardous waste.
Solid Waste Landfill	August 1999	0.5	Database of solid waste facilities and landfill sites, maintained by the NJDEP.
State Hazardous Waste Sites	September 1997	1	The NJDEP provides known contaminated sites in the state (sites with contamination at concentrations greater than the applicable cleanup criteria for soil and/or groundwater).
USTs	September 1999	0.25	List of UST data, maintained by the state of New Jersey.
LUSTs	July 2000	0.5	Regulated UST Contamination Sites Listing, maintained by the state of New Jersey.

Notes:
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS - Comprehensive Environmental Response, Compensation, and Liability Information System
CORRACTS - Corrective Action Report
EPA - U.S. Environmental Protection Agency
Kg - kilogram
LQG - large quantity generator
LUSTs - Leaking Underground Storage Tanks
NFRAP - No Further Remedial Action Planned
NJDEP - New Jersey Department of Environmental Protection
NPL - National Priorities List
RCRA - Resource Conservation and Recovery Act
RCRIS - Resource Conservation and Recovery Information System
USTs - Underground Storage Tank

Table 2-3
U.S. Army Personnel Interviewed

Name	Title	Organization	Telephone Number	Period Associated With Area of Installation
Richard Ramsdell	Environmental Program Manager	HQ, 77th Regional Support Command, U.S. Army Reserve	(718) 352-2091	1996 to Present
Paul Bertrand	Environmental Specialist	HQ, 77th Regional Support Command, U.S. Army Reserve	(718) 352-2092	1997 to Present
Paul Fluck	BRAC Support Group, Technical Manager Quality Assurance (Contractor) (Current BRAC Environmental Coordinator)	Fort Dix BRAC Office	(609) 562-2222	1999 to Present
Richard Sample	BRAC Environmental Coordinator (former)	Fort Dix BRAC Office	(609) 562-3699	1995 to Present

Notes:
BRAC - Base Realignment and Closure
HQ - Headquarters

Table 2-4
Visually Inspected Facilities at Camp Pedricktown Reserve Enclave and Adjacent BRAC Parcel

Installation Facility	Survey Type
Facility 1002, Military Vehicle Parking	Walking, outside
Facility 171, Headquarters Building	Walking, inside/outside
Facility 151, Flagpole	Walking, on-site
Facility 173, Officers' Mess	Walking, inside/outside
Facility 190, Access Control Building	Walking, outside
Facility 229 and 229A, Pump House and Valve Shed	Walking, inside/outside
Facility 239, Elevated Water Tank, 100,000-gallon capacity (active)	Walking, outside
Facility 249, Aboveground Water Storage Tank, Riveted (inactive)	Walking, outside
Facility 268, Gatehouse[a]	Walking, inside/outside
Facility 269, Bathhouse	Walking, inside/outside
Facility 289, Pool	Walking, inside/outside
Facility 298, Chlorinator Building	Walking, inside/outside
Facility 299, Kiddie Pool	Walking, inside/outside
Facility 273, Barracks	Walking, inside/outside
Facility 274, Dispensary	Walking, inside/outside
Facility 285, Detached Garage	Walking, inside/outside
Facility 276, 2-Family, NCO Quarters	Walking, inside/outside
Facility 286, Detached Garage	Walking, inside/outside
Facility 277, 2-Family, NCO Quarters	Walking, inside/outside
Facility 287, Detached Garage	Walking, inside/outside
Facility 278, 2-Family, NCO Quarters	Walking, inside/outside
Facility 288, Detached Garage	Walking, inside/outside
Facility 404, Motor Shop, Garage, Roundhouse	Walking, inside/outside
Facility 412 A&B, Wash Rack	Walking, outside
Facility 413, Gas Station and Oil Storage	Walking, outside
Facility 434, Facility Engineers' Warehouse	Walking, outside
Facility 464, General Storehouse	Walking, outside
Facility 475, Rest Rooms	Walking, outside
Facility 871, Roadways, Paved	Walking, outside
Facility 872, Roadways, Untreated	Walking, outside
Facility 878, Miscellaneous Pavement, Bituminous	Walking, outside

[a]Listed elsewhere as Exchange Branch/Refreshment Stand

Note:
NCO - Noncommissioned Officer

3.0 PROPERTY CHARACTERIZATION

This section provides an overview of past and current activities at the Camp Pedricktown Reserve Enclave and a discussion of the potential for environmental contamination to have been associated with these activities. It addresses waste management practices and significant environmental incidents that have been documented in the files reviewed. A general discussion of past and current operations at the Camp Pedricktown BRAC parcel is presented in the final EBS report (Woodward-Clyde 1997).

3.1 INSTALLATION HISTORY AND MISSION

In 1917, USACE began acquiring farms along the Delaware River in preparation for the construction of the Delaware Ordnance Depot, which was established on approximately 1,500 acres in 1918. The Delaware Ordnance Depot served as a final assembly and storage area for munitions until 1958. During World War II, the installation specialized in manufacturing pentolite-based munitions, including grenades and rockets (USARC 1995a; RMC 1991b; Versar 1993a, 1993c; Ebasco 1994a; Department of the Army n.d.). In 1945, the site became the location of an ammunition renovation school (NJDEP 1989). In 1946, the installation was the location for munitions burning, ordnance destruction, materials disassembly, and ammunition demilitarization of materials left over from World War II.

Also in 1946, the Delaware Ordnance Depot became a subinstallation of the Raritan Arsenal, in accordance with War Department General Order 146 (U.S. Army Forces Command 1995b). In 1947, the Camp Pedricktown site also became the backup storage facility for the Picatinny and Frankford Arsenals and the Aberdeen Proving Ground. In 1954, the Army redesignated the Delaware Ordnance Depot as the Raritan-Delaware Storage Activity. In 1958, the post was placed on stand-by status, and personnel removed all ammunition.

Jurisdiction of most of the original site was transferred to USACE to be used as a disposal area for dredged materials. All land transferred to USACE was designated as the Pedricktown Disposal Facility. The remaining land (approximately 120 acres) was reassigned to the Philadelphia Air Defense Site in 1959. (This 120-acre portion of the original site is now designated as Camp Pedricktown.)

In 1960, the Camp Pedricktown site became the headquarters for the 42nd and 43rd Artillery, whose mission was the command and control of the Nike missile sites in the Philadelphia area. Camp Pedricktown was an Army Air Defense Command Post, operating the "Missile Master," an air defense coordination system, for the Nike missile batteries within the Philadelphia Defense Area (Bender 1999). The site was completely renovated, and most of the buildings were

demolished (NJDEP 1989). A North American Air Defense Command (NORAD) center was built on the site at this time. The 42nd and 43rd Artillery remained at Camp Pedricktown until 1965.

The Camp Pedricktown site was transferred to Fort Dix in August 1962 (U.S. Army Forces Command 1995b). In 1965, 42 facilities at the site were leased to the Salem County Technical Institute. The institute used the facilities until it was displaced by the arrival of the 21st Corps, 79th Army Reserve Command (ARCOM) in the late 1960s. In April 1970, the federal government declared 23 acres of the Philadelphia Air Defense site as surplus, transferring the property to Salem County in July 1972. In 1974, the 21st Corps was replaced by the 78th Division of the Army Reserve.

In 1975, 11 of the 23 acres were transferred to Salem County Community College. In October 1993, the 79th Army Reserve Command (ARCOM) was given jurisdiction over the property. The USARC at Camp Pedricktown, originally 22 acres but expanded to 40 acres in 1996, currently provides grounds and buildings to support the administration, supply, training, and maintenance activities of the U.S. Army Reserve (USAR) (U.S. Army Forces Command 1995b). The following units currently lease the USARC from Fort Dix for training:

- 302nd Transportation Company Terminal (99th Regional Support Command)
- 348th General Hospital (77th Regional Support Command)
- 417th AUG Basic Combat Training (98th Division)
- 625th Forward Surgical Team (77th Regional Support Command)

The 348th and the 625th units will be moved to Fort Dix in the near future (Ramsdell 2001).

3.2 DESCRIPTION OF FACILITIES

Numerous facilities are still present at the Reserve Enclave. Most of these facilities were constructed before World War II. Table 3-1 lists existing and former buildings and facilities at the Reserve Enclave with dates of construction and former use.

To facilitate the discussion of information in this EBS, the Reserve Enclave has been divided into four geographic areas: Military Vehicle Parking Area, Housing and Recreation Area, Administrative Area, and Warehousing Area (Figure 1-2). Facilities that may have associated environmental concerns based on materials storage or use are described in the following sections.

The Camp Pedricktown location has hosted diverse Army missions for nearly 80 years. Unfortunately, detailed records of many potentially significant past activities are not available. Vehicle maintenance and fueling appear to be the former activities at the Reserve Enclave with

the greatest potential for environmental effects. Other activities (e.g., housing, administration, warehousing, and open space) appear to have little potential for environmental effects.

Potential environmental effects from adjacent properties are discussed in Section 4.3.

3.2.1 Military Vehicle Parking Area

The Military Vehicle Parking Area looks much the same as it did in 1945 (Delaware Ordnance Depot 1945b)—an open area sparsely populated with a few buildings. In 1945, these few buildings (since removed) were quarters for the troops.

Currently, this area is a parking lot for USAR vehicles, as it was in 1996, when it was included in the original EBS. The 1,100-foot by 300-foot grassy area resembles a field more than a parking area. According to USAR personnel, no maintenance is performed on the vehicles while they are parked in this area.

3.2.2 Housing and Recreation Area

The Housing and Recreation Area, which is the southeastern portion of the original Reserve Enclave, has not been the subject of any previous EBSs. The following facilities are currently located within the Housing and Recreation Area:

- Buildings 229 and 229A, Pump House and Valve Shed
- Facility 239, Elevated Water Tank (125,000-gallon capacity)
- Facility 249, Aboveground Water Storage Tank, Riveted (inactive)
- Building 268, Exchange Branch/Refreshment Stand
- Building 269, Bathhouse
- Building 273, Enlisted Men's (EM) Barracks
- Building 274, Dispensary
- Building 276, Two-Family Noncommissioned Officer (NCO) Quarters
- Building 277, Two-Family NCO Quarters
- Building 278, Two-Family NCO Quarters
- Building 279, Separate Toilet/Shower Facility
- Building 285, Detached Garage
- Building 286, Detached Garage
- Building 287, Detached Garage
- Building 288, Detached Garage
- Facility 289, Pool
- Building 298, Chlorinator Building
- Facility 299, Wading Pool

Of these buildings and structures, the ones that appear to have the potential for environmental contamination are Facility 239 (elevated water tank); Facility 249 (aboveground water storage tank); Buildings 276, 277, 278, 286, 287, and 288 (family quarters and garages); and Building 298 (chlorinator building).

Facility 239 is a water storage tank. Paint chips have been observed on the ground beneath this tank. In March 2000, Fort Dix BRAC Environmental contract personnel sampled soil beneath Facility 239 for arsenic and lead at the request of a prospective purchaser of the tank. The sampling results are discussed in Section 4 of this report.

Facility 249 is also a water tank. During this site visit, paint chips were observed in a pile of silty sand on one side of this tank. Further investigation has not been performed.

Buildings 276, 277, 278, 286, 287, and 288 were painted with lead-based paint that flaked to the ground surface, contaminating surface soil with lead. A more detailed description of this contamination is provided in Sections 4 and 5 of this report.

An abandoned swimming pool (Facility 289) and associated structures (bath houses, chlorination building [Building 298]) are located in the southwestern corner of the Housing and Recreation Area. Four tanks suspected of containing chlorine gas were removed some time between 1991 and 1993 (Versar 1993a). These gases are not expected to have affected the soil and groundwater. However, other chemicals may have been stored/used in Building 298.

3.2.3 Administrative Area

The following buildings are located within the Administrative Area:

- Facility 151, Flagpole
- Building 170, Waiting Shelter
- Building 171, Headquarters Building
- Building 173, Officers' Mess
- Building 190, Access Control Building

This area has been used for administrative functions since at least the 1940s. The Headquarters building continues to be used by the USARC for office space. The Officers' Mess is used sporadically by the USARC, primarily when Reserve units are conducting training on site. The Access Control Building was formerly used to restrict access to the camp. None of these facilities is likely to have housed activities that could pose an environmental risk to the Reserve Enclave.

3.2.4 Warehousing Area

The following buildings are or were located within the Warehousing Area:

- Building 404, Motor Shop, Garage, Roundhouse
- Building 413, Gas Station and Oil Storage
- Building 434, Facility Engineers' Warehouse
- Building 464, General Storehouse
- Building 475, Restrooms
- Facility FAC1008, Wash Rack
- Facility FAC1009, Temporary Drum Storage Area

Four structures in the Warehousing Area formerly housed activities (vehicle maintenance, washing, drum storage, and fueling) with a potential for environmental effects at the Reserve Enclave: Building 404, Facility FAC1008, Facility FAC1009, and Facility 413. Constructed in 1942, Building 404 includes 19 bays. In 1940s, 1980s, and 1990s maps, its former and current use appears to be as a shop/garage. In the 1940s, the west end of Building 404 was the location of the fire department and the central part was the location of a roundhouse, where three spurs of railroad track terminated (Untitled Map of Delaware Ordnance Depot circa 1942; Delaware Ordnance Depot 1945b). Based on these activities, potential contaminants at the facility could be petroleum hydrocarbons, chlorinated solvents, metals, and asbestos (brake pads), since there are floor drains and sumps in the building.

Building 404 is currently used by the USARC to perform minor repairs to vehicles and heavy equipment, including temporary hospital transports, armored personnel carriers, and construction equipment. All oil changes and major repairs to these vehicles and equipment are performed at Fort Dix. Building 404 is also used for storage of dry goods by different USARC divisions.

Facility FAC1008, a vehicle wash rack, is located to the north of Building 404 and appears to be inactive. When it was used by Camp Pedricktown, wash water was directed to a drain that contained a grease trap and discharged to the storm sewer system. Based on these activities, potential contaminants at the facility could be petroleum hydrocarbons, chlorinated solvents, and metals.

Facility FAC1009, a temporary drum storage area, is located on the east side of Building 404. This facility was not identified during the 2001 visual inspection, nor is it shown on site base maps. Therefore, it may not be currently used as a temporary drum storage area. Based on its use as a temporary drum storage area, potential contaminants could be petroleum hydrocarbons and chlorinated solvents.

Building 413 was formerly a gas station used to fuel motor pool vehicles and heavy equipment. Up to seven USTs were associated with the fuel dispenser island and the remainder of the facility. It was reported to the original EBS team in 1995 that drums containing waste oil and solvents had been stored on the grassy area over the used oil UST. Corroborating this is a photograph from 1986 showing drums adjacent to the northwest end of Building 413. Based on these activities, potential contaminants at the facility could be petroleum hydrocarbons, chlorinated solvents, and metals.

The USARC now refuels vehicles and equipment at commercial gas stations and at Fort Dix. Building 413 is currently inactive.

3.3 FACILITY SUPPORT ACTIVITIES

3.3.1 Hazardous Materials/Waste Management

At present, the only hazardous wastes at Camp Pedricktown are generated in the shop (the Warehousing Area, Building 404). The regulatory database search (Appendix A) revealed that the Reserve Enclave is a large-quantity generator, meaning that it generates at least 1,000 kg of hazardous waste per month. During the 2001 EBS field visit, URS personnel observed small volumes of waste lubricants and waste fuels stored in drums in Building 404. Absorbent materials are kept on hand in the event of a leak or spill.

Several hazardous waste manifests from the last few years were reviewed at the 77th Reserve Support Center, Fort Totten, New York, to get an indication of the kinds and quantities of wastes being generated by the Reserve Enclave. Manifests dated April 1998 list the following wastes for shipment (primarily to Defense Reutilization and Marketing Service [DRMS] Lakehurst, New Jersey):

- 2 Pounds of 2 percent cumene hydroperoxide (sealing compound)
- 316 Pounds of waste fuel oil and diesel fuel
- 383 Pounds of liquid wastes containing lead and benzene (waste antifreeze)
- 181 Pounds of asbestos (brake linings)
- 8 Pounds of nonhazardous liquid (greases)
- 336 Pounds of lube oil, with debris and rags
- 386 Pounds of lube oil, with debris and floor sweepings
- 413 Pounds of filters
- 500 Pounds of waste paint
- 2 Pounds of waste acetone
- 1 Pound of dimyethyl sulfate

It is not clear from the records whether these wastes were generated as part of a hazardous materials "roundup" (i.e., a one-time generation), or whether they are typical of the wastes and waste quantities generated at Building 404. Note that some of these wastes are not RCRA hazardous wastes, even though they are listed on the manifests.

3.3.2 Solid Waste/Landfill Management

Current solid waste disposal practices include the use of trash dumpsters and, as needed, removal by a private contractor to off-site disposal facilities on an as-needed basis.

3.3.3 Underground Storage Tanks

Originally there were at least 35 USTs at the Reserve Enclave. As a result of extensive investigation and removal, there may be as few as four remaining USTs (near Buildings 219, 227, and 283).

A ground penetrating radar (GPR) survey was performed in 1993 to confirm suspected UST locations (Versar 1993b). Three suspected tanks were identified in the vicinity of Building 413, one in the vicinity of former Building 282, one north of Facility 259, one in the vicinity of former Building 270, and two in the vicinity of former Building 220. Two major UST projects were undertaken at the Reserve Enclave by USACE Baltimore in 1997. The first was a series of UST removals (USACE New York 1997a through 1997f; USACE Metro New York 1997a through 1997i; EnSolutions 1998). The second was an investigation of 14 locations for the presence of 19 suspected USTs using GPR surveys and/or exploratory excavations (USACE Baltimore 1997j). The results of the closures and investigations performed in 1997 are shown in Tables 3-2 and 3-3.

3.3.4 Groundwater Monitoring Wells

At the time of the EBS of the BRAC parcel, 19 monitoring wells/piezometers were located at Camp Pedricktown. Additional monitoring wells for measuring groundwater concentrations have been installed as part of the EI/AA (IT Corporation 2000) and two remedial investigations (BES 1998; EA Engineering, Science, and Technology 2000). By 2001, 53 wells and piezometers had been installed to measure soil and groundwater concentrations and groundwater elevations.

3.3.5 Stormwater Management

A stormwater sewer system collects runoff throughout Camp Pedricktown and discharges the stormwater into the Delaware River. A Stormwater Management Plan prepared for the USARC (EA Engineering 1995c) focused on Building 404 as the only potential source of stormwater

contamination. Although the chance of contamination has been determined to be minimal, improper materials handling and outdoor vehicle storage are activities that could contribute to stormwater pollution.

3.3.6 Sewage Treatment Plant

Camp Pedricktown is serviced by a sewage treatment plant located at Building 530, north of the Military Vehicle Parking Area. No septic tanks have been identified at the Reserve Enclave.

3.3.7 Electrical Power Generation

Electrical power is provided to the installation by the Atlantic Electric Company (U.S. Army Forces Command 1995b).

3.3.8 Heating System

Heating systems and boilers in the Housing and Recreation Area, Administrative Area, and portions of the Warehousing Area have been converted to use natural gas. No heating systems are located in the Military Vehicle Parking Area. Buildings 464 and 475 are heated by fuel oil supplied by three 1,000-gallon-capacity self-contained ASTs located northeast of Building 464 and installed in 1995.

3.3.9 Fire Training

Firefighting-training activities do not take place at the Reserve Enclave.

3.3.10 Medical Activities

Currently, no medical activities are known to take place at the Reserve Enclave.

3.3.11 On-Site Housing

During the site reconnaissance, three family housing units (Buildings 276, 277, and 278), four associated detached garages (Buildings 285, 286, 287, and 288), and one enlisted personnel barracks (Building 273) were observed at the Reserve Enclave. None of the housing units appears to be occupied. The presence of lead-based paint in all these buildings was confirmed in a survey that included a sampling and analysis effort. Asbestos may be present in these units as well.

3.3.12 Vehicle Maintenance Activities

As previously discussed, Building 404 continues to be used for vehicle maintenance activities, although these are minor. Building 404 is currently used for storing various USAR dry goods, and vehicle maintenance is limited to hardware repairs. All USARC vehicle oil changes and lubrications are reportedly performed at Fort Dix.

During the site reconnaissance, Building 413 was observed to be locked and not in use.

3.3.13 Dry Cleaning Services

Dry cleaning does not appear to occur at the Reserve Enclave.

Table 3-1
Former and Existing Facilities at the Reserve Enclave

Geographic Area	Building/ Facility No.	Current Use	Date of Construction[a]	Area (Square Feet)	Former Use	EBS Source of Evidence Document Identification No.
Military Vehicle Parking Area	T-426	Demolished	(1942)	3,182	Bachelor Officers' Quarters	63, 64, 66, 67, 68, 70, 71
Military Vehicle Parking Area	435	Demolished	(1942)	Unknown	U & M Field Office, Storage	6, 63, 64, 65
Military Vehicle Parking Area	447	Demolished	(1942)	Unknown	Cold Frame	4, 64, 66
Military Vehicle Parking Area	468	Demolished	(1942)	2,046	Quarters	4, 63, 64, 66, 67, 68
Military Vehicle Parking Area	T-478	Demolished	(1942)	303	Garage	4, 63, 66, 67, 68
Military Vehicle Parking Area	T-488	Demolished	(1963)	Unknown	Unknown	66
Military Vehicle Parking Area	497	Demolished	(1942)	304	Stableman's Quarters, Storage	4, 64, 66, 67, 68
Military Vehicle Parking Area	T-498	Demolished	1932 (?)	800	Lumber Shed	68, 72, 85
Military Vehicle Parking Area	FAC1002	Military Vehicle Parking Area	Not applicable	Unknown	Military Vehicle Parking	69
Warehousing Area	404	ECS No. 27 Subshop Currently Used by USARC	1942	22,202	Roundhouse, Fire Department, Battery Renovation, Motor Pool Building, General Storehouse (use dates unknown)	1, 4, 63, 64, 73, 74, 83
Warehousing Area	412 (412A)	Demolished	(1964)	Unknown	Wash Platform	67, 76, 83
Warehousing Area	413	Gas Station/Flammable Materials Storage Installation Currently Used by USARC	1931	257	Motor Pool Building, Storage of Waste Oils and Solvents (use dates unknown)	1, 64, 69, 73, 74, 75
Warehousing Area	414 (412B)	Demolished	(1964)	Unknown	Wash Platform	67, 76, 83
Warehousing Area	434	Storage General Purpose Installation Currently Used by USARC	1942	13,605	Delaware Ordnance Depot, Ordnance Assembly/Chemical Plant 1918-1958, Storage Warehouse	1, 64, 73, 74, 75
Warehousing Area	464	Storage General Purpose Installation Currently Used by USARC	1951	15,040	Delaware Ordnance Depot, Ordnance Assembly/Chemical Plant 1918-1958, Ordnance and QM Warehouse, Administration Building	1, 64, 73, 74, 75, 76
Warehousing Area	475	Separate Toilet/Shower Facility Currently Used by USARC	1941	477	Latrine	4, 63, 64, 73, 74

Table 3-1 (Continued)
Former and Existing Facilities at the Reserve Enclave

Geographic Area	Building/ Facility No.	Current Use	Date of Construction[a]	Area (Square Feet)	Former Use	EBS Source of Evidence Document Identification No.
Warehousing Area	FAC1012	Abandoned Pump Island in Vicinity of Building 413	1931	Unknown	Part of 413 Gas Station	4, 63, 75
Warehousing Area	FAC1008	Vehicle Wash Rack Behind Building 404	Unknown	Unknown	Vehicle Wash Rack Behind Building 404	1
Warehousing Area	FAC1009	Temporary Drum Storage Area Behind Building 404	Unknown	Unknown	Temporary Drum Storage Area Behind Building 404	1
Administrative Area	151	Flagpole	1946		Flagpole	69, 77, 78
Administrative Area	170[b]	Waiting Shelter	1987	94	Waiting Shelter	78
Administrative Area	171	USARC	1942	7,067	Headquarters Building (use date unknown)	1, 64, 73, 74
Administrative Area	173	Dining Facility Currently Used by USARC	1961	7,215	Officers' Mess, Officers' Club	73, 74, 76, 79
Administrative Area	190	Access Control Building (Sentry)	1942	91	Sentry House	64, 74
Housing and Recreation Area	219	Demolished	(1942)	768	Quarters	4, 63, 64, 67, 68, 80
Housing and Recreation Area	220	Demolished	(1942)	4,736	Officers' Quarters, Officers' Club	4, 63, 64, 66, 68
Housing and Recreation Area	225	Demolished	(1942)	3,148	Quarters	4, 63, 64, 67, 68, 80
Housing and Recreation Area	T-227	Demolished	(1942)	6,327	Officers' Club, R.O. Quarters, Barracks	4, 63, 64, 67, 68, 76, 80
Housing and Recreation Area	229	Water Supply/Treatment Building (Pump Plant)	1932	528	Booster Pump House	64, 74
Housing and Recreation Area	229A	Water Supply/Treatment Building (Meter House)	(1964)	100	Water Supply/Treatment Building (Meter House)	67, 74, 76
Housing and Recreation Area	233	Demolished	(1942)	Unknown	Tennis Courts	4, 63, 64, 67, 68, 80
Housing and Recreation Area	T-235	Demolished	(1942)	655	Garage	4, 63, 64, 67, 68, 80
Housing and Recreation Area	239	Water Tower	(1942)	Unknown	Water Tower	64, 69
Housing and Recreation Area	249	Water Tower	(1942)	Unknown	Water Tower	64, 69
Housing and Recreation Area	257[c]	Demolished	(1942)	Unknown	Soldiers Barracks	63, 64
Housing and Recreation	259	Demolished	(1942)	Unknown	Ground Storage Reservoir	4, 63, 64

Table 3-1 (Continued)
Former and Existing Facilities at the Reserve Enclave

Geographic Area	Building/ Facility No.	Current Use	Date of Construction[a]	Area (Square Feet)	Former Use	EBS Source of Evidence Document Identification No.
Area						
Housing and Recreation Area	268	Exchange Branch/Refreshment Stand	(1962)	44	Exchange Branch/Refreshment Stand	67, 69, 81, 82
Housing and Recreation Area	269	Separate Toilet/Shower Facility (Bath House)	1944	313	Bathhouse	64, 74
Housing and Recreation Area	T-270	Demolished	(1942)	1,689	Recreation Building, Emergency Hospital, Post Chapel	4, 63, 64, 67, 68
Housing and Recreation Area	T-272	Demolished	(1942)	1,331	Storage, Post Exchange, Orderly Room	4, 6, 63, 64, 67, 68, 76
Housing and Recreation Area	273	Unoccupied	1939	15,923	Enlisted Unaccompanied Housing, Barracks	64, 73, 74
Housing and Recreation Area	274	USARC	1939	4,191	Post Hospital, Dispensary	4, 6, 63, 64, 73, 74, 76
Housing and Recreation Area	276	Unoccupied	1939	4,354	Family Housing, NCO Quarters	64, 74
Housing and Recreation Area	277	Unoccupied	1939	4,354	Family Housing, NCO Quarters	64, 74
Housing and Recreation Area	278	Unoccupied	1939	4,354	Family Housing, NCO Quarters	64, 74
Housing and Recreation Area	279	Separate Toilet/Shower Facility	1941	51	Separate Toilet/Shower Facility	64, 74
Housing and Recreation Area	T-282	Demolished	(1942)	4,820	Police Barracks	4, 63, 64, 67, 68, 80
Housing and Recreation Area	T-283	Demolished	(1942)	2,662	Mess Hall, Enlisted Men Service Club	4, 63, 64, 67, 68, 76, 80
Housing and Recreation Area	285	Garage Family Housing Detached	1941	504	Detached Garage	64, 74
Housing and Recreation Area	286	Garage Family Housing Detached	1941	462	Detached Garage	64, 74
Housing and Recreation Area	287	Garage Family Housing Detached	1941	462	Detached Garage	64, 74
Housing and Recreation Area	288	Garage Family Housing Detached	1941	462	Detached Garage	64, 74
Housing and Recreation Area	289	Abandoned Swimming Pool	(1942)	Unknown	Swimming Pool	1, 64

Table 3-1 (Continued)
Former and Existing Facilities at the Reserve Enclave

Geographic Area	Building/ Facility No.	Current Use	Date of Construction[a]	Area (Square Feet)	Former Use	EBS Source of Evidence Document Identification No.
Housing and Recreation Area	297	Demolished	(1942)	Unknown	Hospitality House, Girls Club	4, 6, 63, 64
Housing and Recreation Area	298	Chlorinator Building	(1965)	226	Chlorinator Building	67, 69
Housing and Recreation Area	299	Wading Pool	(1965)	Unknown	Wading Pool	69, 81

[a]Construction dates in parentheses are the year of the oldest map on which the building or facility appears. The actual construction dates are unknown.
[b]The location of Facility 170 was not shown on base maps. The location is assumed to be close to Facility 171, and therefore, in the Administrative Area.
[c]The location of Facility 257 was not shown on base maps. The location is assumed to be close to Facility 259, and therefore, in the Housing and Recreation Area.

Notes:
EBS - environmental baseline survey
RO - Reserve Officer
NCO - Noncommissioned Officer
USARC - U.S. Army Reserve Center

Table 3-2
UST Closures in 1997

Geographic Area	Building (Location)	Tank Size (gallons)	Construction Material	Fuel Type	Tank Contents at Tank Removal	PID Reading (ppm)	Analytical Results	Comments	EBS Source of Evidence Document ID No.
Warehousing	404 (SW)	6,000	Steel, undamaged	No. 2 fuel oil	Empty	< 0.2	TPH 61 to 3,900 mg/kg; VOCs 15,000 µg/kg	Some stockpiled soil and clean fill to close excavation	41, 32, 51
Warehousing	404 (?)	110	Steel, undamaged	Gasoline	Empty	< 5	VOCs 3,068 mg/kg; naphthalene 308 mg/kg; Pb 3 to 18 mg/kg	Stockpiled soil and clean fill to close excavation	38, 32, 51
Warehousing	413 (North)	11,000	Fiberglass, undamaged	Gasoline	50 gallons	< 20	VOCs 0.026 to 160 mg/kg Pb 8 to 121 mg/kg	Stockpiled soil and clean fill to close excavation	35, 51
Warehousing	413 (West)	1,000	Steel, undamaged	Waste oil	300 gallons	0.0 to 1.3	TPH < 40 to 1,100 mg/kg; VOCs 45 µg/kg	230 gallons of seeped groundwater pumped from excavation. Stockpiled soil and clean fill to close.	36, 51
Warehousing	413 (SW)	10,000	Steel, undamaged	Diesel	500 Gallons	ND	TPH < 40 to 71 mg/kg	Stockpiled soil and clean fill to close excavation	42, 51
Administrative	171[a]-NA	1,000	NA, but good condition (no holes or punctures)	No. 2 fuel oil	NA	NA	Samples collected but results NA; no impacted soil encountered	Intact piping with no evidence of leaks, corrosion, or loose fittings	50
Administrative	173[a]-NA	1,500 and 4,000 (2 tanks)	NA, but good condition (no holes or punctures)	No. 2 fuel oil	NA	NA	Samples collected but results NA; no impacted soil encountered	Intact piping with no evidence of leaks, corrosion, or loose fittings	50
Housing & Recreation	229 (West)	220	Steel, undamaged	Gasoline	200 Gallons	< 2	VOCs ND; Pb < 40 mg/kg	Stockpiled soil and clean fill to close excavation	37
Housing & Recreation	235[b] (East)	1,000	Steel, undamaged	Heating oil	1,000 Gallons	ND	TPH < 40 to 56 mg/kg	Stockpiled soil and clean fill to close excavation	34
Housing & Recreation	273 (Basement)	1,500	Steel, pinhole in bottom	No. 2 fuel oil	Empty	ND	Tank in concrete enclosure partially filled with sand; TPH in sand 329 mg/kg	Sand removed and concrete cleaned	39
Housing & Recreation	274 (East)	1,000	Steel, undamaged	No. 2 fuel oil	Empty	< 0.1	TPH 11 to 29 mg/kg	Stockpiled soil and clean fill to close excavation	40
Housing & Recreation	276 (East)	550	Fiberglass, undamaged	No. 2 fuel oil	Empty	< 15	TPH < 11 mg/kg	Stockpiled soil and clean fill to close excavation	43

Table 3-2 (Continued)
UST Closures in 1997

Geographic Area	Building (Location)	Tank Size (gallons)	Construction Material	Fuel Type	Tank Contents at Tank Removal	PID Reading (ppm)	Analytical Results	Comments	EBS Source of Evidence Document ID No.
Housing & Recreation	276 (West)	550	Fiberglass, undamaged	No. 2 fuel oil	Empty	0.0 to 3.0	TPH < 11 mg/kg	Stockpiled soil and clean fill to close excavation	44
Housing & Recreation	277 (East)	550	Fiberglass, undamaged	No. 2 fuel oil	Empty	0.0 to 7.0	TPH < 12 mg/kg to 110 mg/kg	Stockpiled soil and clean fill to close excavation	45
Housing & Recreation	277 (West)	550	Fiberglass, undamaged	No. 2 fuel oil	Empty	0.0 to 5.0	TPH < 11 to 14 mg/kg	Stockpiled soil and clean fill to close excavation	46
Housing & Recreation	278 (East)	550	Fiberglass, undamaged	No. 2 fuel oil	Empty	0.0 to 1.2	TPH < 11 mg/kg	Stockpiled soil and clean fill to close excavation	47
Housing & Recreation	278 (West)	550	Fiberglass, undamaged	No. 2 fuel oil	Empty	0.0 to 7.0	TPH < 12 mg/kg	Stockpiled soil and clean fill to close excavation	48

[a]EnSolutions, Inc. 1998.
[b]Building demolished, only foundation remaining, tank 235-1.

Notes:
< - less than
EBS - environmental baseline survey
mg/kg - milligram per kilogram
NA - not available
ND - not detected
Pb - lead
PID - photoionization detector
TPH - total petroleum hydrocarbons
VOC - volatile organic compound

Table 3-3
GPR and Exploratory Excavation Work for Underground Storage Tanks in 1997

Building No.	Tank No. (GPR Survey ID)	Tank Size (gallons)	Contents	Construction	GPR Survey Results	Exploratory Excavation Results	Tank Present
190	190-1	1,000	Diesel	Steel	Not performed	Negative	No
220	220-SW (220)	1,000	Heating oil	Steel	Positive[a]	Removed boiler	No
	220 W (220-2)	1,000	Heating oil	Steel	Positive[a]	Negative	No
225	225-1	1,000	Heating oil	Steel	Positive[a]	Negative	No
233	233-1	1,000	Diesel	Steel	Negative	Negative	No
235	235-1[b]	1,000	Heating oil	Steel	Not performed	One UST with 2 fill ports	Yes
	235-2[b]	1,000	Heating oil	Steel	Not performed	Second tank does not exist[b]	No
235	235-B (235)	1,000	Heating oil	Steel	Positive[a]	Not performed	No
270	270-1	275	Heating oil	Steel	Negative	Negative	No
272	272-1	1,000	Heating oil	Steel	Not performed	Negative	No
	272-2	1,000	Heating oil	Steel	Not performed	Negative	No
	272-3	1,000	Heating oil	Steel	Not performed	Negative	No
282	282-1	1,000	Heating oil	Steel	Positive[c]	Negative	No
283	283-1	1,000	Heating oil	Steel	Positive[a]	Not performed	No
413	413NE	5,000	Gasoline	Steel	Inconclusive	Negative	No
	413E	5,000	Gasoline	Steel	Inconclusive	Negative	No
	413SE	5,000	Gasoline	Steel	Inconclusive	Negative	No
426	426-1	1,000	Fuel oil	Steel	Positive[d]	Negative	No
468	468-1	275	Heating oil	Steel	Negative	Not performed	No

[a]GPR results indicate presence of underground utility.
[b]Tanks 235-1 and 235-2 are actually the same tank. The two fill ports led people to believe there were two tanks. During excavation, it was determined that there was only one tank.
[c]GPR results indicate presence of pipe target; metal detection survey indicates possible presence of UST.
[d]GPR results indicate pipe target and possible tank target.

Notes:
GPR - ground penetrating radar
UST - underground storage tank

4.0 INVESTIGATION RESULTS

This section describes the results of the EBS at the Reserve Enclave, including the following:

- Sources of potential contamination that have been addressed in prior reports
- Sources of potential contamination that have not been addressed by previous investigations
- Adjacent properties that may be potential sources of contamination to the Reserve Enclave property
- Areas containing substances not regulated by CERCLA (non-CERCLA)
- Remedial actions

4.1 PREVIOUSLY IDENTIFIED SOURCES OF POTENTIAL CONTAMINATION

Potential on-site sources of soil and groundwater contamination at the Reserve Enclave have been documented in previous investigations. A summary of these findings is included in the following subsections.

4.1.1 Lead in Soil

Facility 239

Facility 239 (Figure 1-2 and Photo B-2) consists of a 125,000-gallon water tank located in the Housing and Recreation Area that was constructed in 1942. Paint chips have been observed on the soil surrounding the tank base.

Four soil samples were collected from the top 6 inches of soil at the base of the tank and analyzed for total lead and arsenic, constituents of older paints (Department of the Army 2000). Both arsenic and lead are, under certain circumstances, regulated by the NJDEP when present in the soil at concentrations greater than 20 mg/kg and 400 mg/kg, respectively (NJDEP 1999). Lead concentrations in the four samples ranged from 2,740 to 6,390 mg/kg, exceeding the NJDEP regulatory threshold. Site-specific background concentrations of lead reportedly range from 1.4 to 66 mg/kg. None of the samples had arsenic concentrations greater than the detection limits.

Note that this sampling event was not intended to quantify the horizontal and vertical extent of arsenic or lead in the surface soil; however, if the lead concentrations were caused by lead-based paint flaking, the extent would likely to be fairly localized. No soil was removed as a result of this investigation.

A lead-based paint survey and surface soil sampling investigation was conducted at housing units and associated garages at Camp Pedricktown, including Reserve Enclave buildings 276, 277, 278, 286, 287, and 288. The investigation found that lead-based paint was present on both interior and exterior surfaces, as well as in surface soil within 20 feet of the building foundations. Surface soil within 3 feet of the foundation exceeded NJDEP action levels.

4.1.2 Spills

Two oil spills have been documented on the Reserve Enclave. In the Military Vehicle Parking Area in May 1995, a vehicle's hydraulic cylinder leaked approximately 1 gallon of hydraulic oil to the ground. The leak was stabilized, and the vehicle was moved to a hardstand. Soil was excavated from an approximately 8-foot by 8-foot area at 12 to 16 inches deep (2.4 to 3.2 cubic yards), and the contaminated soil was containerized and staged on pallets inside Building 495. The release was reported to the Environmental Manager at the 79th ARCOM several days later (Woodward-Clyde 1997).

During a fuel delivery at Building 274 (Figure 1-2), in November 1986, an undetermined quantity of No. 2 fuel oil was released to the floor of the boiler room and outside the building via a vent line. Approximately 8 cubic yards of soil were removed during the cleanup. Steps were taken to prevent recurrence of this type of release, and the incident was reported to NJDEP (Woodward-Clyde 1997).

No documentation of spills since 1995 was found in the files.

4.1.3 Aboveground/Underground Petroleum Storage Tanks

The aboveground and underground petroleum storage tanks currently or formerly located on the Reserve Enclave property are included in Table 4-1. Currently, only three aboveground storage tank (ASTs) (464-1, 464-2, and 464-3) and no USTs (based on a review of available records) remain active at the Reserve Enclave. The status of four USTs identified during the search of historical records is unknown. These include a possible tank located near former Building 219, one near former Building 227, one near former reservoir 259, and one near former Building 283. No investigations have been performed to attempt to locate the tanks near Buildings 219 and 227. GPR showed the possible presence of a tank near Buildings 259 and 283. However, exploratory excavations were not performed to confirm the presence of tanks at these locations. Contaminated soil was removed and disposed of during the tank removal at Building 273. A

remedial investigation (BES 1998) and a focused remedial investigation (EA Engineering, Science, and Technology 2000) of UST sites at Buildings 404 and 413 were performed, and no evidence was found to suggest that the former USTs have adversely affected soil and groundwater quality.

4.1.4 Area 9, East of Building 464

Area 9 is located east of Building 464. A narrow portion of this area, between Building 464 and the gravel access road, is located on Reserve Enclave property. During the EI/AA, one soil sample was collected in Area 9. In this sample, the concentration of arsenic exceeded the NJDEP cleanup criterion. Additional soil samples were collected between May 2000 and January 2001 (ARCADIS Geraghty & Miller 2001b). During these sampling events, 26 samples from Area 9 were analyzed, 4 of which were from the Reserve Enclave portion of Area 9. The four samples from the Reserve Enclave were collected from 6 to 12 inches bgs. Arsenic concentrations ranged from 58 to 107 mg/kg, which is approximately 3 to 5 times the NJDEP cleanup criterion of 20 mg/kg. During these sampling events, the horizontal and vertical extent of contamination was not completely delineated.

4.1.5 Tetrachloroethene in Groundwater, Area North of Building 413

During the remedial investigation of the UST sites at Buildings 404 and 413 (BES 1998), one of the four monitoring wells at Building 413 was found to have tetrachloroethene (PCE) at concentrations higher than the NJDEP groundwater cleanup criterion. An additional monitoring well was installed near Building 413 during the focused remedial investigation (EA Engineering, Science, and Technology 2000). No PCE was detected in this well. The PCE encountered during the remedial investigation (BES 1998) may be due to a release from PCE drums previously stored at Building 413, which is not part of the Reserve Enclave. A further discussion of PCE contamination in groundwater is provided in Section 4.3.

4.1.6 Stormwater Catch Basin in Administrative Area

Surface water samples were collected from stormwater catch basins during the expanded site investigation (Versar 1993a). Contamination was found in a surface water sample from sampling location SW18-001, which is located northwest of Building 173. Petroleum hydrocarbons were found at a concentration of 14,000 µg/L, and cadmium was found at a concentration of 19.4 µg/L. Subsequent sampling was not performed; the source of the contamination is unknown.

4.2 POTENTIAL CONTAMINATION AREAS IDENTIFIED DURING THE EBS INVESTIGATION

Activities in Building 404 (Figure 1-2 and Appendix B, Photo B-1) have been identified as potential sources of contamination. Activities include minor vehicle repair, vehicle washing (FAC1008), and temporary drum storage (FAC1009). The hazardous waste manifests reviewed and reported in Section 3.3.1 indicate 11 kinds of materials as wastes. Current practices appear to pose a relatively small environmental risk, since only minor maintenance is conducted in the building. These activities are not likely to generate large quantities of chlorinated solvents, metal wastes, and petroleum hydrocarbons. Also, should spills or leaks of waste streams or hazardous materials occur, a spill plan and spill containment materials, such as absorbents, are available. Finally, hazardous waste and hazardous materials management is tightly controlled by regulations that the facility appears to be following.

Information regarding past waste handling practices was not available. However, the long-term use of Building 404 for vehicle maintenance and its former use as a roundhouse make it a potential source of petroleum, solvent, and metals contamination. Waste handling and disposal practices in the United States were not tightly regulated or controlled before the mid-1970s. Wastes that are now determined to be hazardous may have been disposed of to the soil or to building drains and sumps.

However, any contamination from these activities would not be expected to be widespread, based on sampling performed to delineate contamination associated with USTs adjacent to this building. During a remedial investigation, four soil samples and three groundwater samples were collected from the former UST locations and analyzed for volatile organic compounds (VOCs) and lead (BES 1998). No VOCs were detected in any of the samples, and lead was not detected in groundwater. Lead concentrations in soil were lower than the NJDEP's most stringent soil cleanup criterion (impact to groundwater). Two groundwater samples and six soil samples were collected from the former UST locations near Building 404 as part of a focused remedial investigation (EA Engineering, Science, and Technology 2000). Analytical results for groundwater were less than the NJDEP criteria for VOCs. The lead concentration in the monitoring well groundwater sample was also less than the NJDEP criterion. However, the lead concentration in the groundwater sample from the test pit exceeded the NJDEP criterion, most likely because of the presence of sediment in the unfiltered sample.

Historical activities in Buildings 434 and 464 have been identified as potential sources of contamination. Current activities in these buildings include general purpose storage for the USARC, which appears to pose a relatively low environmental risk. However, both of these buildings were used historically as storage warehouses for the ordnance assembly/chemical plant. Based on this, hazardous materials were most likely stored at these buildings, and, therefore, it is possible that historical releases of hazardous substances occurred.

Because of the historical use of Building 274 as the post hospital and dispensary, hazardous materials may have been stored in this building. Hazardous materials may also have been stored and used in Building 298, which was used as the chlorinator building for the pool; therefore, it is possible that historical releases occurred.

The following additional potential sources of contamination were observed during the site walk:

- A pile (approximately 8 cubic yards) of sandy silt with what appeared to be paint fragments at the base of the southwest side of water storage tank (Facility 249) (Figure 1-1 and Photo B-2) in the Housing and Recreational Area.

- A rectangular depression at the north end of the Military Vehicle Parking Area, surrounding by traffic cones (Photo B-2). Tall grasses are growing around the edge of the depression, as though the depression had once held water. When observed, the depression was filled with wooden boards. Based on a review of an engineering drawing dating from the late 1950s to the mid-1960s, a buried 8-inch-diameter vitrified clay sewer line is the only current of former site improvement in the area of the depression. The cause/source of the depression has not been determined.

4.3 SOURCES OF POTENTIAL CONTAMINATION FROM ADJACENT OR SURROUNDING PROPERTY

The adjacent property to the north and east of the Reserve Enclave is the BRAC parcel that was the subject of the 1996 EBS. The current tenants of various facilities included in the BRAC parcel are listed in Table 4-2. Because of subsequent investigations conducted at the BRAC parcel, more information is known about its environmental conditions than what is known about the conditions of the Reserve Enclave. As previously stated, an EI/AA was performed for the BRAC parcel in the late 1990s. Additional investigations were performed in preparation for the completion of remedial action work plans for the BRAC parcel (ARCADIS Geraghty & Miller 2001a, 2001b). Soil and groundwater contamination in adjacent or surrounding property that has the potential of affecting Reserve Enclave property is discussed in the following subsections. Based on the results of these analyses, a Proposed Plan for soil and groundwater remedial actions has been prepared (U.S. Army, Fort Dix, 2001a).

4.3.1 Soil

The EI/AA identified a total of eight general areas across the BRAC parcel that require remedial action and/or further investigation of contaminants in soil. Of these eight areas, four are located near the Reserve Enclave:

- Area of Building 322 and former Building T-300
- Area of Building 473 and former Building 463
- Area of Buildings 484, 485, 494, and 495
- Area of Building 506 and former Building 569

The February 2000 EI/AA concluded that the primary contaminants of concern in the eight areas are arsenic, antimony, lead, polycyclic aromatic hydrocarbons (PAHs), PCBs, and pesticides. In most cases, the presence of the contaminants was determined to be surficial in nature (within 24 inches of ground surface).

In May 2000, additional soil sampling activities were initiated in those areas requiring further action. Within the eight areas of concern identified in the EI/AA, 35 individual areas were targeted for sampling. The sampling areas were centered on individual sampling locations from the EI/AA that had contaminant concentrations that exceeded the NJSCC soil cleanup criteria. The soil sampling activities were initiated to determine the vertical and horizontal extent of soils requiring remediation and to develop a complete work plan for the soil remediation. Sampling was conducted in May, September, November, and December 2000, and in January 2001. Of the 35 individual areas identified, 11 are located near the Reserve Enclave:

- Areas 9 and 10, northeast of Building 464
- Area 15, between Buildings 494 and 495
- Areas 11 and 16, northeast of Buildings 474, 485, and 494
- Areas 17 and 18, both located at the northeast corner of the Military Vehicle Parking Area
- Areas 27 and 28, in the area of former Building T-300
- Areas 34 and 35, both located north of the Military Vehicle Parking Area

Based on the analytical results from the sampling events, contaminant concentrations in samples collected from areas 15, 27, and 35 were all below the cleanup criteria. Contaminant concentrations in samples collected from Area 34 were all below the cleanup criteria, with one

exception. A sample collected from the 24- to 30-inches-bgs interval contained arsenic at a concentration of 38.4 mg/kg (cleanup criterion is 20 mg/kg). This result appeared to be inconsistent with concentration data obtained from the four overlying sampling intervals and the presumed source of arsenic (surface deposition).

A total of 26 samples were collected from 21 soil borings in Area 9. Concentrations of arsenic in the soil samples ranged from not detected to 693 mg/kg, well above the cleanup criteria of 20 mg/kg. Based on these results, arsenic contamination extends to 30 inches bgs, and the horizontal extent is estimated to be 4,650 square feet. However, delineation of this area has not been completed. Eight samples were collected from a total of six soil borings in Area 10. Concentrations of lead in the soil samples ranged from not detected to 1,540 mg/kg, well above the cleanup criterion of 400 mg/kg. Based on these results, lead contamination extends to 12 inches bgs. The horizontal extent of the contamination is 750 square feet.

A total of 94 samples were collected from 78 soil borings throughout Areas 3, 11, and 16. Seventeen boring locations were in Area 11, and 53 boring locations were in Area 16. Concentrations of arsenic and lead in Area 11 ranged from not detected to 386 mg/kg and not detected to 2,110 mg/kg, respectively. Concentrations of arsenic in Area 16 ranged from not detected to 218 mg/kg. Based on these results, the contamination in these two areas extends to 18 inches bgs, and the horizontal extent of the contamination is approximately 17,500 square feet. However, delineation of this area has not been completed.

No samples have been collected in Area 17. This area was initially identified on the basis of one subsurface soil sample that contained arsenic at a concentration of 28 mg/kg, which is close to the cleanup criterion of 20 mg/kg. Since no additional sampling was performed, the extent of contamination is unknown at this time. A total of 12 samples were collected from six borings in Area 18. Antimony was detected in only one sample, at a concentration of 19.9 mg/kg, which is higher than the cleanup criterion of 14 mg/kg. Based on the results of the sampling and the EI/AA, the contamination extends to 6 inches bgs. The horizontal extent of the contamination is estimated to be 570 square feet.

A total of 18 samples were collected from 9 soil borings in Area 28. Lead was not detected in any of these samples. However, lead was detected in two of the three samples collected from this area during the EI/AA. The lead concentrations in these samples were 1,800 and 1,200 mg/kg. Based on these results, the contamination extends to 6 inches bgs. The horizontal extent is estimated to be 750 square feet.

In summary, because of the localized nature of the soil contamination on adjacent and surrounding property, the risk of its contaminating the Reserve Enclave property appears to be minimal.

4.3.2 Groundwater

This section assesses groundwater conditions underlying the BRAC parcel and the USACE properties.

BRAC Parcel

The EI/AA identified a total of six areas within the BRAC parcel that require remedial action and/or further investigation of contaminants in groundwater due to the presence of VOCs, particularly PCE:

- Area of Building 184
- Area of Building 413 and Building 422
- Area north of Building 432
- Area east of Building 464
- Area north of Building 471
- Area of Buildings 484, 485, 494, and 495
- Area north and east of Former Vehicle Wash Rack/Scrap Metal Dump

Parcel 42 (Building 464) is located immediately west of an area where the near-surface groundwater, on the adjoining BRAC property, has been determined to contain low levels of PCE. The PCE has been detected intermittently in monitoring wells located in this area (MW-15-001, MW16-003, CPMW06D, and MW16-001) from October 1997 to February 2002. The near-surface groundwater in this area flows in a northwesterly direction, making Parcel 42 cross-gradient of the identified PCE-affected near-surface groundwater on the BRAC property. The Army has entered into a Decision Document (Apr 01) with the State of New Jersey, which includes the aforementioned groundwater; that this contamination be remediated by natural remedial processes (natural attenuation) and be part of a long-term groundwater monitoring program and Classification Exception Area (CEA)/Well Restriction Area (WRA) in accordance with the *Final Guidance on Designation of Classification Exception Area* (November 1998).

USACE Property

The Philadelphia District of USACE is responsible for maintaining the navigational channel within the Delaware River. The material resulting from dredging operations is disposed of in a number of USACE-maintained storage sites at the 1,200-acre Pedricktown North and South Storage Areas, north of the Reserve Enclave. These areas have been reported to receive approximately 2.5 million cubic yards of dredged material annually from the channel, although recent dredging operations have slowed to 2.5 million cubic yards every other year.

Prior to its use as a dredging disposal area, the USACE property was part of the Delaware Ordnance Depot. Ordnance storage, burning, and renovation took place on the part of the depot that is currently USACE property. Two facilities associated with the Delaware Ordnance Depot were located on the USACE property. These include Building 606, which was located near former Building 569, and Building 604, which was located near former Building T-500. Building 606 was identified as a transformer building and Building 604 was identified as a surveillance laboratory (Delaware Ordnance Depot 1942a, 1945b). It has been reported that military munitions may be buried at the site (NJDEP 1989). In addition, part of the USACE property was reportedly used as a solid waste landfill. The solid waste landfill is currently inactive, and the site is being used for the disposal of dredged material.

Two incidents involving hazardous materials have been documented on the USACE property. In 1978, 35 drums of cyanide were discovered stored on the landfill (NJDEP 1989). These drums were disposed of by Rollins Environmental Services. In 1984, four 55-gallon drums of waste oil were dumped into a pond on the USACE disposal facility property (DEH, Fort Dix, 1985; Department of the Army 1984b, 1984c; RMC 1991b). A maximum of 50 to 100 gallons of waste oil were released into the pond and on the roadway leading to it. The site was immediately remediated by excavating contaminated soil, deploying absorbent pads on the pond, and removing the remaining waste oil from the drums.

Groundwater monitoring has been performed on the USACE property over the past 20 years, and there is no known contamination resulting from the previous uses of the site (Department of the Army 1990). In addition, the site is hydraulically downgradient of the Reserve Enclave, and it is unlikely that any impacts on the USACE property would affect the Reserve Enclave.

Other adjacent properties, identified in the regulatory database (Appendix A), have been determined to be distant enough to likely not pose a risk to environmental conditions at the Reserve Enclave. Generally remedial actions have already been implemented at these sites. Another protective factor is that a network of groundwater monitoring wells that will continue to be monitored for some time would pick up any contamination migrating onto the property from elsewhere.

4.4 NON-CERCLA-RELATED ENVIRONMENTAL, HAZARD, AND SAFETY ISSUES

The following summarizes the results of the records review pertaining to non-CERCLA contamination substances as well as any documented hazard or safety issues.

4.4.1 Asbestos-Containing Material

In 1997, the 77th USARC performed a survey for identification of asbestos-containing material in Buildings 171 and 173 in the Administrative Area; Buildings 273, 274, 276, 277, and 278 in the Housing and Recreational Area; and Buildings 404, 434, and 464 in the Warehousing Area (Argonne National Laboratory 1997). It appears that only structures receiving significant use by the 77th USARC were surveyed. (Garages, pump houses, valve houses, and restrooms were not included.) All facilities surveyed were reported to contain asbestos-containing material, except for Building 273, from which steam line insulation and hot and cold water system insulation, which might have contained asbestos-containing material, had already been removed.

Asbestos-containing material found in Building 171 during the survey included insulation for the cold water line in the basement room next to the boiler, and a small section of steam line insulation above the first floor west entrance. Insulation for the hot water system in the building had been removed previously and replaced with nonsuspect materials. Asbestos-containing material found in Building 173 was limited to the boiler room and included the insulation board on the ceiling and insulation on the boiler stack. Insulation for the hot water and cold water systems had been previously removed and replaced with nonsuspect materials. Insulation for the hot water tank had also been removed.

Asbestos-containing material found in Building 274 (Figure 1-2) included insulation for the hot water system in the boiler room and basement, and brown floor tile on the first floor. Building 276 contained the following asbestos-containing material: floor tile and floor tile mastic in the entry of the north unit and the basement of the south unit, and insulation for the hot and cold water systems in the basement of both units. Asbestos-containing material found in Building 277 (Appendix B, Photo B-4) included insulation for the hot and cold water systems in the basement of both units. Building 278 (Photo B-4) contained the following asbestos-containing material: floor tile in the entries of the north and south units, and insulation for the hot and cold water systems in the basement of both units.

Asbestos-containing material found in Building 404 (Appendix B, Photo B-1) included insulation for the hot and cold water systems in the service bays, insulation on the abandoned fire hose supply line in the service bays, black floor tile and floor tile mastic in Room 10 (locker room), and insulation for the steam system in the boiler room. The transit panel roof was the only asbestos-containing material identified in Building 434. Asbestos-containing material identified in Building 464 was limited to gray and black floor tiles. Steam system insulation had been removed previously and replaced with nonsuspect materials.

During the 2001 site reconnaissance, suspect asbestos-containing material was observed in the Housing and Recreational Area in Building 229, the Water Pump House. In particular, suspect asbestos-containing material was observed in the exhaust header and pipe of a 12-cylinder

diesel-powered engine that powers a water pump, in ceiling tiles, and in wall covering. The suspect asbestos-containing material on the water-pump power supply is in poor condition. Suspect asbestos-containing material consisting of transite pipe was also observed at Facility 249 (Appendix B, Photo B-2), Water Storage Tank.

Finally, real estate records (Real Property Record, DA Forms 2877, 5-47, and 5-49) were reviewed. Asbestos-containing materials were reportedly used in the construction of Buildings 434, 464, 475, 229a, 229, and 269. Asbestos-containing material was used on the roofs of Building 434, 464, 475, 229, and 269; and in the siding of Building 229a, according to these records. During the 2001 site reconnaissance, the roofing material on Building 269 appeared to be composition. It is possible that the asbestos-containing material on the roof of this building had been removed and replaced with the composition roof.

4.4.2 Lead-Based Paint

In 1994 a lead-based paint sampling and analysis effort was performed and a risk assessment conducted in the Reserve Enclave for Buildings 276, 277, 278, 286, 287, and 288 (Ogden Environmental 1994). This survey confirmed the presence of lead-based paint, with some interior samples exceeding thresholds established in U.S. Department of Housing and Urban Development (HUD) and BRAC guidance. Any other Reserve buildings constructed prior to 1978 were assumed to potentially contain lead-based paint; thus they are designated "L(P)" as possible qualified parcels. Although some of the building exteriors are brick and concrete (unpainted), window sills and interior walls may be painted.

When lead-based paint has flaked to the surrounding soil, causing it to exceed the NJDEP soil cleanup criterion, as occurred in the housing units listed above, then the lead contamination becomes a CERCLA issue because lead is a hazardous substance under CERCLA.

4.4.3 Polychlorinated Biphenyls

The 1991 preliminary site assessment noted numerous electrical transformers located throughout the Reserve Enclave. Table 4-3 provides the locations, types, and status of these transformers.

The 1996 EBS qualified the transformers observed at the Reserve Enclave because they were unlabeled as to PCB content. No reviewed records discussed any further investigation of these locations; therefore, these same locations have been identified as possibly qualified for PCBs in this EBS, as a conservative measure.

During a building inspection program in 1999, PCB-containing light ballasts were identified in several buildings within the BRAC parcel (U.S. Army, Fort Dix, 2001b). Some of the light ballasts were leaking at the time of the inspection. A similar building inspection program does

not appear to have been performed at the Reserve Enclave. Since many of the Reserve Enclave buildings were constructed during the same time period, it is likely that buildings in the Reserve Enclave also contain PCB-containing light ballasts.

4.4.4 Radon

Radon monitoring was conducted in 1992 at Reserve Enclave Buildings 171, 173, 273, and 404 (Figure 1-2 and Appendix B, Photo B-1). None of these buildings was found to have radon levels exceeding 4.0 picocuries per liter (pCi/L) (Landauer 1992), the annual average for radon in living areas below which the EPA considers an acceptable risk. In July 1998, portions of Buildings 404, 171, 434, 274, 464, and 273 were tested for radon. Radon concentrations ranged from 0.1 to 0.5 pCi/L, well below the EPA threshold for effects.

4.4.5 Unexploded Ordnance

As discussed in Section 3.1, the Delaware Ordnance Depot was a munitions final assembly and storage area until the late 1950s. It appears, though, that the actual ordnance storage, burning, and renovation took place on the part of the depot that is now the USACE sediment dredging disposal property, to the north of Camp Pedricktown. A survey of unexploded ordnance conducted by USACE in 1996 concluded that there were no concerns regarding unexploded ordnance at Camp Pedricktown (USACE St. Louis 1996). In addition, an archives search report (USACE 1997) concluded that no further action was required regarding unexploded ordnance at Camp Pedricktown. This recommendation was based on the following:

- No unexploded ordnance was found and/or reported.
- None of the people interviewed who used to work at the facility knew of any disposal sites on the BRAC property.
- No disposal sites or other ordnance related activities were detected in aerial photographs.
- Explosives chemicals were not detected in groundwater samples or soil borings in the former salvage yard where casings have been uncovered.
- Explosives detected in one surface water sample near Building 404 was most likely caused by washing vehicles.

4.4.6 Radionuclides

An industrial radiation survey (No. 27-MH-4940-R-98) was conducted to determine the presence and extent of radiological health hazards in Building 274 (Figure 1-2) in the Housing and Recreation Area (Department of the Army 1998). (Other buildings were also surveyed, but they were located in the adjacent BRAC parcel.) No radiological health hazards were identified in Building 274. No documentation was found on any other potential radiological hazards within the Reserve Enclave.

4.4.7 Pesticides Use

Pesticide use at the Reserve Enclave is under the supervision of the 77th USARC Regional Support Command. The perimeter and fence lines associated with the Reserve Enclave were assessed in 1994 to determine if waste oils mixed with herbicides had been applied. No environmental concerns were identified in this assessment (USARC 1995a; EA Engineering, Science, and Technology 1994).

4.5 REMEDIATION EFFORTS

Remediation efforts on Reserve Enclave property and BRAC property are summarized in the following subsections.

4.5.1 Reserve Enclave

Tank removals occurred at Buildings 229, 235, 273, 274, 276, 277, 278, 404, and 413. Contaminated soil from the tank removal at Building 273 was excavated and disposed of. Contaminated groundwater that was pumped from the tank 413-2 (413 west) excavation was containerized. Additional information is provided in Sections 3.3.3 and 4.1.3.

Two spills have been documented at the Reserve Enclave. In May 1995, a vehicle's hydraulic cylinder leaked approximately 1 gallon of hydraulic oil to the ground. Contaminated soil was excavated, containerized, and staged on pallets inside Building 495. During a fuel delivery to Building 274 in November 1986, an undetermined quantity of No. 2 fuel oil was released to the floor of the boiler room and outside the building via a vent line. Approximately 8 cubic yards of soil were removed during the cleanup.

No additional information regarding remedial actions at the Reserve Enclave was found during the file review or the interviews. Several surface soil samples were collected below Facility 239 (Figure 1-2 and Appendix B, Photo B-2), but no soil was removed as a result of this effort.

4.5.2 BRAC Parcel

The BRAC parcel has been extensively investigated for soil and groundwater contamination resulting from past use. As a result of these investigations, areas have been targeted for both soil and groundwater remediation. The planned remediation activities are discussed further in the following subsections.

Soil

Soil remediation is planned in the following areas near the Reserve Enclave (ARCADIS Geraghty & Miller 2001b; U.S. Army, Fort Dix, 2001a):

- Areas 9 and 10, northeast of Building 464
- Areas 16 and 11, northeast of Buildings 494, 485, and 474
- Areas 17 and 18, both at the northeast corner of the Military Vehicle Parking Area
- Area 28, in the area of former Building T-300

Remediation will consist of soil excavation and off-site disposal. All soil with contaminant concentrations above the NJDEP cleanup criteria will be excavated. At Areas 10, 18, and 28, excavation will be completed to the boundaries already delineated by sampling. No postexcavation sampling will be conducted. For Areas 9, 11, 16, and 17, the area to be excavated will be completely delineated during the remedial action. The results of additional delineation samples and/or postexcavation samples will be documented as part of the remedial action report. Since all soils with contaminant concentrations above the NJDEP cleanup criteria will be addressed, the risk to Reserve Enclave property will be essentially removed.

Groundwater

Groundwater remediation is planned in the following areas near the Reserve Enclave (ARCADIS Geraghty & Miller 2001a; U.S. Army, Fort Dix, 2001a):

- Area of Building 413 and Building 422
- Area of Buildings 484, 485, 494, and 495

Monitored natural attenuation will be used in these two areas, along with institutional controls. Groundwater will be monitored in a total of 16 wells throughout the BRAC parcel. The wells will be positioned downgradient and/or at perimeter positions within areas of groundwater contaminated with VOCs. In areas where groundwater contains constituents at concentrations above the GWQC, a classification exception area has been proposed for the shallow Cape May Formation underlying the site. The classification exception area is defined under the NJDEP cleanup program as an area in which the groundwater quality standards are exceeded. The entire

BRAC parcel is included in the classification exception area, and the duration of the classification exception area is expected to be 3 years.

Although the concentration of contaminants was found to be greater than the GWQC, no actions have been proposed for the following areas:

- Area just north of the Military Vehicle Parking Area (MW14-001)
- Area north of Building 432

Since these two areas are near the Reserve Enclave property, groundwater on the Reserve Enclave property may be affected.

Table 4-1
Aboveground and Underground Storage Tanks
Camp Pedricktown, New Jersey

Geographic Area	Building No.	Tank No.	Capacity (gallons)	Contents	Status	Comments	EBS Source of Evidence Document Identification No.
Administrative Area	171	171	1,000	No. 2 fuel oil	Removed in 1997	No evidence of leaks, corrosion, or loose fittings.	50
Administrative Area	173	173-1	1,500	No. 2 fuel oil	Removed in 1997	No evidence of leaks, corrosion, or loose fittings.	50
Administrative Area	173	173-2	4,000	No. 2 fuel oil	Removed in 1997	No evidence of leaks, corrosion, or loose fittings.	50
Administrative Area	190	190-1	1,000	Diesel	Removed	Not located by exploratory excavation.	14, 59
Housing and Recreation Area	219	Unknown	275	Fuel oil	Unknown		59
Housing and Recreation Area	220	220 W (220-2)	1,000	Heating oil	Removed	Not located by exploratory excavation.	14, 59
Housing and Recreation Area	220	220-SW (220)	1,000	Heating oil	Removed	Not located by exploratory excavation.	14, 59
Housing and Recreation Area	225	225-1	1,000	Heating oil	Removed	Not located by exploratory excavation.	14, 59
Housing and Recreation Area	227	Unknown	1,000	Fuel oil	Unknown		59
Housing and Recreation Area	229	229 (West)	220	Gasoline	Removed in 1997		337
Housing and Recreation Area	233	233-1	1,000	Diesel	Removed	Not located by exploratory excavation.	14, 59
Housing and Recreation Area	235	235-1	1,000	Heating oil	Removed in 1997		34

Table 4-1 (Continued)
Aboveground and Underground Storage Tanks
Camp Pedricktown, New Jersey

Geographic Area	Building No.	Tank No.	Capacity (gallons)	Contents	Status	Comments	EBS Source of Evidence Document Identification No.
Housing and Recreation Area	235	235-2	1,000	Heating oil	Second tank does not exist	Tanks 235-1 and 235-2 are the same tank.	34
Housing and Recreation Area	235	235-B (235)	1,000	Heating oil	Removed	Not located by GPR.	14, 59
Housing and Recreation Area	259	Unknown	Unknown	Unknown	Unknown	GPR showed possible presence of tank.	27, 59
Housing and Recreation Area	270	270-1	275	Heating oil	Removed	Not located by exploratory excavation.	14, 59
Housing and Recreation Area	272	272-1	1,000	Heating oil	Removed	Not located by exploratory excavation.	14, 59
Housing and Recreation Area	272	272-2	1,000	Heating oil	Removed	Not located by exploratory excavation.	14, 59
Housing and Recreation Area	272	272-3	1,000	Heating oil	Removed	Not located by exploratory excavation.	14, 59
Housing and Recreation Area	273	273	1,500	No. 2 fuel oil	Removed in 1997		39
Housing and Recreation Area	274	274	1,000	No. 2 fuel oil	Removed in 1997		40
Housing and Recreation Area	276	276 (East)	550	No. 2 fuel oil	Removed in 1997		43
Housing and Recreation Area	276	276 (West)	550	No. 2 fuel oil	Removed in 1997		44
Housing and Recreation Area	277	277 (East)	550	No. 2 fuel oil	Removed in 1997		45

Table 4-1 (Continued)
Aboveground and Underground Storage Tanks
Camp Pedricktown, New Jersey

Geographic Area	Building No.	Tank No.	Capacity (gallons)	Contents	Status	Comments	EBS Source of Evidence Document Identification No.
Housing and Recreation Area	277	277 (West)	550	No. 2 fuel oil	Removed in 1997		46
Housing and Recreation Area	278	278 (East)	550	No. 2 fuel oil	Removed in 1997		47
Housing and Recreation Area	278	278 (West)	550	No. 2 fuel oil	Removed in 1997		48
Housing and Recreation Area	282	282-1	1,000	Heating oil	Removed	Not located by exploratory excavation. Same as tank listed as Northeast 273 (T-282).	14, 59
Housing and Recreation Area	283	283-1	1,000	Heating oil	Unknown	GPR showed possible presence of tank, but exploratory excavation was not performed.	14a
Military Vehicle Parking Area	426	426-1	1,000	Heating oil	Removed	Not located by exploratory excavation.	14, 59
Military Vehicle Parking Area	426	Unknown	275	Fuel oil	Removed		59
Military Vehicle Parking Area	468	468-1	275	Heating oil	Removed	Not located by GPR.	14, 59
Warehousing Area	404	404	6,000	No. 2 fuel oil	Removed in 1997		41
Warehousing Area	404	404-1	110	Gasoline	Removed in 1997	Some reports show this tank as a 500-gallon waste oil tank. The 110-gallon gasoline tank and the 500-gallon waste oil tank are believed to be the same tank, since records show only two tanks at Building 404.	38
Warehousing Area	413	413-1 (413NW)	11,000	Gasoline	Removed in 1997		35

Table 4-1 (Continued)
Aboveground and Underground Storage Tanks
Camp Pedricktown, New Jersey

Geographic Area	Building No.	Tank No.	Capacity (gallons)	Contents	Status	Comments	EBS Source of Evidence Document Identification No.
Warehousing Area	413	413-2 (413SW)	10,000	Diesel	Removed in 1997		42
Warehousing Area	413	413-2 (413 West)	1,000	Waste oil	Removed in 1997		36
Warehousing Area	413	413E	5,000	Gasoline	Removed	Not located by exploratory excavation.	14, 59
Warehousing Area	413	413NE	5,000	Gasoline	Removed	Not located by exploratory excavation.	14, 59
Warehousing Area	413	413SE	5,000	Gasoline	Removed	Not located by exploratory excavation.	14, 59
Warehousing Area	413	Unknown	Unknown	Kerosene	Removed		59
Warehousing Area	464	464-1	1,000	No. 2 fuel oil	Active	AST	59
Warehousing Area	464	464-2	1,000	No. 2 fuel oil	Active	AST	59
Warehousing Area	464	464-3	1,000	No. 2 fuel oil	Active	AST	59

Notes:
AST - aboveground storage tank
GPR - ground penetrating radar

Table 4-2
Tenants on Adjacent BRAC Parcel

Building	Tenant	Nature of Business
100	Letteiri and Associates	Mini-mart/bait store
184	Wistar Equipment	Storage, repair, and assembly of nonhazardous materials and equipment
188	Letteiri and Associates	Storage of non-hazardous materials and equipment
197	Oldmans Township Department of Public Works	Storage of Oldmans Township equipment (e.g., snowplow)
322	Letteiri and Associates	Office and storage (includes 16 acres)
322	Slotworx Raceway[a]	Full-service slot and remote-control car raceway, with three outdoor asphalt tracks and Hot Rod Grille Café
380/480	BJB Enterprises	Office, warehouse and parking
474	Pioneer Glass Inc	Storage and assembly of specialized window frames
474 parking	Pioneer Glass Inc.	Parking area
495	WJV Builders	Vehicle storage
PPKLO5	Wistar Equipment	Storage of industrial compressors and generators (parking area)

[a] http://www.slotworx.com

Table 4-3
Transformers Located at Reserve Enclave

Area	Building/ Location	Number of Transformers	Type	Status	EBS Source of Evidence ID No.	Comment
Administrative Area	173, North	3	PM	Active	2, 20	
Administrative Area	190, Northwest	1	PM	Active	20	
Housing and Recreation Area	220	1	PM	Active	2	Reported as 120 SW in 1993 ESI[a]
Housing and Recreation Area	229, North	1	PM	Active	2	Not reported in 1993 ESI[a]
Housing and Recreation Area	229, West	1	PM	Active	2, 20	
Housing and Recreation Area	269, Southeast	3	PM	Active	2, 20	
Housing and Recreation Area	273, North	3	PM	Active	20	
Housing and Recreation Area	273, North	1	PM	Active	20	
Housing and Recreation Area	273, West	1	PM	Active	20	
Housing and Recreation Area	285, West	3	PM	Active	20	
Housing and Recreation Area	286, Northwest	1	PM	Active	20	
Housing and Recreation Area	Adjacent to Route 130	3	PM	Active	2, 20	
Warehousing Area	434, Southwest	1	PM	Active	2, 20	
Warehousing Area	464, Southwest	3	PM	Active	2, 20	
Military Vehicle Parking Area	475, Northwest	3	PM	Unknown	20	Northeast corner of vehicle parking area
Military Vehicle Parking Area	FAC1002	1	PM	Unknown	Visual inspection	Northwest side of vehicle parking area, not shown on maps

[a]Versar 1993a.

Notes:
ESI - expanded site inspection
PM - pole mounted

5.0 ENVIRONMENTAL CONDITION OF THE PROPERTY AREA

This section presents the parcelization of the Reserve Enclave property in accordance with the criteria described in the CERFA guidance and the DoD BCP guidebook (DoD 1995).

Based on a review of installation documents; federal, state, and local databases; and a site visit including employee interviews and visual inspections of the property and facilities, the Reserve Enclave at Camp Pedricktown has been divided into parcels that represent the environmental condition of the property area. Parcel numbers were initially assigned beginning with environmental condition of property (ECOP) Category 1, continuing through Category 7, and ending with the last qualified parcel. Some parcels were subsequently moved to other ECOP categories, and other parcels were added, resulting in some out-of-numerical-order parcels. The parcels and corresponding categorizations are summarized in Table 5-1 and on the CERFA map (Figure 5-1), which is in a plastic sleeve at the end of this report.

Figure 5-1 shows parcelization of the Reserve Enclave property as well as the approximate locations of subsurface utilities. Because the electronic files were not available, the utilities were mapped on the basis of their locations in three separate drawings. In some cases these drawings were unclear or information was contradictory; therefore, the locations are approximate. The purpose of including the approximate locations of the utilities on the CERFA map is to see where subsurface utilities are possibly within or near a potential or known area of soil or groundwater contamination. By showing the intersection of the utilities and possible contamination areas, Figure 5-1 highlights what may be areas of concern for utility transfer.

Areas with non-CERCLA substances are identified and delineated separately as qualified parcels. Qualified parcels overlie all environmental condition of property categories (Categories 1 through 7). The qualified parcels are presented in Table 5-2. Parcels are labeled as described in Section 1.3 and Table 1-1. A 1-acre grid coordinate system has been overlaid in Figure 5-1 to aid in locating the parcels. The x,y grid coordinates of the parcels are indicated in the parcel summary of Tables 5-1 and 5-2.

Parcel boundaries were drawn using the best available information on the extent of contamination and do not follow map grid lines. Small point sources of contamination or storage, such as USTs, are delineated by circular 0.25-acre parcels centered on the source, as stipulated in DoD guidance. For consistency and to facilitate summation of acreages, parcel acreages were calculated to two decimal places using the digitized map (Figure 5-1). The method is not meant to imply an accuracy to one one-hundredth of an acre.

The survey and subsequent parcelization of the Reserve Enclave resulted in a total of 48 environmental parcels: 17 Category 1 parcels; 3 Category 2 parcels; no Category 3 or 4 parcels; 9 Category 5 parcels; 2 Category 6 parcels; and 17 Category 7 parcels.

5.1 CATEGORY 1 PARCELS

The 17 Category 1 parcels, approximately 34 acres, are shown in Figure 5-1 and summarized in Table 5-1. In Figure 5-1, Category 1 parcels are neither colored nor shaded. The majority of the Category 1 parcels are the areas where only storage of petroleum products and/or hazardous substances has occurred, of which there are 12: Parcels 5(1) through 16(1).

Five Category 1 parcels (Parcels 1(1), 2(1), 3(1), 4(1), and 32(1)) are the areas within each geographic area (Administrative Area, Housing and Recreation Area, Military Vehicle Parking Area, and Warehousing Area) where no storage, disposal, or migration of CERCLA hazardous substances or petroleum products is known to have occurred. Brief descriptions of all of the Category 1 environmental parcels are included in this section.

5.1.1 Environmental Parcel Number and Label 1(1)

This parcel encompasses most of the Administrative Area, with the exclusion of the areas that are otherwise identified. The records review and interviews indicate that land in the Administrative Area was historically used for administrative and recreational activities. Areas of this parcel are identified as Category 1 because there has been no documented storage, release, or disposal of hazardous substances or petroleum products, and no evidence of migration of hazardous substances or petroleum products from adjacent properties has been identified. Areas specifically excluded from this parcel include those areas where only petroleum storage has occurred and areas where releases and/or migration of hazardous substances is suspected or has occurred, as shown in Figure 5-1. Although the petroleum storage areas are also designated Category 1, they have been assigned a separate parcel number to document that environmental concerns associated with the storage tank have been considered.

5.1.2 Environmental Parcel Number and Label 2(1)

This parcel encompasses most of the Housing and Recreation Area, with the exclusion of the areas that are otherwise identified. The records review and interviews indicate that land in this area was historically used primarily for housing and recreation. Areas of this parcel are identified as Category 1 because there has been no documented storage, release, or disposal of hazardous substances or petroleum products, and no evidence of migration of hazardous substances or petroleum products from adjacent properties has been identified. Areas specifically excluded from this parcel include those areas where only petroleum storage has occurred and areas where releases and/or migration of hazardous substances is suspected or has occurred, as shown in Figure 5-1. Although the petroleum storage areas are also designated Category 1, they have been assigned a separate parcel number.

5.1.3 Environmental Parcel Number and Label 3(1)

This parcel encompasses most of the Military Vehicle Parking Area, with the exclusion of the areas that are otherwise identified. The records review and interviews indicate that land in this area was historically used primarily for military vehicle parking and housing. Areas of this parcel are identified as Category 1 because there has been no documented storage, release, or disposal of hazardous substances or petroleum products, and no evidence of migration of hazardous substances or petroleum products from adjacent properties has been identified. Areas specifically excluded from this parcel include those areas where only petroleum storage has occurred and areas where releases and/or migration of hazardous substances is suspected or has occurred, as shown in Figure 5-1. Although the petroleum storage areas are also designated Category 1, they have been assigned a separate parcel number.

5.1.4 Environmental Parcel Number and Label 4(1)

This parcel encompasses most of the Warehousing Area, with the exclusion of the areas that are otherwise identified. The records review and interviews indicate that land in this area was historically used primarily for miscellaneous storage activities and vehicle maintenance and fueling. Areas of this parcel are identified as Category 1 because there has been no documented storage, release, or disposal of hazardous substances or petroleum products, and no evidence of migration of hazardous substances or petroleum products from adjacent properties has been identified. Areas specifically excluded from this parcel include those areas where only petroleum storage has occurred and areas where releases and/or migration of hazardous substances is suspected or has occurred, as shown Figure 5-1. Although these areas are also designated Category 1, they have been assigned a separate parcel number.

5.1.5 Environmental Parcel Number and Label 5(1)PS

This parcel is associated with former tank 171, which was a 1,000-gallon No. 2 fuel oil tank located northwest of Building 171. The tank was removed in 1997. There has been no documented release from this tank, and during removal there was no evidence of leaks, corrosion, or loose fittings. The NJDEP issued a No Further Action (NFA) letter after reviewing the tank closure report for Tanks 171, 173-1, and 173-2 (see Parcel 6).

5.1.6 Environmental Parcel Number and Label 6(1)PS

This parcel is associated with former tanks 173-1 and 173-2. Tank 173-1 was a 1,500-gallon No. 2 fuel oil tank and Tank 173-2 was a 4,000-gallon No. 2 fuel oil tank. Both were located north of Building 173, and both were removed in 1997. There has been no documented release from either of these tanks, and during removal there was no evidence of leaks, corrosion, or loose fittings in either tank. As stated above, an NFA letter was provided by NJDEP for these tank removals.

5.1.7 Environmental Parcel Number and Label 7(1)PS

This parcel is associated with former tank 190-1, which was a 1,000-gallon diesel tank located in the vicinity of Building 190. There has been no documented release associated with this tank. Exploratory excavation was performed to locate the tank. Since the tank was not located, it is assumed that it has been removed. No evidence of petroleum contamination was found in the excavation.

5.1.8 Environmental Parcel Number and Label 8(1)PS

This parcel is associated with former tanks 220-SW and 220-W, which were 1,000-gallon heating oil tanks located in the vicinity of former Building 220. Two GPR surveys were performed in the area of former Building 220, one in 1993 and the other in 1997. Both surveys indicated the possible presence of USTs. Exploratory excavation was performed in 1997 as a followup to the GPR surveys. Since the tanks were not located, it is assumed that they have been removed. No evidence of petroleum contamination was found in the excavations.

5.1.9 Environmental Parcel Number and Label 9(1)PS

This parcel is associated with former tank 229 (west), which was a 220-gallon gasoline tank located west of Building 229. The tank was removed in 1997. There has been no documented release from this tank. During the tank removal, there was no evidence of leaks from the tank, and the tank was in good condition. In addition, volatile organic compounds (VOCs) were not detected in confirmatory soil samples.

5.1.10 Environmental Parcel Number and Label 10(1)PS

This parcel is associated with former tank 233-1, which was a 1,000-gallon diesel tank located west of Facility 233. There has been no documented release associated with this tank. A GPR survey was performed, and no UST was detected. Exploratory excavation was performed in 1997 as a followup to the GPR survey. Since the tank was not located, it is assumed that it has been removed. No evidence of petroleum contamination was found in the excavation.

5.1.11 Environmental Parcel Number and Label 11(1)PS

This parcel is associated with former tank 270-1, which was a 275-gallon heating oil tank located in the vicinity of former Building 270. Two GPR surveys were performed in the area of former Building 270, one in 1993 and the other in 1997. The survey performed in 1993 indicated the possible presence of a small tank. The survey performed in 1997 did not detect any USTs. Exploratory excavation was performed in 1997 as a followup to the GPR surveys. Since the tank was not located, it is assumed that it has been removed. No evidence of petroleum contamination was found in the excavation.

5.1.12 Environmental Parcel Number and Label 12(1)PS

This parcel is associated with former tanks 272-1, 272-2, and 272-3, which were 1,000-gallon heating oil tanks located in the vicinity of former Building 272. There has been no documented release associated with these tanks. Exploratory excavation was performed in 1997 to locate the tanks. Since the tanks were not located, it is assumed that they have been removed. No evidence of petroleum contamination was found in the excavation.

5.1.13 Environmental Parcel Number and Label 13(1)PS

This parcel is associated with former tank 274, which was a 1,000-gallon No. 2 fuel oil tank located north of Building 274. The tank was removed in 1997. There has been no documented release from this tank. During the tank removal, there was no evidence of leaks from the tank, and the tank was in good condition. In addition, confirmatory soil samples indicated that TPH concentrations were less than the NJDEP soil cleanup criterion.

5.1.14 Environmental Parcel Number and Label 14(1)PS

This parcel is associated with former tanks 276 (east), 276 (west), 277 (east), 277 (west), 278 (east), and 278 (west). These tanks were 550-gallon No. 2 fuel oil tanks located in the vicinity of Buildings 276, 277, and 278. The tanks were removed in 1997. There have been no documented releases from these tanks. During the tank removals, there was no evidence of leaks from the tanks, and the tanks were in good condition. In addition, confirmatory soil samples indicated that TPH concentrations were less than the NJDEP soil cleanup criterion.

5.1.15 Environmental Parcel Number and Label 15(1)PS

This parcel is associated with former tank 282-1, which was a 1,000-gallon heating oil tank located in the vicinity of former Building 282. Two GPR surveys were performed in the area of former Building 282, one in 1993 and the other in 1997. Both surveys indicated the possible presence of a tank. Exploratory excavation was performed as a followup to the GPR surveys. Since the tank was not located, it is assumed that it has been removed. No evidence of petroleum contamination was found in the excavation.

5.1.16 Environmental Parcel Number and Label 16(1)PS

This parcel is associated with a former UST (tank 426-1) and an unnumbered AST. The UST was a 1,000-gallon heating oil tank located in the vicinity of former Building 426. The AST was 275-gallon fuel oil tank, which has been removed. There has been no documented release associated with either tank. A GPR survey performed in 1997 detected a possible UST. Exploratory excavation was performed as a followup to the GPR survey. Since the tank was not

located, it is assumed that it has been removed. No evidence of petroleum contamination was found in the excavation.

5.1.17 Environmental Parcel Number and Label 32(1)

This parcel is associated with Building 274, which was used as a post hospital and dispensary. It is located east of housing units 276, 277, and 278. No hazardous materials are known to have been released from the facility.

5.2 CATEGORY 2 PARCELS

The three Category 2 parcels (0.65 acre) are shown in Figure 5-1 and summarized in Table 5-1. In Figure 5-1, Category 2 parcels are indicated in blue. These parcels include areas where only release or disposal of petroleum products has occurred.

5.2.1 Environmental Parcel Number and Label 22(2)PS/PR

This parcel includes the area surrounding Building 273, which served as housing and barracks for enlisted men. According to installation records, a 1,500-gallon fuel oil tank (tank 273) was located in the basement of Building 273 in a concrete enclosure partially filled with sand. A spill occurred when this tank was being filled in 1986. The oil was released on the floor of the boiler room and also spilled outside the building via a vent line. Approximately 8 cubic yards of soil were removed during the cleanup. The tank was removed in 1997. Contaminated sand surrounding the tank was removed and disposed of at Casie Ecology Oil Salvage, Inc. No post-excavation soil samples were collected because of the concrete enclosure surrounding the tank. No further remedial actions are required.

5.2.2 Environmental Parcel Number and Label 25(2)PR

This parcel is the site of a hydraulic oil leak from a vehicle parked in the Military Vehicle Parking Area in May 1995. Approximately 1 gallon of hydraulic oil leaked to the ground. Contaminated soil was excavated, containerized, staged inside Building 495, and disposed of off site. No further remediation is required.

5.2.3 Environmental Parcel Number and Label 26(2)PS/PR

This parcel is associated with former tank 404, which was a 6,000-gallon tank used to store No. 2 fuel oil. Tank 404 was removed in 1997, and soil staining was observed near the fill port during the tank removal. However, VOC and TPH concentrations in the five confirmatory soil samples were less than the NJDEP cleanup criteria. Therefore, no actions were recommended for this tank.

5.3 CATEGORY 3 PARCELS

Currently, there are nine Category 3 parcels at the Reserve Enclave.

5.4 CATEGORY 4 PARCELS

Currently, there are no Category 4 parcels at the Reserve Enclave.

5.5 CATEGORY 5 PARCELS

Currently, there are nine Category 5 parcels at the Reserve Enclave, totaling 0.95 acre, as shown in Figure 5-1 and summarized in Table 5-1. Category 5 parcels are indicated in yellow in Figure 5-1. Category 5 parcels are areas where release, disposal, and/or migration of hazardous substances has occurred, but all required remedial actions have not yet been taken.

5.5.1 Environmental Parcel Number and Label 37(5)HR(P)

This parcel includes an area of the Military Vehicle Parking Area southwest of Buildings 484, 485, 494, and 495. PCE has been detected in wells in the area of these buildings. Because of the proximity of these wells to the Military Vehicle Parking Area, it is possible that groundwater in this parcel has been affected. Groundwater remediation (natural attenuation) is ongoing.

5.5.2 Environmental Parcel Number and Label 38(5)HR(P)

This parcel includes an area of the Military Vehicle Parking Area southeast of well MW 14-001, in which PCE has been detected. Because of the proximity of this well to the Military Vehicle Parking Area, it is possible that groundwater in this parcel has been affected. Groundwater remediation (natural attenuation) is ongoing.

5.5.3 Environmental Parcel Number and Label 42(5)HS/HR(P)

This parcel is associated with Building 464, which is currently being used as a storage facility and was previously used as a storage facility for the ordnance assembly/chemical plant. In addition, PCE contamination has been detected in a well in the area north of Building 432, adjacent to Building 464. Because of the proximity of this well to the Warehousing Area, it is possible that groundwater in this parcel has been affected. Further investigation is warranted to determine the extent of PCE contamination and to evaluate if the building's use as a storage facility has affected the environment.

5.5.4 Environmental Parcel Number and Label 90(5)HR

This parcel is associated with Building 276, a former housing unit in the Housing and Recreation Area. Lead was found in one surface soil sample collected within 3 feet of the building foundation at a concentration of 493 mg/kg, which is above the NJDEP action level (400 mg/kg),

5.5.5 Environmental Parcel Number and Label 91(5)HR

This parcel is associated with Building 277, a former housing unit in the Housing and Recreation Area. Lead was found in two surface soil samples collected within 3 feet of the building foundation at concentrations of 526 mg/kg and 685 mg/kg, above the NJDEP action level (400 mg/kg).

5.5.6 Environmental Parcel Number and Label 92(5)HR

This parcel is associated with Building 278, a former housing unit in the Housing and Recreation Area. Lead was found in two surface soil samples collected within 3 feet of the building foundation at concentrations of 459 and 1,384 mg/kg, above the NJDEP action level (400 mg/kg).

5.5.7 Environmental Parcel Number and Label 93(5)HR

This parcel is associated with Building 286, the garage for former housing unit 276 in the Housing and Recreation Area. Lead was found in one surface soil sample collected within 3 feet of the building foundation at 454 mg/kg, which is above the NJDEP action level (400 mg/kg).

5.5.8 Environmental Parcel Number and Label 94(5)HR

This parcel is associated with Building 287, the garage for former housing unit 277 in the Housing and Recreation Area. Lead was found in one surface soil sample collected within 3 feet of the building foundation at 686 mg/kg, which is above the NJDEP action level (400 mg/kg).

5.5.9 Environmental Parcel Number and Label 95(5)HR

This parcel is associated with Building 288, the garage for former housing unit 278 in the Housing and Recreation Area. Lead was found in one surface soil sample collected within 3 feet of the building foundation at 489 mg/kg, which is above the NJDEP action level (400 mg/kg).

5.6 CATEGORY 6 PARCELS

The two Category 6 parcels, totaling approximately 0.30 acre, is shown in Figure 5-1 and summarized in Table 5-1. Category 6 parcels are indicated in red in Figure 5-1. Category 6

parcels are areas where release, disposal, and/or migration of hazardous substances has occurred, but required actions have not yet been implemented.

5.6.1 Environmental Parcel Number and Label 28(6)PS/HR

This parcel includes an area of arsenic-contaminated soils east of Building 464. Sampling performed in 2000 and 2001 showed arsenic concentrations greater than the NJDEP soil cleanup criterion of 20 mg/kg (ARCADIS Geraghty & Miller 2000, 2001b). The vertical and horizontal extent of contamination has not been fully delineated.

This parcel is also associated with three 1,000-gallon ASTs (464-1, 464-2, and 464-3), which are being used to store No. 2 fuel oil. These tanks are new, active tanks, which were installed on bermed concrete pads for spill containment. There has been no documented release associated with these ASTs. Therefore, no further actions are required for these tanks.

5.6.2 Environmental Parcel Number and Label 29(6)HR

This parcel includes the area surrounding/under Facility 239, a 125,000-gallon water tower. Paint chips were observed in the soil surrounding Facility 239, and four surface soil samples were obtained. These soil samples contained lead at concentrations above the NJDEP guidance threshold. Additional investigation is required to evaluate the extent of lead contamination and to prepare an action plan for addressing the contaminated soil.

5.7 CATEGORY 7 PARCELS

The 17 Category 7 parcels, totaling approximately 4.8 acres, are shown in Figure 5-1 and summarized in Table 5-1. Category 7 parcels are indicated in Figure 5-1 in gray. These parcels are areas that may require additional evaluation.

5.7.1 Environmental Parcel Number and Label 17(7)PS(P)/PR(P)

This parcel includes the area surrounding former Building 219, which was used as quarters. According to installation records, a 275-gallon fuel oil tank was associated with this former building. No documentation was found on the status of this tank. Therefore, further investigation of this area may be warranted to locate the tank (or former tank if it has been removed) and to evaluate whether releases have occurred.

5.7.2 Environmental Parcel Number and Label 18(7)PS/PR(P)

This parcel is associated with former tank 225-1, which was a 1,000-gallon heating oil tank located in the vicinity of former Building 225. Two GPR surveys were reportedly performed in the area of former Building 225. During a GPR survey in 1993, no tank was detected in the area

around former Building 225. A second GPR survey was performed in the area of former Building 225 in 1997. (Note: The 1997 GPR survey that was conducted in the area of former Building 225 was referred to as 235-B on the map and in the text of the GPR report. It is assumed that the locations were mapped correctly and that the survey of the area identified as area 235-B was actually performed in the area of former Building 225.) This more recent GPR survey also found no evidence of a tank. Since the tank was not located, it is assumed that the tank has been removed. Since no invasive activity was performed and no closure report was available for this tank, a clean closure for this tank could not be confirmed. Further investigation of this area may be warranted.

5.7.3 Environmental Parcel Number and Label 19(7)PS(P)/PR(P)

This parcel includes the area surrounding former Building 227, which was used as an officers' club, quarters, and barracks. According to installation records, a 1,000-gallon fuel oil tank was associated with this former building. No documentation was found on the status of this tank. Therefore, further investigation of this area may be warranted to locate the tank (or former tank if it has been removed) and to evaluate whether releases have occurred.

5.7.4 Environmental Parcel Number and Label 20(7)PS/PR(P)

This parcel is associated with former tanks 235-1 and 235-B. Tank 235-1 was a 1,000-gallon heating oil tank located adjacent to former Building 235. Originally, it was believed that two tanks were located in the area of Tank 235-1, because of the presence of two fill ports. However, tank 235-1 had two fill ports, and a second tank was not located in the area of Tank 235-1. Tank 235-1 was removed in 1997. There has been no documented release from this tank. During the tank removal, there was no evidence of leaks from the tank, and the tank was in good condition. In addition, confirmatory soil samples indicated that TPH concentrations were less than the NJDEP soil cleanup criterion.

No information is available on the status of tank 235-B. No GPR survey was conducted in the area immediately surrounding former Building 235 to determine the location of tank 235-B. Therefore, further investigation of this area may be warranted to locate tank 235-B or its former location and to evaluate whether releases have occurred.

5.7.5 Environmental Parcel Number and Label 21(7)PS(P)/PR(P)

This parcel includes an area north of former Facility 259, which was used as a ground storage reservoir. According to a GPR survey performed in 1993, evidence of a tank was found. No documentation was found on the status of this tank. Therefore, further investigation of this area may be warranted to locate the tank and to evaluate whether releases have occurred.

5.7.6 Environmental Parcel Number and Label 23(7)PS/PR(P)

This parcel includes the area surrounding former Building 283, which served as a mess hall and service club for enlisted men. According to installation records, a 1,000-gallon heating oil tank (tank 283-1) was associated with this former building. According to GPR surveys performed in 1993 and 1997, no evidence of a tank was found. However, no exploratory excavation was performed and no documentation was found on the status of this tank. Therefore, further investigation of this area may be warranted to evaluate whether releases have occurred.

5.7.7 Environmental Parcel Number and Label 24(7)PS/PR(P)

This parcel includes the area surrounding former Building 468, which served as quarters. According to installation records, a 275-gallon heating oil tank was associated with this former building. According to a GPR survey performed in 1997, no evidence of a tank was found. However, no exploratory excavation was performed and no documentation was found on the status of this tank. Therefore, further investigation of this area may be warranted to evaluate whether releases have occurred.

5.7.8 Environmental Parcel Number and Label 27(7)PS/PR(P)

This parcel includes the area west of Building 413. According to installation records, a kerosene tank of unknown size was associated with this building. No documentation was found on the status of this tank. Although the area surrounding Building 413 has been thoroughly studied, this tank appears to be located to the west of the main study area. Therefore, further investigation of this area may be warranted to locate the tank (or former tank if it has been removed) and to evaluate whether releases have occurred.

5.7.9 Environmental Parcel Number and Label 30(7)PR(P)/HR(P)

This parcel is in the Administrative Area, northwest of Building 173. It is associated with a storm drain and portions of the storm water sewer system radiating from the storm drain. TPH and cadmium were detected in a surface water sample collected from this storm drain in 1993. Additional sampling and analysis may be required to evaluate whether contamination is present.

5.7.10 Environmental Parcel Number and Label 31(7)HR(P)

This parcel includes Facility 249 and the surrounding soil. Facility 249 is a water tower located in the southwest corner of the Reserve Enclave. During the visual inspection, a pile of sandy silt with what appeared to be paint fragments was found at the base of the southwest side of the tank. Additional investigation of the pile of sandy silt may be required to evaluate whether hazardous substances such as lead may be present above regulatory levels.

5.7.11 Environmental Parcel Number and Label 33(7)HS(P)/HR(P)

This parcel is associated with Building 298, which was used as the chlorinator building for the pool. The building is located along the west edge of the Reserve Enclave, south of the Military Vehicle Parking Area. Pool chemicals would have been handled in this facility. Additional investigation may be required to determine if there are any concerns regarding chemical release related to the storage or use of pool chemicals in this building.

5.7.12 Environmental Parcel Number and Label 34(7)

This parcel is associated with the location of former Building T-488, located in the northern end of the Military Vehicle Parking Area. The function of this former building is unknown; therefore, further investigation may be warranted regarding past practices in the building.

5.7.13 Environmental Parcel Number and Label 35(7)

This parcel is associated with the location of former Building T-488, located north of Building T-488 in the Military Vehicle Parking Area. The function of this former building is unknown. Further investigation may be warranted to determine whether any wood treatment or surface protection treatment took place at this location.

5.7.14 Environmental Parcel Number and Label 36(7)HR(P)

This parcel is associated with the rectangular depression at the northern end of the Military Vehicle Parking Area that was observed during the visual inspection. The depression was filled with wood boards. The former activities that may be associated with this area are unknown; therefore, further investigation may be warranted.

5.7.15 Environmental Parcel Number and Label 39(7)PS/PR/HS/HR(P)

This parcel is associated with Building 404, which has been used for vehicle maintenance and as a roundhouse for locomotive maintenance. In addition, vehicle wash racks and a drum storage facility are associated with this building. These current and former uses make it a potential source of petroleum, solvent, and metals contamination. Therefore, further investigation may be warranted to evaluate whether hazardous substances associated with the current and former uses of this building have been released to the soil or groundwater.

A former tank is also associated with this parcel. This tank is unnumbered in some references and is numbered 404-1 in other references. The tank was removed in 1997. The tank had no visual evidence of a leak. However, the VOC and naphthalene concentrations in one confirmatory soil sample exceeded the NJDEP soil cleanup criteria. The results of a focused

remedial investigation indicated that the tank had not adversely affected soil and groundwater. No additional actions are required for the tank.

5.7.16 Environmental Parcel Number and Label 40(7)PS/PR/HS/HR(P)

This parcel is associated with Building 413, which served as a gas station and motor pool area. A storage facility for waste oils, solvents, and flammable materials was located outside the building. Six former tanks are associated with this parcel: Tanks 413NW, 413SW, 413 West, 413NE, 413E, and 413SE.

At the time of removal in 1997, Tank 413NW was in good condition, and no soil staining was observed. However, the xylene concentration in one confirmatory sample was above the NJDEP soil cleanup criterion. A subsequent focused remedial investigation indicated that any releases from the tank had not adversely affected soil and groundwater.

Tank 413SW was in good condition when removed in 1997, with no evidence of leaks. Soil sampling results indicated TPH concentrations less than the NJDEP soil cleanup criterion.

Used oil was stored in Tank 413 West. When removed in 1997, it was in good condition, and there was no evidence of soil staining. Confirmatory soil samples indicated TPH and VOC concentrations less than the NJDEP cleanup criteria.

An attempt was made to locate tanks 413NE, 413E, and 413SE by exploratory excavation. Since the tanks were not located, it is assumed that the tanks have been removed. No evidence of petroleum contamination was found in the excavation.

One of five monitoring wells installed near Building 413 was found to have PCE at a concentration greater than the NJDEP groundwater criterion. However, followup sampling has not been performed to confirm these results. Further investigation is warranted to evaluate the extent of PCE contamination. No further actions are required for the tanks.

5.7.17 Environmental Parcel Number and Label 41(7)HS/HR(P)

This parcel is associated with Building 434, which is currently being used as a storage facility and was previously used as a storage facility for the ordnance assembly/chemical plant. Because of its current and former use as a storage facility, further investigation of past practices may be warranted.

5.8 QUALIFIED PARCELS

In identifying the qualified parcels, the following guidelines were used:

- If an asbestos survey has not been conducted on a building, then the building was assumed to contain asbestos-containing material if it was constructed prior to 1985. An "A(P)" for the possible presence of asbestos was used to qualify the parcel.

- Since a lead-based paint survey has not been conducted on any of the buildings/facilities within the Reserve Enclave, all buildings constructed prior to 1978 were assumed to contain lead-based paint. An "L(P)" for the possible presence of lead-based paint was used to qualify the parcel.

- All transformers were qualified for PCBs, because the PCB content of the transformers was not labeled. A "P(P)" for the possible presence of PCBs was used to qualify the parcel.

- All buildings, which potentially contain light fixtures, were qualified for PCBs, because PCB-containing light ballasts have been identified in numerous buildings in the BRAC parcel. A "P(P)" for the possible presence of PCBs was used to qualify the parcel.

Parcels totaling approximately 5.4 acres were identified as qualified (Table 5-2). When a qualified parcel is associated with a building/facility, the indicated acreage corresponds to the "footprint" of the building/facility. If a qualified parcel was not associated with a building/facility, the area was delineated using a circular 0.25-acre parcel centered on the source of qualification.

Table 5-1
Environmental Parcel Descriptions
Camp Pedricktown, New Jersey

Environmental Parcel No. and Label[a]	Location (X, Y Coordinates)	Approximate Size (acres)[b]	Geographic Area[c]	Environmental Condition Category Number	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
1(1)	11,7	2.81	Administrative Area	1	This parcel covers portions of the Administrative Area, excluding those areas identified as non-Category 1 parcels. There have been no documented releases or disposal of hazardous substances or petroleum substances associated with this parcel. In addition, there is no evidence of migration of hazardous substances and petroleum substances from adjacent properties.	1, 7, 59, Visual inspection	None is required.
2(1)	10,5	13.41	Housing and Recreation Area	1	This parcel covers portions of the Housing and Recreation Area, excluding those areas identified as non-Category 1 parcels. There have been no documented releases or disposal of hazardous substances or petroleum substances associated with this parcel. In addition, there is no evidence of migration of hazardous substances and petroleum substances from adjacent properties.	1, 7, 59, Visual inspection	None is required.
3(1)	5,6	10.43	Military Vehicle Parking Area	1	This parcel covers portions of the Military Vehicle Parking Area, excluding those areas identified as non-Category 1 parcels. There have been no documented releases or disposal of hazardous substances or petroleum substances associated with this parcel. In addition, there is no evidence of migration of hazardous substances and petroleum substances from adjacent properties.	1, 7, 59, Visual inspection	None is required.
4(1)	6,7	2.87	Warehousing Area	1	This parcel covers portions of the Warehousing Area, excluding those areas identified as non-Category 1 parcels. There have been no documented releases or disposal of hazardous substances or petroleum substances associated with this parcel. In addition, there is no evidence of migration of hazardous substances and petroleum substances from adjacent properties.	1, 7, 59, Visual inspection	None is required.
5(1)PS	11,7	0.25	Administrative Area	1	This area is associated with former tank 171, which was removed in 1997. There has been no documented release associated with this UST, and there was no evidence of leaks, corrosion, or loose fittings at the time the UST was removed.	50	None is required.

Table 5-1 (Continued)
Environmental Parcel Descriptions
Camp Pedricktown, New Jersey

Environmental Parcel No. and Label[a]	Location (X, Y Coordinates)	Approximate Size (acres)[b]	Geographic Area	Environmental Condition Category Number	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
6(1)PS	12,7	0.32	Administrative Area	1	This area is associated with former tanks 173-1 and 173-2, which were removed in 1997. There have been no documented release associated with these USTs, and there was no evidence of leaks, corrosion, or loose fittings at the time they were removed.	50	None is required.
7(1)PS	10,7	0.24	Administrative Area	1	This area is associated with former tank 190-1. There has been no documented release associated with this UST. An attempt was made to locate the tank by exploratory excavation. Since the tank was not located, it is assumed that the tank has been removed. No evidence of petroleum contamination was found in the excavation.	14	None is required.
8(1)PS	11,4	0.44	Housing and Recreation Area	1	This area is associated with former tanks 220-SW and 220 W. There has been no documented release associated with these USTs. An attempt was made to locate the tanks by exploratory excavation. Since the tanks were not located, it is assumed that they have been removed. No evidence of petroleum contamination was found in the excavation.	14, 27	None is required.
9(1)PS	7,1	0.02	Housing and Recreation Area	1	This area is associated with former tank 229 (west). Tank 229 (west) was removed in 1997. There has been no documented release associated with this tank, and no evidence of leaks was found during tank removal. The tank was in good condition, and confirmatory soil samples indicated TPH concentrations less than the NJDEP soil cleanup criterion.	37	None is required.
10(1)PS	9,3	0.22	Housing and Recreation Area	1	This area is associated with former tank 233-1. There has been no documented release associated with this UST. An attempt was made to locate the tank by exploratory excavation. Since the tank was not located, it is assumed that the tank has been removed. No evidence of petroleum contamination was found in the excavation.	14	None is required.

Table 5-1 (Continued)
Environmental Parcel Descriptions
Camp Pedricktown, New Jersey

Environmental Parcel No. and Label[a]	Location (X, Y Coordinates)	Approximate Size (acres)[b]	Geographic Area	Environmental Condition Category Number	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
11(1)PS	11,6	0.25	Housing and Recreation Area	1	This area is associated with former tank 270-1. There has been no documented release associated with this UST. An attempt was made to locate the tank by exploratory excavation. Since the tank was not located, it is assumed that the tank has been removed. No evidence of petroleum contamination was found in the excavation.	14, 27	None is required.
12(1)PS	10,6	0.24	Housing and Recreation Area	1	This area is associated with former tanks 272-1, 272-2, and 272-3. There has been no documented release associated with these USTs. An attempt was made to locate the tanks by exploratory excavation. Since the tanks were not located, it is assumed that they have been removed. No evidence of petroleum contamination was found in the excavation.	14	None is required.
13(1)PS	9,5	0.22	Housing and Recreation Area	1	This area is associated with former tank 274. The tank was removed in 1997. There has been no documented release associated with this tank, and no evidence of leaks was found during tank removal. The tank was in good condition, and confirmatory soil samples indicated TPH concentrations less than the NJDEP soil cleanup criterion.	40	None is required.
14(1)PS	8,4	1.12	Housing and Recreation Area	1	This area is associated with the following former tanks: 276(east), 276(west), 277(east), 277(west), 278(east), and 278(west). The tanks were removed in 1997. There has been no documented release associated with these tanks, and no evidence of leaks was found during any of the tank removals. The tanks were in good condition, and confirmatory soil samples indicated TPH concentrations less than the NJDEP soil cleanup criterion at all tanks.	43, 44, 45, 46, 47, 48	None is required.
15(1)PS	10,7	0.23	Housing and Recreation Area	1	This area is associated with former tank 282-1. There has been no documented release associated with this UST. An attempt was made to locate the tank by exploratory excavation. Since the tank was not located, it is assumed that the tank has been removed. No evidence of petroleum contamination was found in the excavation.	14, 27	None is required.

Table 5-1 (Continued)
Environmental Parcel Descriptions
Camp Pedricktown, New Jersey

Environmental Parcel No. and Label[a]	Location (X, Y Coordinates)	Approximate Size (acres)[b]	Geographic Area	Environmental Condition Category Number	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
16(1)PS	5,6	0.25	Military Vehicle Parking Area	1	This area is associated with a former UST (tank 426-1) and an unnumbered AST. There has been no documented release associated with the UST or the AST. An attempt was made to locate tank 426-1 by exploratory excavation. Since the tank was not located, it is assumed that the tank has been removed. No evidence of petroleum contamination was found in the excavation.	14, 59	None is required.
17(7)PS(P)/PR(P)	7,1	0.21	Housing and Recreation Area	7	This parcel includes former Building 219. Evidence of the existence of a tank associated with Building 219 was found. However, no information is available on the status of the tank or possible releases from the tank.	59	Further investigation of this area may be warranted to determine the location of tank/former tank associated with Building 219 and to determine if any releases have occurred.
18(7)PS/PR(P)	10,3	0.16	Housing and Recreation Area	7	This area is associated with former tank 225-1. There has been no documented release associated with this UST. GPR surveys were performed in the vicinity of former Building 225 in 1993 and 1997 in an attempt to located the tank. No tanks were located during either GPR survey. Since the tank was not located, it is assumed that the tank has been removed.	14, 27	Since no invasive activity was performed and no closure report was available for this tank, the occurrence of a release could not be ruled out. Further investigation of this area may be warranted.
19(7)PS(P)/PR(P)	8,3	0.25	Housing and Recreation Area	7	Evidence of a tank associated with former Building 227 was found. However, no information is available on the status of the tank or possible releases from the tank.	59	Further investigation of this area may be warranted to determine the location of tank/former tank associated with Building 227 and to determine if any releases have occurred.
20(7)PS/PR(P)	8,3	0.25	Housing and Recreation Area	7	This area is associated with former tanks 235-B and 235-1. No information is available on the status of tank 235-B or possible releases from the tank. Tank 235-1 was removed in 1997. There has been no documented release associated with this tank, and no evidence of leaks was found during tank removal. The tank was in good condition, and confirmatory soil samples indicated TPH concentrations less than the NJDEP soil cleanup criterion.	14	Further investigation of this area may be warranted to determine the location of tank/former tank 235-B associated with Building 235 and to determine if any releases have occurred. No further investigations are required for tank 235-1.

Table 5-1 (Continued)
Environmental Parcel Descriptions
Camp Pedricktown, New Jersey

Environmental Parcel No. and Label[a]	Location (X, Y Coordinates)	Approximate Size (acres)[b]	Geographic Area	Environmental Condition Category Number	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
21(7)PS(P)/PR(P)	6,2	0.15	Housing and Recreation Area	7	Evidence of a tank north of former Building 259 was found. However, no information is available on the status of the tank or possible releases from the tank.	27, 59	Further investigation of this area may be warranted to determine the location of tank/former tank associated with Building 259 and to determine if any releases have occurred.
22(2)PS/PR	9,5	0.25	Housing and Recreation Area	2	This area is associated with former tank 273. This tank was located in the basement of Building 273 in a sand-filled concrete enclosure. A spill occurred when this tank was being filled in 1986. Approximately 8 cubic yards of soil were removed during the cleanup. The tank was removed in 1997. Contaminated sand surrounding the tank was removed and disposed of at Casie Ecology Oil Salvage, Inc. No confirmatory soil samples were collected because of the concrete enclosure surrounding the tank.	39	None is required.
23(7)PS/PR(P)	8,6	0.25	Housing and Recreation Area	7	This area is associated with former tank 283-1. There has been no documented release associated with this UST. An attempt was made to locate the tank by GPR. Since the tank was not located, it is assumed that the tank has been removed.	14, 27	Since no invasive activity was performed and no closure report was available for this tank, the occurrence of a release could not be ruled out. Further investigation of this area may be warranted.
24(7)PS/PR(P)	4,7	0.25	Military Vehicle Parking Area	7	This area is associated with former tank 468-1. There has been no documented release associated with this UST. An attempt was made to locate the tank by GPR. Since the tank was not located, it is assumed that the tank has been removed.	14	Since no invasive activity was performed and no closure report was available for this tank, the occurrence of a release could not be ruled out. Further investigation of this area may be warranted.

Table 5-1 (Continued)
Environmental Parcel Descriptions
Camp Pedricktown, New Jersey

Environmental Parcel No. and Label[a]	Location (X, Y Coordinates)	Approximate Size (acres)[b]	Geographic Area	Environmental Condition Category Number	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
25(2)PR	4,8	0.25	Military Vehicle Parking Area	2	In May 1995, a vehicle's hydraulic cylinder leaked approximately 1 gallon of hydraulic oil to the ground. The leak was stabilized, and the vehicle was moved. Contaminated soil was excavated, containerized, and staged on pallets inside Building 495.	59	The disposition of the excavated soil has not been determined.
26(2)PS/PR	8,6	0.15	Warehousing Area	2	This area is associated with former tank 404. The tank was removed in 1997. Soil staining was observed near the fill port during tank removal. However, VOC and TPH concentrations in the five confirmatory soil samples were less than the NJDEP soil cleanup criteria. Therefore, no actions were recommended for this tank	41, 59	None is required.
27(7)PS/PR(P)	6,6	0.14	Warehousing Area	7	This area is associated with a former kerosene tank near Building 413. There has been no documented release associated with this tank. No records were found on the status of the kerosene tank. Although the area surrounding Building 413 has been thoroughly studied, this tank appears to be located to the west of the main study area.	59	Further investigation of this area may be warranted to determine the location of tank/former tank associated with Building 413 and to determine if any releases have occurred.
28(6)PS/HR	6,8	0.11	Warehousing Area	6	Sampling performed in 2000 and 2001 in the area between Building 464 and the gravel access road showed arsenic concentrations greater than the NJDEP soil cleanup criterion of 20 mg/kg (ARCADIS Geraghty & Miller 2000, 2001b). The vertical and horizontal extent of contamination has not been fully determined. Removal and disposal of soil is planned for this area. [This area is also associated with ASTs 464-1, 464-2, and 464-3, which are new tanks installed on bermed concrete pads for spill containment. These tanks are active. There has been no documented release associated with these ASTs.]	17, 20, 59, 62	Remedial action is planned for this area due to the arsenic contamination. No actions are required for the existing active ASTs.

Table 5-1 (Continued)
Environmental Parcel Descriptions
Camp Pedricktown, New Jersey

Environmental Parcel No. and Label[a]	Location (X, Y Coordinates)	Approximate Size (acres)[b]	Geographic Area	Environmental Condition Category Number	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
29(6)HR	7,2	0.19	Housing and Recreation Area	6	This parcel includes Facility 239. Paint chips have been observed on the soil surrounding Facility 239, a 125,000-gallon water tank. Four soil samples were obtained, and lead concentrations were above the NJDEP guidance threshold.	19	Additional investigation may be required to determine the horizontal and vertical extent of lead-contaminated soil in the vicinity of Facility 239 and to prepare an action plan for addressing the contaminated soil.
30(7)PR(P)/HR(P)	11,8	0.16	Administrative Area	7	This area is associated with a storm drain from which a surface water sample (SW18-001) was collected in 1993 (Versar 1993a). TPH and cadmium were detected in the surface water sample. This parcel also includes potentially contaminated portions of the storm water sewer system radiating from the storm drain.	59	Additional sampling and analysis may be required.
31(7)HR(P)	7,2	0.13	Housing and Recreation Area	7	This parcel includes Facility 249, a water tower. During the visual inspection, a pile of sandy silt with what appeared to be paint fragments was observed at the base of the southwest side of the water tower.	Visual inspection	Additional investigation may be required to determine whether hazardous substances such as lead are present in the pile of sandy silt adjacent to Facility 249.
32(1)	8,4	0.05	Housing and Recreation Area	1	Building 274 was used as a post hospital and dispensary. Hazardous materials may have been stored or used in the facility No evidence of releases from the facility have been found.	59	None required.
33(7)HS(P)/HR(P)	5,3	0.01	Housing and Recreation Area	7	Building 298 was used as the chlorinator building for the pool. Pool chemicals would have been handled in this facility.	59	Additional investigation may be required to determine if there have been any releases related to the storage or use of pool chemicals in this building.
34(7)	5,7	0.25	Military Vehicle Parking Area	7	This parcel is associated with the location of former Building T-488. The function of this building is unknown.	59	Further investigation may be warranted.

Table 5-1 (Continued)
Environmental Parcel Descriptions
Camp Pedricktown, New Jersey

Environmental Parcel No. and Label[a]	Location (X, Y Coordinates)	Approximate Size (acres)[b]	Geographic Area	Environmental Condition Category Number	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
35(7)	4,8	0.25	Military Vehicle Parking Area	7	This parcel is associated with the location of former Building T-498, a lumber shed.	59, 85	Further investigation may be warranted to determine whether any wood treatment or surface protection took place at this location.
36(7)HR(P)	3,9	0.07	Military Vehicle Parking Area	7	A rectangular depression was observed at the northern end of the Military Vehicle Parking Area. The depression was filled with wood boards. An 8-inch clay sewer line running in an east-west direction along the approximate location of the southern edge of the depression was depicted in a utility map believed to have been prepared in the late 1950s to the early 1960s. Also, it was observed that the depression is in the approximate location described for the hydraulic fuel leak in Parcel 25(2).	Visual inspection	Further investigation may be warranted.
37(5)HR(P)	4,9	0.32	Military Vehicle Parking Area	5	PCE has been detected in groundwater monitoring wells in the area of Buildings 484, 485, 494, and 495. Because of the proximity of these wells to the Military Vehicle Parking Area, it is possible that groundwater on Reserve Enclave property has been affected. The Army entered into a Decision Document in April 2001 with the State of New Jersey regarding low-level PCE contamination in groundwater from monitoring wells east of Building 464. The Decision Document states that this contamination will be remediated by natural remedial processes (natural attenuation) as part of a long-term groundwater monitoring program and Classification Exception (CEA)/Well Restriction Area (WRA) in accordance with the *Final Guidance on Designation of Classification Exception Areas* (November 1998).	17, 61	Groundwater remediation in the form of natural attenuation is ongoing but is not yet complete.

Table 5-1 (Continued)
Environmental Parcel Descriptions
Camp Pedricktown, New Jersey

Environmental Parcel No. and Label[a]	Location (X, Y Coordinates)	Approximate Size (acres)[b]	Geographic Area	Environmental Condition Category Number	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
38(5)HR(P)	2,8	0.13	Military Vehicle Parking Area	5	PCE has been detected in the area of well MW 14-001. Because of the proximity of this well to the Military Vehicle Parking Area, it is possible that groundwater on Reserve Enclave property has been affected. The Army entered into a Decision Document in April 2001 with the State of New Jersey regarding low-level PCE contamination in groundwater from monitoring wells east of Building 464. The Decision Document states that this contamination will be remediated by natural remedial processes (natural attenuation) as part of a long-term groundwater monitoring program and Classification Exception (CEA)/Well Restriction Area (WRA) in accordance with the *Final Guidance on Designation of Classification Exception Areas* (November 1998).	17, 61	Groundwater remediation in the form of natural attenuation is ongoing but is not yet complete.
39(7)PS/PR/ HS/HR(P)	6,5	1.39	Warehousing Area	7	Building 404 has been used for vehicle maintenance and as a "roundhouse" for locomotive maintenance. These uses make it a potential source of petroleum, solvent, and metals contamination. A vehicle wash rack (FAC1008) and a temporary drum storage area (FAC1009) are also located at this building. Note: FAC1008 and FAC1009 are known to be associated with Building 404. However, the exact locations of these facilities are not known. One former UST is associated with this parcel. This tank is unnumbered in some references and is numbered 404-1 in other references. This tank was removed in 1997 and had no visual evidence of a leak. The VOC and naphthalene concentrations in one confirmatory soil sample exceeded the NJDEP soil cleanup criteria, but the results of a focused remedial investigation indicated that the tank had not adversely affected soil and groundwater.	38, 59	Further investigation may be warranted to determine whether hazardous substances associated with the former uses of Building 404 were released to the soil or groundwater. No additional action is required for the UST.

Table 5-1 (Continued)
Environmental Parcel Descriptions
Camp Pedricktown, New Jersey

Environmental Parcel No. and Label[a]	Location (X, Y Coordinates)	Approximate Size (acres)[b]	Geographic Area	Environmental Condition Category Number	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
40(7)PS/PR/ HS/HR(P)	8,7	0.41	Warehousing Area	7	This parcel is associated with Building 413, which served as a gas station, a motor pool building, and a storage facility for waste oils, solvents, and flammable materials. Six former tanks associated with this parcel: tanks 413-1 (413NW), 413-2 (413SW), 413-2 (413 west), 413NE, 413E, and 413SE. There has been no documented release associated with any of these tanks. PCE was found in one of five monitoring wells installed near Building 413 at a concentration greater than the NJDEP groundwater criterion. Followup sampling has not been performed to confirm these results.	35, 36, 42, 51, 59, 14	Further investigation may be warranted to determine the extent of PCE contamination.
41(7)HS/HR(P)	6,8	0.49	Warehousing Area	7	Building 434 is currently being used as a storage facility, and was previously used as a storage facility for the ordnance assembly/chemical plant.	59	Further investigation may be warranted.
42(5)HS(P)/HR(P)	6,8	0.50	Warehousing Area	5	Building 464 is currently being used as a storage facility and was previously used as a storage facility for the ordnance assembly/chemical plant. PCE has been detected in a well in the area north of Building 432, adjacent to Building 464. Because of the proximity of this well to the Warehousing Area, it is possible that groundwater on Reserve Enclave property has been affected. The Army entered into a Decision Document in April 2001 with the State of New Jersey regarding low-level PCE contamination in groundwater from monitoring wells east of Building 464. The Decision Document states that this contamination will be remediated by natural remedial processes (natural attenuation) as part of a long-term groundwater monitoring program and Classification Exception (CEA)/Well Restriction Area (WRA) in accordance with the *Final guidance on Designation of Classification Exception Areas*(November 1998).	17, 59, 61	Groundwater remediation in the form of natural attenuation is ongoing but is not yet complete.

Table 5-1 (Continued)
Environmental Parcel Descriptions
Camp Pedricktown, New Jersey

Environmental Parcel No. and Label[a]	Location (X, Y Coordinates)	Approximate Size (acres)[b]	Geographic Area	Environmental Condition Category Number	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
90(5)HR	8, 4	0.04	Housing and Recreation Area	5	Lead contamination exceeding the NJDEP action level for soil was found from 0 to 3 feet from Building 276's foundation. The source of the lead was likely flaking of lead-based exterior paint. Lead concentrations in soil samples collected from 15 to 20 feet from the foundation fell below the NJDEP action level.	84	No documentation of remediation or mitigation was available. Building 276 is currently not in use.
91(5)HR	7, 4	0.04	Housing and Recreation Area	5	Lead contamination exceeding the NJDEP action level for soil was found from 0 to 3 feet from Building 277's foundation. The source of the lead was likely flaking of lead-based exterior paint. Lead concentrations in soil samples collected from 15 to 20 feet from the foundation fell below the NJDEP action level.	84	No documentation of remediation or mitigation was available. Building 277 is currently not in use.
92(5)HR	7, 4	0.04	Housing and Recreation Area	5	Lead contamination exceeding the NJDEP action level for soil was found from 0 to 3 feet from Building 278's foundation. The source of the lead was likely flaking of lead-based exterior paint. Lead concentrations in soil samples collected from 15 to 20 feet from the foundation fell below the NJDEP action level.	84	No documentation of remediation or mitigation was available. Building 278 is currently not in use.
93(5)HR	7, 5	0.01	Housing and Recreation Area	5	Lead contamination exceeding the NJDEP action level for soil was found from 0 to 3 feet from Building 286's foundation. The source of the lead was likely flaking of lead-based exterior paint. Lead concentrations in soil samples collected from 15 to 20 feet from the foundation fell below the NJDEP action level.	84	No documentation of remediation or mitigation was available. Building 286 is currently not in use.
94(5)HR	7, 4	0.01	Housing and Recreation Area	5	Lead contamination exceeding the NJDEP action level for soil was found from 0 to 3 feet from Building 287's foundation. The source of the lead was likely flaking of lead-based exterior paint. Lead concentrations in soil samples collected from 15 to 20 feet from the foundation fell below the NJDEP action level.	84	No documentation of remediation or mitigation was available. Building 287 is currently not in use.

Table 5-1 (Continued)
Environmental Parcel Descriptions
Camp Pedricktown, New Jersey

Environmental Parcel No. and Label[a]	Location (X, Y Coordinates)	Approximate Size (acres)[b]	Geographic Area	Environmental Condition Category Number	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
95(5)HR	7, 4	0.01	Housing and Recreation Area	5	Lead contamination exceeding the NJDEP action level for soil was found from 0 to 3 feet from Building 288's foundation. The source of the lead was likely flaking of lead-based exterior paint. Lead concentrations in soil samples collected from 15 to 20 feet from the foundation fell below the NJDEP action level.	84	No documentation of remediation or mitigation was available. Building 288 is currently not in use.

[a]Environmental parcel label definitions are as follows:
PS = petroleum storage
PR = petroleum release of disposal
HS = hazardous substance storage
HR = hazardous substance release or disposal
(P) = possible/unverified
[b]Acreage figures are approximate; they have been calculated using AutoCAD Release 12.
[c]EBS source of evidence document identification numbers refer to documents listed in Table 2-1 of the EBS report.

Notes:
If a tank number is known, it is provided. If a tank number is unknown, the number of the nearest building is used to identify the location.
Table 4-1 provides detailed information on all tanks discussed in this table.

AST - aboveground storage tank
GPR - ground penetrating radar
NJDEP - New Jersey Department of Environmental Protection
PCE - tetrachloroethene
TPH - total petroleum hydrocarbons
UST - underground storage facility
VOC - volatile organic compound

Table 5-2
Qualified Parcel Descriptions
Camp Pedricktown, New Jersey

Qualified Parcel Number and Label[a]	Location (X, Y Coordinates)	Approximate Size(Acres)[b]	Geographic Area	Building/ Facility No.	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
46L(P)	12,7	0.25	Administrative Area	151	Because of the age of the flagpole, lead-based paint may have been used.	59	If lead based paint is exposed to the weather, there is a potential for lead to be released to the environment.
47A/P(P)/L(P)	12,7	0.08	Administrative Area	171	An ACM survey found ACM in Building 171. No building inspections for lead-based paint or PCB-containing light ballasts have been performed.	18, 28, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.
48A/P(P)/L(P)	12,7	0.15	Administrative Area	173	An ACM survey found ACM in Building 173. No building inspections for lead-based paint or PCB-containing light ballasts have been performed.	18, 28, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.
49P(P)	12,8	0.17	Administrative Area	North of 173	The PCB content of the transformers was not labeled.	1, 7, 59	Records review or transformer testing could determine the PCB content of the transformer.

Table 5-2 (Continued)
Qualified Parcel Descriptions
Camp Pedricktown, New Jersey

Qualified Parcel Number and Label[a]	Location (X, Y Coordinates)	Approximate Size(Acres)[b]	Geographic Area	Building/ Facility No.	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
50A(P)/P(P)/L(P)	10,7	<0.01	Administrative Area	190	No building inspections for asbestos, lead-based paint, or PCB-containing light ballasts have been performed.	18, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.
51P(P)	10,7	0.16	Administrative Area	Northwest of 190	The PCB content of the transformer was not labeled.	7, 59	Records review or transformer testing could determine the PCB content of the transformer.
52P(P)	11,5	0.25	Housing and Recreation Area	North of 220	The PCB content of the transformers was not labeled.	1, 59	Records review or transformer testing could determine the PCB content of the transformer.
53A(P)/P(P)/L(P)	7,1	0.01	Housing and Recreation Area	229	Suspect ACM was identified by visual inspection, and real property records identified ACM in building materials. No building inspections for lead-based paint or PCB-containing light ballasts have been performed.	Visual inspection, 9, 18, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.

Table 5-2 (Continued)
Qualified Parcel Descriptions
Camp Pedricktown, New Jersey

Qualified Parcel Number and Label[a]	Location (X, Y Coordinates)	Approximate Size(Acres)[b]	Geographic Area	Building/ Facility No.	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
54P(P)	8,2	0.13	Housing and Recreation Area	North of 229	The PCB content of the transformer was not labeled.	1, 59	Records review or transformer testing could determine the PCB content of the transformer.
55P(P)	8,2	See 54P(P)	Warehousing Area	West of 229	The PCB content of the transformer was not labeled.	1, 7, 59	Records review or transformer testing could determine the PCB content of the transformer.
56A(P)/P(P)/L(P)	8,2	<0.01	Housing and Recreation Area	229a	Real property records identified ACM in building materials. However, no ACM survey has been performed. No building inspections for lead-based paint or PCB-containing light ballasts have been performed.	9, 18, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.
57A(P)/L(P)	7,2	0.02	Housing and Recreation Area	239	Lead-based paint was likely used for painting Facility 239, since lead contamination was found surrounding the tank. According to the BEC (2002), this lead-based paint has been removed and the water tower repainted	25, 59	None.
58A(P)/L(P)	7,2	0.01	Housing and Recreation Area	249	Suspect ACM was identified by visual inspection, but no ACM survey has been performed. No inspections for lead-based paint have been performed.	Visual inspection, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements.

Table 5-2 (Continued)
Qualified Parcel Descriptions
Camp Pedricktown, New Jersey

Qualified Parcel Number and Label[a]	Location (X, Y Coordinates)	Approximate Size(Acres)[b]	Geographic Area	Building/ Facility No.	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
59A(P)/P(P)/L(P)	6,3	<0.01	Housing and Recreation Area	268	No building inspections for asbestos, lead-based paint, or PCB-containing light ballasts have been performed.	18, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.
60A(P)/P(P)/L(P)	7,3	0.01	Housing and Recreation Area	269	Real property records identified ACM in building materials. No building inspections for lead-based paint or PCB-containing light ballasts have been performed.	9, 18, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.
61P(P)	7,3	0.16	Housing and Recreation Area	Southeast of 269	The PCB content of the transformers was not labeled.	1, 7, 59	Records review or transformer testing could determine the PCB content of the transformer.

Table 5-2 (Continued)
Qualified Parcel Descriptions
Camp Pedricktown, New Jersey

Qualified Parcel Number and Label[a]	Location (X, Y Coordinates)	Approximate Size(Acres)[b]	Geographic Area	Building/ Facility No.	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
62P(P)/L(P)	9,5	0.14	Housing and Recreation Area	273	An ACM survey was completed, and ACM was not found in Building 273. No building inspections for lead-based paint or PCB-containing light ballasts have been performed.	18, 28, 59	Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.
63P(P)	9,7	0.24	Housing and Recreation Area	North of 273	The PCB content of the transformers was not labeled.	7, 59	Records review or transformer testing could determine the PCB content of the transformer.
64P(P)	8,6	0.25	Housing and Recreation Area	North of 273	The PCB content of the transformer was not labeled.	7, 59	Records review or transformer testing could determine the PCB content of the transformer.
65P(P)	8,6	0.25	Housing and Recreation Area	West of 273	The PCB content of the transformer was not labeled.	7, 59	Records review or transformer testing could determine the PCB content of the transformer.
66A/P(P)/L(P)	9,5	0.05	Housing and Recreation Area	274	An ACM survey was completed, and ACM was found in Building 274. No building inspections for lead-based paint or PCB-containing light ballasts have been performed.	18, 28, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.

Table 5-2 (Continued)
Qualified Parcel Descriptions
Camp Pedricktown, New Jersey

Qualified Parcel Number and Label[a]	Location (X, Y Coordinates)	Approximate Size(Acres)[b]	Geographic Area	Building/ Facility No.	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
67A/P(P)/L(P)	8,4	0.04	Housing and Recreation Area	276	An ACM survey was completed, and ACM was found in Building 276. A building survey indicated that lead based paint was present on interior and exterior building surfaces. No building inspections for PCB-containing light ballasts have been performed.	18, 28, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Before any building demolition could occur, asbestos abatement would need to be performed. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.
68A/P(P)/L(P)	8,4	0.04	Housing and Recreation Area	277	An ACM survey was completed, and ACM was found in Building 277. A building survey indicated that lead based paint was present on interior and exterior building surfaces. No building inspections for PCB-containing light ballasts have been performed.	18, 28, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.
69A/P(P)/L(P)	8,3	0.04	Housing and Recreation Area	278	An ACM survey was completed, and ACM was found in Building 278. A building survey indicated that lead based paint was present on interior and exterior building surfaces. No building inspection for PCB-containing light ballasts has been performed.	18, 28, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.

Table 5-2 (Continued)
Qualified Parcel Descriptions
Camp Pedricktown, New Jersey

Qualified Parcel Number and Label[a]	Location (X, Y Coordinates)	Approximate Size(Acres)[b]	Geographic Area	Building/ Facility No.	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
70A(P)/P(P)/L(P)	6,3	<0.01	Housing and Recreation Area	279	No building inspections for asbestos, lead-based paint, or PCB-containing light ballasts have been performed.	18, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.
71A(P)/P(P)/L(P)	8,4	0.01	Housing and Recreation Area	285	No building inspections for asbestos, lead-based paint, or PCB-containing light ballasts have been performed.	18, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.
72P(P)	7,6	0.24	Housing and Recreation Area	West of 285	The PCB content of the transformers was not labeled.	7, 59	Records review or transformer testing could determine the PCB content of the transformer.

Table 5-2 (Continued)
Qualified Parcel Descriptions
Camp Pedricktown, New Jersey

Qualified Parcel Number and Label[a]	Location (X, Y Coordinates)	Approximate Size(Acres)[b]	Geographic Area	Building/ Facility No.	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
73A(P)/P(P)/L(P)	7,5	0.01	Housing and Recreation Area	286	A building survey indicated that lead based paint was present on interior and exterior building surfaces. No building inspections for asbestos or PCB-containing light ballasts have been performed.	18, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.
74P(P)	7,5	0.23	Housing and Recreation Area	Northwest of 286	The PCB content of the transformer was not labeled.	7, 59	Records review or transformer testing could determine the PCB content of the transformer.
75A(P)/P(P)/L(P)	6,5	0.01	Housing and Recreation Area	287	A building survey indicated that lead based paint was present on interior and exterior building surfaces. No building inspections for asbestos or PCB-containing light ballasts have been performed.	18, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.

Table 5-2 (Continued)
Qualified Parcel Descriptions
Camp Pedricktown, New Jersey

Qualified Parcel Number and Label[a]	Location (X, Y Coordinates)	Approximate Size(Acres)[b]	Geographic Area	Building/ Facility No.	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
76A(P)/P(P)/L(P)	6,4	0.01	Housing and Recreation Area	288	A building survey indicated that lead based paint was present on interior and exterior building surfaces. No building inspections for asbestos or PCB-containing light ballasts have been performed.	18, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.
77L(P)	6,3	0.04	Housing and Recreation Area	289	No inspections for lead-based paint have been performed.	59	Exterior lead-based paint surfaces have the potential to release lead to the environment.
78A(P)/P(P)/L(P)	5,3	0.01	Housing and Recreation Area	298	No building inspections for asbestos, lead-based paint, or PCB-containing light ballasts have been performed.	18, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed
79L(P)	5,4	0.01	Housing and Recreation Area	299	No inspections for lead-based paint have been performed.	59	Exterior lead-based paint surfaces have the potential to release lead to the environment.
80P(P)	9,2	0.17	Housing and Recreation Area	Adjacent to Route 130	The PCB content of the transformers was not labeled; therefore they are identified as possibly qualified for PCBs.	1, 7, 59	Records review or transformer testing could determine the PCB content of the transformer.

Table 5-2 (Continued)
Qualified Parcel Descriptions
Camp Pedricktown, New Jersey

Qualified Parcel Number and Label[a]	Location (X, Y Coordinates)	Approximate Size(Acres)[b]	Geographic Area	Building/ Facility No.	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
81P(P)	5,6	0.25	Military Vehicle Parking Area	Southwest of 434	The PCB content of the transformer was not labeled.	1, 7, 59	Records review or transformer testing could determine the PCB content of the transformer.
82P(P)	4,9	0.18	Military Vehicle Parking Area	West of 494	The PCB content of the transformer was not labeled.	59	Records review or transformer testing could determine the PCB content of the transformer.
83P(P)	4,8	0.24	Military Vehicle Parking Area	Northwest of 475	Transformers were not inspected; therefore PCB content is not known.	20	Records review or transformer testing could determine the PCB content of the transformer.
84A/P(P)/L(P)	6,5	0.63	Warehousing Area	404	An ACM survey was completed, and ACM was found in Building 404. No building inspections for lead-based paint or PCB-containing light ballasts have been performed.	18, 28, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.

Table 5-2 (Continued)
Qualified Parcel Descriptions
Camp Pedricktown, New Jersey

Qualified Parcel Number and Label[a]	Location (X, Y Coordinates)	Approximate Size(Acres)[b]	Geographic Area	Building/ Facility No.	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
85A(P)/P(P)/L(P)	8,7	0.01	Warehousing Area	413	No building inspections for asbestos, lead-based paint, or PCB-containing light ballasts have been performed.	18, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.
86A/P(P)/L(P)	5,7	0.34	Warehousing Area	434	An ACM survey was completed, and ACM was found in Building 434. In addition, real property records identified ACM in building materials. No building inspections for lead-based paint or PCB-containing light ballasts have been performed.	9, 18, 28, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.

Table 5-2 (Continued)
Qualified Parcel Descriptions
Camp Pedricktown, New Jersey

Qualified Parcel Number and Label[a]	Location (X, Y Coordinates)	Approximate Size(Acres)[b]	Geographic Area	Building/ Facility No.	Basis	EBS Source of Evidence Document ID No.[c]	Remediation/ Mitigation
87A/P(P)/L(P)	5,7	0.36	Warehousing Area	464	An ACM survey was completed, and ACM was found in Building 464. In addition, real property records identified ACM in building materials. No building inspections for lead-based paint or PCB-containing light ballasts have been performed.	9, 18, 28, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.
88P(P)	6,8	0.13	Housing and Recreation Area	Southwest of 464	The PCB content of the transformers was not labeled.	1, 7, 59	Records review or transformer testing could determine the PCB content of the transformer.
89A/P(P)/L(P)	5,8	0.08	Warehousing Area	475	ACM was found in an asbestos survey. In addition, real property records identified ACM in building materials. No building inspections for lead-based paint or PCB-containing light ballasts have been performed..	9, 18, 28, 59	If ACM is or becomes friable, it can pose a risk to building occupants or maintenance workers. Before any building demolition could occur, asbestos abatement would need to be performed. Interior lead based paint surfaces need to be handled in accordance with HUD requirements. Exterior lead-based paint surfaces have the potential to release lead to the environment. If light ballasts are not labeled, they may contain PCBs and thus would fall under specific disposal requirements should they be removed.

Table 5-2 (Continued)
Qualified Parcel Descriptions
Camp Pedricktown, New Jersey

[a]Qualified label definitions are as follows:
A = asbestos-containing material
L = lead-based paint
P = polychlorinated biphenyls
R = radon
X = unexploded ordnance and/or ordnance fragments
RD = radionuclides
(P) = possible (unverified)
[b]Acreage figures are approximate; they have been calculated using AutoCAD Release 12.
[c]EBS source of evidence document identification numbers refer to documents listed in Table 2-1 of the EBS report.

Notes:
ACM - asbestos-containing material
PCB - polychlorinated biphenyl

6.0 REFERENCES

Allee King Rosen & Fleming Inc. 1995. *New Jersey Department of Environmental Protection, Historic Preservation Office, Individual Structure Survey Form for Anti-Aircraft Operations Center Missile Master.* October 1995.

ARCADIS Geraghty & Miller, Inc. 2001a. *Remedial Action Workplan Addendum for Groundwater, March 2001: Pilot Demonstration of the Clean Base Program at Camp Pedricktown, Camp Pedricktown, Salem County, New Jersey.* Prepared for Concurrent Technologies Corporation. Langhorne, Pennsylvania. March 2001.

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APPENDIX A

DATABASE SEARCH REPORT FROM ENVIRONMENTAL DATA RESOURCES, INC.

The EDR Radius Map
with GeoCheck®

Camp Pedricktown
Route 130
Pedricktown, NJ 08085

Inquiry Number: 0616049.1r

April 06, 2001

Environmental Data Resources, Inc.

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

FORM-KID

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

TARGET PROPERTY INFORMATION

ADDRESS

ROUTE 130
PEDRICKTOWN, NJ 08085

COORDINATES

Latitude (North):	39.750950 - 39° 45' 3.4"
Longitude (West):	75.448890 - 75° 26' 56.0"
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	461543.0
UTM Y (Meters):	4400002.5
State Plane X (Feet):	1780054.4
State Plane Y (Feet):	335179.5

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	2439075-G4 MARCUS HOOK, PA NJ DE
Source:	USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL ..... National Priority List
Proposed NPL ..... Proposed National Priority List Sites
CERCLIS ..... Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP ..... CERCLIS No Further Remedial Action Planned
CORRACTS ..... Corrective Action Report
RCRIS-TSD ..... Resource Conservation and Recovery Information System
RCRIS-LQG ..... Resource Conservation and Recovery Information System
RCRIS-SQG ..... Resource Conservation and Recovery Information System
ERNS ..... Emergency Response Notification System

STATE ASTM STANDARD

SWF/LF ..... Solid Waste Facility Directory
LUST ..... Regulated UST Contamination Sites Listing

UST..... Underground Storage Tank Data

FEDERAL ASTM SUPPLEMENTAL

CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
Delisted NPL..... National Priority List Deletions
FINDS..... Facility Index System/Facility Identification Initiative Program Summary Report
HMIRS..... Hazardous Materials Information Reporting System
MLTS..... Material Licensing Tracking System
MINES..... Mines Master Index File
NPL Liens..... Federal Superfund Liens
PADS..... PCB Activity Database System
RAATS..... RCRA Administrative Action Tracking System
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

STATE OR LOCAL ASTM SUPPLEMENTAL

NJ MAJOR FACILITIES..... List of Major Facilities
NJ Spills..... Spills
NJ Release..... Hazardous Material Incident Database
NJ PF..... Publicly Funded Cleanups Site Status Report
CHROME..... Chromate Chemical Production Waste Sites

EDR PROPRIETARY DATABASES

Coal Gas..... Former Manufactured Gas (Coal Gas) Sites

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS 1 degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. EDR's definition of a site with an elevation equal to the target property includes a tolerance of +/- 10 feet. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property (by more than 10 feet). Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STATE ASTM STANDARD

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Environmental Protection & Energy's Site Status Report.

A review of the SHWS list, as provided by EDR, has revealed that there are 2 SHWS sites within

approximately 1 mile of the target property.

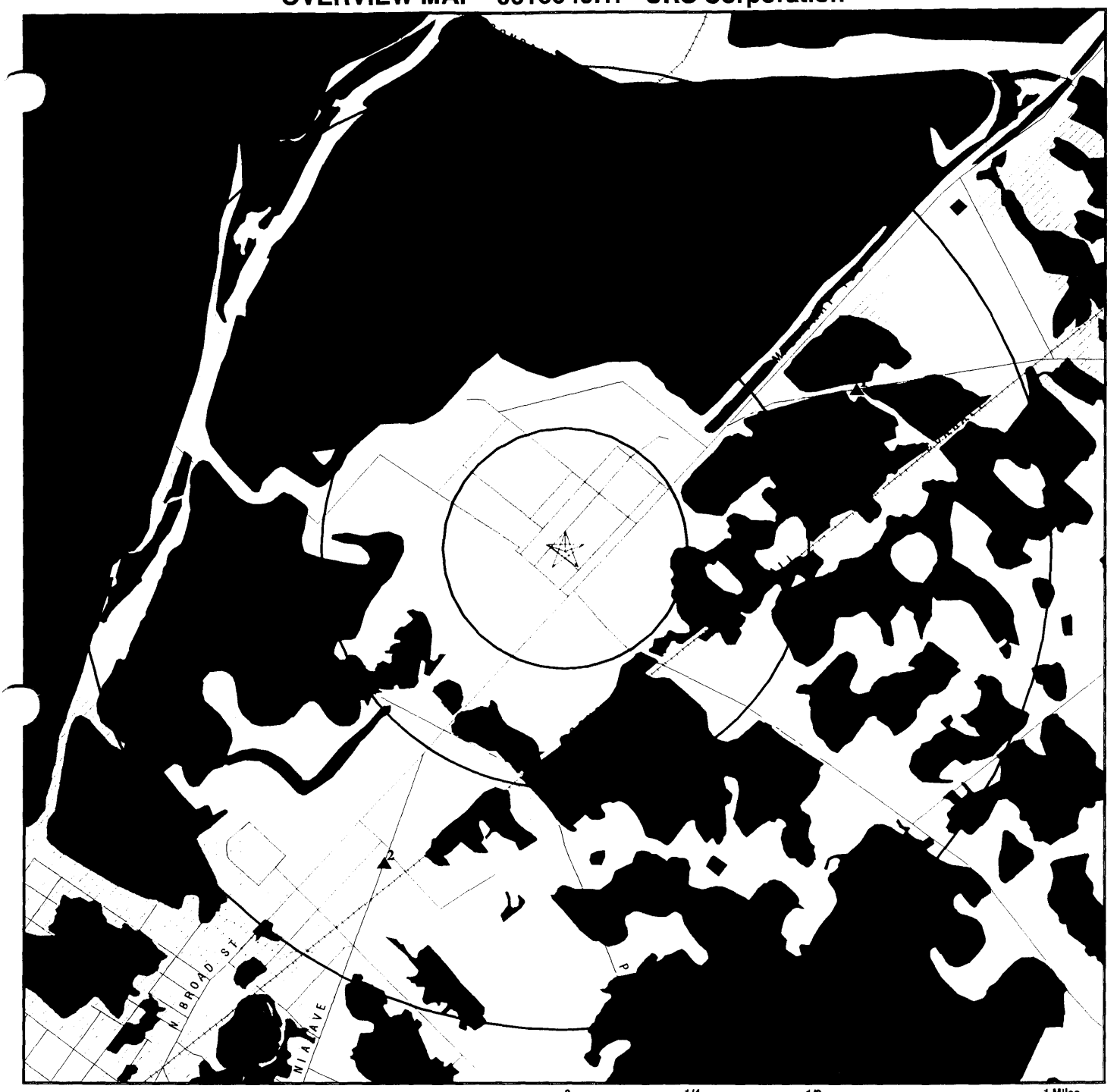
Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
TOMAH PRODUCTS INC. / NO - STR	*PENNSGROVE-PEDRICKTOWN*	*1/2 - 1 ENE*	*1*	*5*
XERXES FIBERGLASS INC	*351 N VIRGINIA AVE*	*1/2 - 1 SSW*	*2*	*5*

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
QUALA SYSTEMS INC	FINDS, RCRIS-LQG, RCRIS-TSD, CORRACTS
PEDRICKTOWN SUPPORT FACILITY	CERC-NFRAP, UST, SHWS
PICKENS AUTO SERVICE INC	UST, SHWS, LUST
MAINTECH INTL INC	FINDS, RCRIS-LQG, SHWS
CARNEYS POINT REST AREA	LUST
FRMR JOE B'S TRUCK STOP-CURRENTLY MJS TRUCK PLAZA	LUST
HAROLD G KLINE TRUCKING COMPANY	LUST
DEEPWATER MAINTENACE FACILITY	LUST
PILOT OIL CORPORATION	FINDS, RCRIS-LQG, UST, NJ Spills, LUST
US ARMY RESERVES	LUST
SIEVERS-SANDBERG US ARMY RESER	LUST
SIEVERS SANDBERG USARC	LUST
NL INDUSTRIES SUPERFUND SITE	LUST
RUSTIC INN TRUCK STOP AND REST	LUST
SCREWBALL INCORPORTED	LUST
MOBIL S/S #15-LOM	LUST
MATLACK INC	LUST
KINGWAY REGIONAL HIGH SCHOOL	LUST
SHELL S/S	LUST
SUBURBAN GAS & AUTO SERVICE	LUST
GETTY S/S #56955	LUST
SUBURBAN GAS & AUTO SERVICE	LUST
FORMER GAS STATION	UST, LUST
SUNNY BROOK ANTIQUE AUCTION GALLERY	LUST
NJTA - INTERCHANGE 2 TOLL PLAZA	LUST
GROPPENBACHER FARM (ESTATE)	LUST
CLARA BARTON SERVICE AREA 1-S	UST
W H FERRELL'S OIL & GAS SERVICE	UST
CORROSION CONTROL CORP	FINDS, RCRIS-LQG, UST
FORMER GETTY S/S #56955	UST
GROPPENBACHER FARM (ESTATE)	UST
US ARMY CORPS OF ENGINEERS PHILA DIST	RCRIS-SQG, FINDS
OXY VINYLS LP - PEDRICKTOWN PLANT	RCRIS-SQG, FINDS
NJ TNPK AUTH - DISTRICT 1	RCRIS-SQG, FINDS
US ARMY CAMP PEDRICKTOWN	FINDS, RCRIS-LQG
US ARMY - SIEVER SANDBERG USAR CTR	FINDS, RCRIS-LQG
QUALA SYSTEMS INC	RCRIS-LQG
PEDRICKTOWN CO GEN	NJ Release, NJ Spills
PEDRICKTOWN CO-GEN	NJ Spills
PEDRICKTOWN COGEN	NJ Spills
PEDRICKTOWN SUB STATION	NJ Spills
PEDRICKTOWN CO-GEN	NJ Spills
NL PEDRICKTOWN SUPERFUND SITE	NJ Spills, NJ Release
PEDRICKTOWN CO-GENERATION PL	NJ Spills
PEDRICKTOWN COGEN	NJ Release
PEDRICKTOWN COGEN	NJ Release
PEDRICKTOWN COGEN	NJ Release
PEDRICKTOWN COGEN	NJ Release
PEDRICKTOWN COGEN	NJ Release
PEDRICKTOWN GENERATION	NJ Release
PEDRICKTOWN CO GEN	NJ Release
PEDRICKTOWN CO GEN	NJ Release
PEDRICKTOWN DINER/PARKING LOT	NJ Release
PEDRICKTOWN ELEMENTRY	NJ Release
PEDRICKTOWN CO-GEN LTD PTNRSHP	NJ Release
PEDRICKTOWN CO-GEN	NJ Release
FUELING STATION ON THE PEDRICKTOWN PENNS GROVE RD	ERNS

EXECUTIVE SUMMARY

OVERVIEW MAP - 0616049.1r - URS Corporation

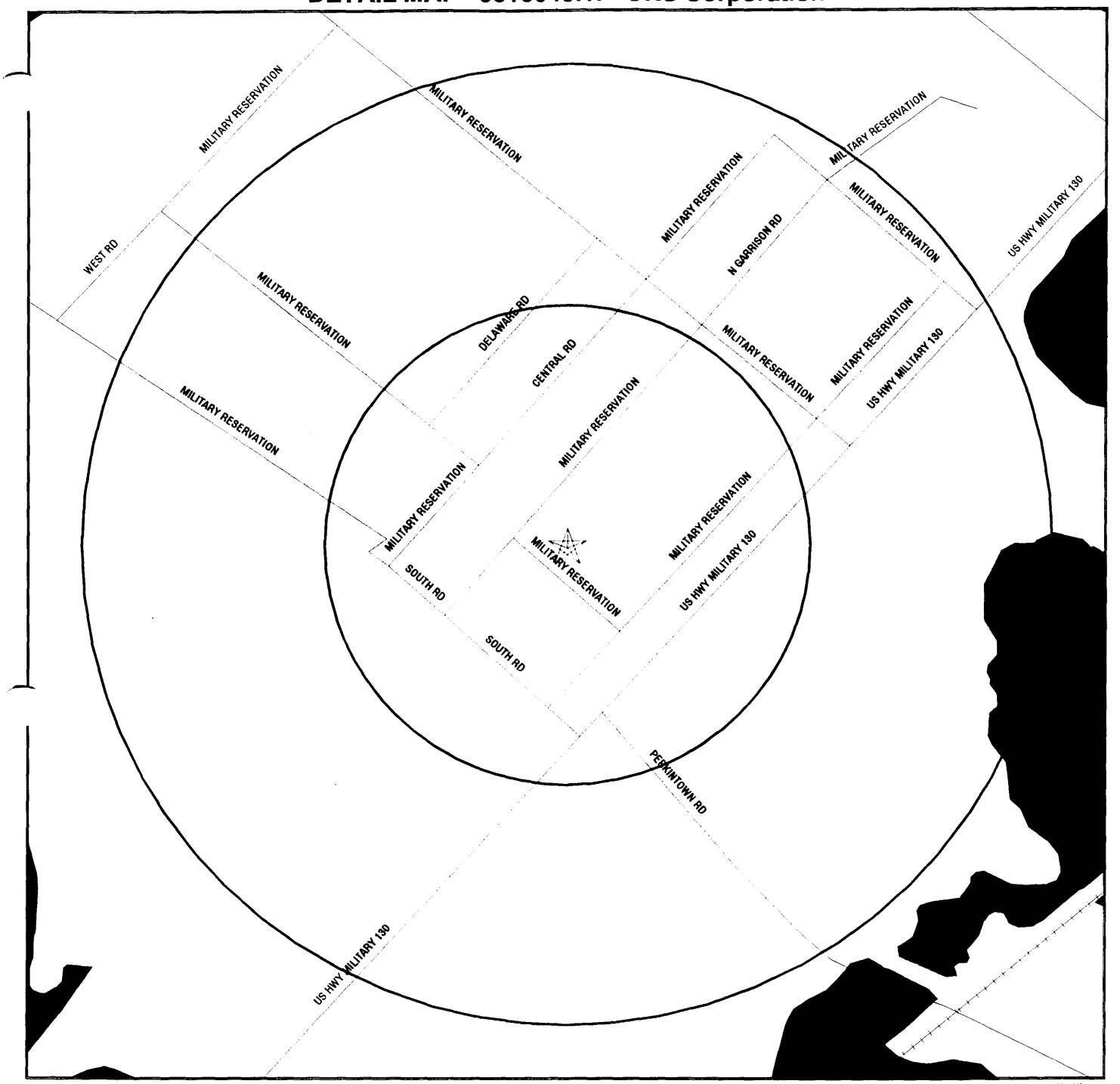


0 1/4 1/2 1 Miles

- ☆ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Coal Gasification Sites (if requested)
- National Priority List Sites
- Landfill Sites
- Power transmission lines
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Wetlands

TARGET PROPERTY:	Camp Pedricktown	CUSTOMER:	URS Corporation
ADDRESS:	Route 130	CONTACT:	Susan King
CITY/STATE/ZIP:	Pedricktown NJ 08085	INQUIRY #:	0616049.1r
LAT/LONG:	39.7510 / 75.4489	DATE:	April 06, 2001 12:54 pm

DETAIL MAP - 0616049.1r - URS Corporation



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Coal Gasification Sites (if requested)
- Sensitive Receptors
- National Priority List Sites
- Landfill Sites
- Power transmission lines
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Wetlands

TARGET PROPERTY:	Camp Pedricktown	CUSTOMER:	URS Corporation
ADDRESS:	Route 130	CONTACT:	Susan King
CITY/STATE/ZIP:	Pedricktown NJ 08085	INQUIRY #:	0616049.1r
LAT/LONG:	39.7510 / 75.4489	DATE:	April 06, 2001 12:54 pm

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL ASTM STANDARD								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.250	0	0	NR	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRIS-TSD		0.500	0	0	0	NR	NR	0
RCRIS Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
ERNS		TP	NR	NR	NR	NR	NR	0
STATE ASTM STANDARD								
State Haz. Waste		1.000	0	0	0	2	NR	2
State Landfill		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	0	NR	NR	0
UST		0.250	0	0	NR	NR	NR	0
FEDERAL ASTM SUPPLEMENTAL								
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
STATE OR LOCAL ASTM SUPPLEMENTAL								
NJ Major Facilities		0.500	0	0	0	NR	NR	0
NJ Spills		TP	NR	NR	NR	NR	NR	0
NJ Release		TP	NR	NR	NR	NR	NR	0
NJ PF		TP	NR	NR	NR	NR	NR	0
CHROME		TP	NR	NR	NR	NR	NR	0
EDR PROPRIETARY DATABASES								
Coal Gas		1.000	0	0	0	0	NR	0

AQUIFLOW - see EDR Physical Setting Source Addendum

TP = Target Property

NR = Not Requested at this Search Distance

* Sites may be listed in more than one database

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

1
ENE
1/2-1
3608
Higher

TOMAH PRODUCTS INC. / NO - STRIP
PENNSGROVE-PEDRICKTOWN RD
OLDMANS TWP, NJ 08067

CERCLIS 1000146342
SHWS NJD980771778

CERCLIS Classification Data:
Site Incident Category: Not reported
Ownership Status: Other
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Site Description: GROUNDWATER CONTAMINATION HAS BEEN REDUCED SIGNIFICANTLY SINCE THE IMPLEMENTATION OF A GROUNDWATER REMEDIATION PROGRAM BY NJPDES. LOWER PRIORITY FOR FURTHER ACTION IS RECOMMENDED DUE TO THE GROUNDWATER CONTAMINATION.GROUNDWATER CONTAMINATION HAS BE EN REDUCED SIGNIFICANTLY SINCE THE IMPLEMENTATION OF A GROUNDWATER REMEDIATION PROGRAM BY NJPDES. LOWER PRIORITY FOR FURTHER ACTION IS RECOMMENDED DUE TO THE GROUNDWATER CONTAMINATION.

CERCLIS Assessment History:
Assessment: DISCOVERY Completed: 19840410
Assessment: PRELIMINARY ASSESSMENT Completed: 19870818
Assessment: SITE INSPECTION Completed: 19910521

CERCLIS Site Status:
Low

SHWS:
Facility ID: NJD980771778
Case ID: 930721151727
Case Status: ACTIVE
Status Date: 07/09/1993
Contact: BFO-S
Facilty Status: OPEN
CEA/DER: Not reported

2
SSW
1/2-1
3959
Higher

XERXES FIBERGLASS INC
351 N VIRGINIA AVE
CARNEY S POINT, NJ 08069

FINDS 1000439253
RCRIS-LQG NJD011037496
CERC-NFRAP
SHWS

CERCLIS-NFRAP Classification Data:
Site Incident Category: Not reported
Ownership Status: Other
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL

CERCLIS-NFRAP Assessment History:
Assessment: DISCOVERY Completed: 19810601
Assessment: PRELIMINARY ASSESSMENT Completed: 19840401
Assessment: SITE INSPECTION Completed: 19900925

CERCLIS-NFRAP Alias Name(s):
XERXES FIBERGLASS INC

XERXES FIBERGLASS INC (Continued) **1000439253**

RCRIS:
Owner: XERXES CORP
(212) 555-1212
Contact: JIM BEYER
(612) 887-1800
Record Date: 09/23/1981
Classification: Large Quantity Generator
Used Oil Recyc: No
Violation Status: Violations exist

Regulation Violated:	Not reported
Area of Violation:	Generator-All Requirements
Date Violation Determined:	11/17/1988
Priority of Violation:	Low
Schedule Date to Achieve Compliance:	12/01/1988
Actual Date Achieved Compliance:	12/01/1988
Enforcement Action:	Written Informal
Enforcement Action Date:	11/17/1988
Proposed Monetary Penalty:	Not reported
Final Monetary Penalty:	Not reported

There are 1 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Compliance Evaluation Inspection (CEI)	Generator-All Requirements	12/01/1988

SHWS:
Facility ID: NJD011037496
Case Status: ACTIVE
Contact: BEECRA
Facilty Status: OPEN
CEA/DER: Not reported
Case ID: E89184
Status Date: 07/24/1995

City	EDR ID	Site Name	Site Address	Zip	Database(s)	Facility ID
CARNEYS POINT	S104392911	CARNEYS POINT REST AREA	RTE 295 N	08069	LUST	97-05-19-1414-13
CARNEYS POINT	S104392002	FRMR JOE B'S TRUCK STOP-CURRENTLY MJS TRUCK PLAZA	RTE 40 EXIT 1 NJ TPK	08069	LUST	95-07-14-2023-14
CARNEYS POINT	S104390531	HAROLD G KLINE TRUCKING COMPANY	HARDING HWY / DUPO	08069	LUST	93-04-12-1335
CARNEYS POINT	S104394968	DEEPWATER MAINTENACE FACILITY	HOOK ROAD (OFF RTE 49)	08069	LUST	99-11-22-1552-19
CARNEYS POINT	1000342650	PILOT OIL CORPORATION	6010 PENNSVILLE AUBURN RD	08069	FINDS, RCRIS-LQG, UST, NJ Spills, LUST	0049584
OLDMANS TWP	U000362584	CLARA BARTON SERVICE AREA 1-S	NEW JERSEY TPKE M.P. 5.4 SOUTH	08067	UST	0133076
PEDRICKTOWN	1000225052	QUALA SYSTEMS INC	RD 1 BOX 174 RTE 130	08067	FINDS, RCRIS-LQG, RCRIS-TSD, CORRACTS	
PEDRICKTOWN	S104475098	PEDRICKTOWN CO GEN	143 RT 130 SB		NJ Release, NJ Spills	54475
PEDRICKTOWN	S104453535	PEDRICKTOWN COGEN	RT 130 / PORCIPINE		NJ Release	21685
PEDRICKTOWN	S104442626	PEDRICKTOWN CO-GEN	RT 130 / PORCUPINE		NJ Spills	
PEDRICKTOWN	S104438357	PEDRICKTOWN COGEN	HWY 130 PORCUPINE RD		NJ Spills	12759
PEDRICKTOWN	S104430865	PEDRICKTOWN SUB STATION	RT 130		NJ Spills	19372
PEDRICKTOWN	S104420050	PEDRICKTOWN CO-GEN	RT 130 / PORCUPINE		NJ Spills	20881
PEDRICKTOWN	S104697690	PEDRICKTOWN COGEN	RT 130 PORKUPINE RD		NJ Release	7153
PEDRICKTOWN	S104698276	PEDRICKTOWN COGEN	RT 130		NJ Release	13699
PEDRICKTOWN	S104664901	PEDRICKTOWN COGEN	RT 130		NJ Release	9563
PEDRICKTOWN	S104675712	PEDRICKTOWN COGEN	RT 130 / PORCUPINE		NJ Release	13137
PEDRICKTOWN	S104692161	PEDRICKTOWN GENERATION	RT 130 / PORCUPINE		NJ Release	3016
PEDRICKTOWN	1001127858	US ARMY CAMP PEDRICKTOWN	RTE 130 / ARTILLERY AVE	08067	FINDS, RCRIS-LQG	
PEDRICKTOWN	1000476201	PEDRICKTOWN SUPPORT FACILITY	RTE 130	08067	CERC-NFRAP, UST, SHWS	0071994
PEDRICKTOWN	S104393143	US ARMY RESERVES	RTE 130	08067	LUST	97-09-16-1233-42
PEDRICKTOWN	S104392943	SIEVERS-SANDBERG US ARMY RESER	RTE 130	08067	LUST	97-06-04-1510-40
PEDRICKTOWN	S104385623	SIEVERS SANDBERG USARC	RTE 130 S	08067	LUST	
PEDRICKTOWN	1000140139	US ARMY - SIEVER SANDBERG USAR CTR	RTE 130	08067	FINDS, RCRIS-LQG	
PEDRICKTOWN	S104662751	PEDRICKTOWN CO GEN	RT 130/PORCUPINE RD		NJ Release	4069
PEDRICKTOWN	S104350324	PEDRICKTOWN CO GEN	RT 130/PORCUPINE RD		NJ Release	1486
PEDRICKTOWN	S104721981	PEDRICKTOWN DINER/PARKING LOT	EXIT 7 OFF RT 295		NJ Release	4675
PEDRICKTOWN	89106130	FUELING STATION ON THE PEDRICKTOWN PENNS GROVE RD	FUELING STATION ON THE PEDRICKTOWN PE GROVE RD		ERNS	
PEDRICKTOWN	U000357723	PICKENS AUTO SERVICE INC	10 W MILL ST	08067	UST, SHWS, LUST	0071101
PEDRICKTOWN	S102198738	NL PEDRICKTOWN SUPERFUND SITE	PEDRICKTOWN PENNSGRO		NJ Spills, NJ Release	17755
PEDRICKTOWN	U000354003	W H FERRELL'S OIL & GAS SERVICE	PEDRICKTOWN PENNS GROVE RD	08067	UST	0021692
PEDRICKTOWN	1000155695	US ARMY CORPS OF ENGINEERS PHILA DIST	PEDRICKTOWN DSPSL AREA RTE 130	08067	RCRIS-SQG, FINDS	
PEDRICKTOWN	S104390979	NL INDUSTRIES SUPERFUND SITE	PENNS GROVE	08067	LUST	93-11-17-1612
PEDRICKTOWN	91206650	PENSGROVE PEDRICKTOWN RD	PENSGROVE PEDRICKTOWN RD		ERNS	
PEDRICKTOWN	1000322089	MAINTECH INTL INC	PORCUPINE RD	08067	FINDS, RCRIS-LQG, SHWS	NJD076956234
PEDRICKTOWN	S104710300	PEDRICKTOWN ELEMENTRY	RAILROAD AVE		NJ Release	13719
PEDRICKTOWN	S104394982	RUSTIC INN TRUCK STOP AND REST	87 US ROUTE 130	08067	LUST	99-11-24-1039-39
PEDRICKTOWN	S104670353	PEDRICKTOWN CO-GEN LTD PTNRSHP	RT#130+PORCUPINE RD		NJ Release	2363
PEDRICKTOWN	S104668873	PEDRICKTOWN CO-GEN	RT#130+PORCUPINE RD		NJ Release	19929

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)	Facility ID
PEDRICKTOWN	S104435328	PEDRICKTOWN CO-GENERATION PL	RT#130/PORCUPINE RD		NJ Spills	6961
PEDRICKTOWN	1001488740	OXY VINYLS LP - PEDRICKTOWN PLANT	US RTE 130 / PORCUPINE RD	08067	RCRIS-SQG, FINDS	
PEDRICKTOWN	1000457099	QUALA SYSTEMS INC	6 US RTE 130	08067	RCRIS-LQG	
PEDRICTOWN	1000692923	CORROSION CONTROL CORP	MILE MARKER 7 / US RTE 130	08067	FINDS, RCRIS-LQG, UST	0021962
PENNS GROVE	S104589436	SCREWBALL INCORPORTED	130 TO 136 MAIN ST W	08069	LUST	95-10-10-1717-45
PENNS GROVE	S104588354	MOBIL S/S #15-LOM	I 295 / RT 551	08069	LUST	90-05-16-1523
SWEDESBORO	S104394954	MATLACK INC	RD 1 ROUTE 322	08085	LUST	99-11-18-1007-35
SWEDESBORO	S104587435	KINGWAY REGIONAL HIGH SCHOOL	RTE 322 / KINGS HWY	08085	LUST	
SWEDESBORO	S104393877	SHELL S/S	RTE 322	08085	LUST	98-10-13-0712-52
SWEDESBORO	S104385967	SUBURBAN GAS & AUTO SERVICE	KING HWY / GLEN ECHO AVE	08085	LUST	
SWEDESBORO	U003653778	FORMER GETTY S/S #56955	KINGS HWY & GLEN ECHO AVE	08085	UST	0336954
SWEDESBORO	S104391040	GETTY S/S #56955	KINGS HWY / GLEN ECHO AVE	08085	LUST	93-12-13-1133
SWEDESBORO	S104387001	SUBURBAN GAS & AUTO SERVICE	KINGS HWY / GLEN ECHO AVE	08085	LUST	
SWEDESBORO	U003106471	FORMER GAS STATION	RFD 1 BOX 176 RTE 322	08085	UST, LUST	0310457
SWEDESBORO	S104385615	SUNNY BROOK ANTIQUE AUCTION GALLERY	1401 STATE HIGHWAY 45	08085	LUST	
SWEDESBORO	1000445946	NJ TNPK AUTH - DISTRICT 1	NJ TNPK M P 13.0 RTE 322	08085	RCRIS-SQG, FINDS	
SWEDESBORO	S104385731	NJTA - INTERCHANGE 2 TOLL PLAZA	TURNPIKE MILEPOST 12.9 / US RTE 322	08085	LUST	
WOOLWICH TOWNSHIP	S104386866	GROPPENBACHER FARM (ESTATE)	ROUTE 538	08085	LUST	
WOOLWICH TWP	U003653786	GROPPENBACHER FARM (ESTATE)	RTE 538	08085	UST	0337043

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM STANDARD RECORDS

NPL: National Priority List
Source: EPA
Telephone: N/A
National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC).

Date of Government Version: 01/23/01
Date Made Active at EDR: 02/16/01
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 02/05/01
Elapsed ASTM days: 11
Date of Last EDR Contact: 02/05/01

Proposed NPL: Proposed National Priority List Sites
Source: EPA
Telephone: N/A

Date of Government Version: 01/23/01
Date Made Active at EDR: 02/16/01
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 02/05/01
Elapsed ASTM days: 11
Date of Last EDR Contact: 02/05/01

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
Source: EPA
Telephone: 703-413-0223
CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 12/28/00
Date Made Active at EDR: 02/28/01
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 12/29/00
Elapsed ASTM days: 61
Date of Last EDR Contact: 03/26/01

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned
Source: EPA
Telephone: 703-413-0223
As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 12/28/00
Date Made Active at EDR: 02/28/01
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 12/29/00
Elapsed ASTM days: 61
Date of Last EDR Contact: 03/26/01

CORRACTS: Corrective Action Report
Source: EPA
Telephone: 800-424-9346
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 04/20/00
Date Made Active at EDR: 08/01/00
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 06/12/00
Elapsed ASTM days: 50
Date of Last EDR Contact: 03/14/01

RCRIS: Resource Conservation and Recovery Information System
Source: EPA/NTIS
Telephone: 800-424-9346
Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 06/21/00
Date Made Active at EDR: 07/31/00
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 07/10/00
Elapsed ASTM days: 21
Date of Last EDR Contact: 01/30/01

ERNS: Emergency Response Notification System
Source: EPA/NTIS
Telephone: 202-260-2342
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 08/08/00
Date Made Active at EDR: 09/06/00
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 08/11/00
Elapsed ASTM days: 26
Date of Last EDR Contact: 02/02/01

FEDERAL ASTM SUPPLEMENTAL RECORDS

BRS: Biennial Reporting System
Source: EPA/NTIS
Telephone: 800-424-9346
The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/97
Database Release Frequency: Biennially
Date of Last EDR Contact: 03/19/01
Date of Next Scheduled EDR Contact: 06/18/01

CONSENT: Superfund (CERCLA) Consent Decrees
Source: EPA Regional Offices
Telephone: Varies
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A
Database Release Frequency: Varies
Date of Last EDR Contact: N/A
Date of Next Scheduled EDR Contact: N/A

ROD: Records Of Decision
Source: NTIS
Telephone: 703-416-0223
Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 09/30/99
Database Release Frequency: Annually
Date of Last EDR Contact: 01/09/01
Date of Next Scheduled EDR Contact: 04/09/01

DELISTED NPL: National Priority List Deletions
Source: EPA
Telephone: N/A
The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/23/01
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/05/01
Date of Next Scheduled EDR Contact: 05/07/01

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report
Source: EPA
Telephone: N/A
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/07/00
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/09/01
Date of Next Scheduled EDR Contact: 04/09/01

HMIRS: Hazardous Materials Information Reporting System
Source: U.S. Department of Transportation
Telephone: 202-366-4526
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 05/31/00
Database Release Frequency: Annually

Date of Last EDR Contact: 01/23/01
Date of Next Scheduled EDR Contact: 04/23/01

MLTS: Material Licensing Tracking System
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 01/30/01
Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/09/01
Date of Next Scheduled EDR Contact: 04/09/01

MINES: Mines Master Index File
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959

Date of Government Version: 08/01/98
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 01/02/01
Date of Next Scheduled EDR Contact: 04/02/01

NPL LIENS: Federal Superfund Liens
Source: EPA
Telephone: 205-564-4267
Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 02/20/01
Date of Next Scheduled EDR Contact: 05/21/01

PADS: PCB Activity Database System
Source: EPA
Telephone: 202-260-3936
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/01/00
Database Release Frequency: Annually

Date of Last EDR Contact: 02/12/01
Date of Next Scheduled EDR Contact: 05/14/01

RAATS: RCRA Administrative Action Tracking System
Source: EPA
Telephone: 202-564-4104
RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95
Database Release Frequency: No Update Planned
Date of Last EDR Contact: 03/13/01
Date of Next Scheduled EDR Contact: 06/11/01

TRIS: Toxic Chemical Release Inventory System
Source: EPA
Telephone: 202-260-1531
Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/97
Database Release Frequency: Annually
Date of Last EDR Contact: 03/26/01
Date of Next Scheduled EDR Contact: 06/25/01

TSCA: Toxic Substances Control Act
Source: EPA
Telephone: 202-260-1444
Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/98
Database Release Frequency: Every 4 Years
Date of Last EDR Contact: 03/30/01
Date of Next Scheduled EDR Contact: 06/12/01

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-564-2501
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/00
Database Release Frequency: Quarterly
Date of Last EDR Contact: 03/26/01
Date of Next Scheduled EDR Contact: 06/25/01

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
Source: EPA
Telephone: 202-564-2501

Date of Government Version: 08/10/00
Database Release Frequency: Quarterly
Date of Last EDR Contact: 03/26/01
Date of Next Scheduled EDR Contact: 06/25/01

STATE OF NEW JERSEY ASTM STANDARD RECORDS

SHWS: Known Contaminated Sites in New Jersey Except Those Associated with Bureau of Underground Storage Sites (BUST)
Source: New Jersey Department of Environmental Protection
Telephone: 609-292-8761
The Known Contaminated Sites in New Jersey includes sites under the purview of the Site Remediation Program which have contamination present at levels greater than the applicable cleanup criteria for soil and/or groundwater standards. The sites appearing in Known Contaminated Sites in New Jersey are classified as either active, where the site is assigned to a specific remedial program area, or pending, where the site is awaiting assignment to a specific remedial program area. Sites where no further action (NFA) designation has been given are not included in this report unless there are other areas of identified contamination which have not been remediated. This report includes sites being remediated under all of the various regulatory programs administered by the Site Remediation Program such as: Federal Superfund Program, Federal Resource Conservation and Recovery Act (RCRA), New Jersey's Industrial Site Recovery Act (ISRA), New Jersey's Underground Storage of Hazardous Substances Act, New Jersey's Spill Compensation and Control Act, New Jersey's Solid Waste Management Act, New Jersey's Water Pollution Control Act.

Date of Government Version: 09/01/97
Date Made Active at EDR: 04/17/98
Database Release Frequency: Varies
Date of Data Arrival at EDR: 03/19/98
Elapsed ASTM days: 29
Date of Last EDR Contact: 03/26/01

SWF/LF: Solid Waste Facility Directory
Source: Department of Environmental Protection
Telephone: 609-984-6741
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/17/00
Date Made Active at EDR: 10/30/00
Database Release Frequency: Quarterly
Date of Data Arrival at EDR: 09/28/00
Elapsed ASTM days: 32
Date of Last EDR Contact: 03/05/01

LUST: Regulated UST Contamination Sites Listing
Source: New Jersey Department of Environmental Protection
Telephone: 609-292-8761
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 07/25/00
Date Made Active at EDR: 10/03/00
Database Release Frequency: Semi-Annually
Date of Data Arrival at EDR: 08/09/00
Elapsed ASTM days: 55
Date of Last EDR Contact: 11/20/01

UST: Underground Storage Tank Data
Source: Department of Environmental Protection
Telephone: 609-633-1455
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 09/15/99
Date Made Active at EDR: 10/18/99
Database Release Frequency: Annually
Date of Data Arrival at EDR: 09/15/99
Elapsed ASTM days: 33
Date of Last EDR Contact: 03/16/01

STATE OF NEW JERSEY ASTM SUPPLEMENTAL RECORDS

NJ MAJOR FACILITIES: List of Major Facilities
Source: Department of Environmental Protection
Telephone: 609-292-1690
Major facilities means all facilities, located on one or more contiguous or adjacent properties owned or operated by the same person, having total combined storage capacity of 20,000 gallons or more for hazardous substances other than petroleum or petroleum products, or 200,000 gallons or more of hazardous substances of all kinds.

Date of Government Version: 03/01/00
Database Release Frequency: Biennially
Date of Last EDR Contact: 02/19/01
Date of Next Scheduled EDR Contact: 05/21/01

NJ Spills: Spills
Source: Department of Environmental Protection
Telephone: 609-633-0898
Initial notification information of hazardous material incidents, where there is land contamination, reported to the Department of Environmental Protection's Environmental Action Line. The DEP has not conducted any investigation to determine its validity or accuracy.

Date of Government Version: 06/30/00
Database Release Frequency: Annually
Date of Last EDR Contact: 01/09/01
Date of Next Scheduled EDR Contact: 04/09/01

NJ Release: Hazardous Material Incident Database
Source: Department of Environmental Protection
Telephone: 604-633-0898
Hazardous material release. Initial notification information reported to the Department of Environmental Protection's Environmental Action Line and the office has not conducted any investigations to determine its validity or accuracy.

Date of Government Version: 06/30/00
Database Release Frequency: Semi-Annually
Date of Last EDR Contact: 01/09/01
Date of Next Scheduled EDR Contact: 04/09/01

PF: Publicly Funded Cleanups Site Status Report
Source: Department of Environmental Protection
Telephone: 609-292-9418
The report focuses on publicly funded cleanups and features progress achieved and underway at all sites that are being addressed by the NJDEP with public funds.

Date of Government Version: 12/31/99
Database Release Frequency: Annually
Date of Last EDR Contact: 02/26/01
Date of Next Scheduled EDR Contact: 05/28/01

CHROME: Chromate Chemical Production Waste Sites
Source: Department of Environmental Protection
Telephone: 609-984-4071
Known chromate chemical production waste sites.

Date of Government Version: 06/23/99
Database Release Frequency: Annually
Date of Last EDR Contact: 03/13/01
Date of Next Scheduled EDR Contact: 06/11/01

EDR PROPRIETARY DATABASES

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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HISTORICAL AND OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines/Electrical Transmission Lines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines and electrical transmission lines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 1999 from the U.S. Fish and Wildlife Service.

New Jersey State Wetlands

Source: New Jersey Department of Environmental Protection

This data was obtained by EDR in 1998 from the New Jersey Department of Environmental Protection.

GEOCHECK®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

CAMP PEDRICKTOWN
ROUTE 130
PEDRICKTOWN, NJ 08085

TARGET PROPERTY COORDINATES

Latitude (North):	39.750950 - 39° 45' 3.4"
Longitude (West):	75.448891 - 75° 26' 56.0"
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	461543.0
UTM Y (Meters):	4400002.5
State Plane X (Feet):	1780054.4
State Plane Y (Feet):	335179.5

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

USGS TOPOGRAPHIC MAP ASSOCIATED WITH THIS SITE

Target Property: 2439075-G4 MARCUS HOOK, PA NJ DE
Source: USGS 7.5 min quad index

GENERAL TOPOGRAPHIC GRADIENT AT TARGET PROPERTY

Target Property: Undeterminable

Source: General Topographic Gradient has been determined from the USGS 1 Degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Q3 Flood Data Electronic Coverage
SALEM, NJ	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:	00000000000 / UNMC
Additional Panels in search area:	10003C0089F / CWNP
	10003C0088F / CWPP
	10003C0180F / CWPP
	3404180005B / CBPP
	3404240005B / CBPP

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Coverage
MARCUS HOOK	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Site-Specific Hydrogeological Data*:

Search Radius:	2.0 miles
Status:	Not found

AQUIFLOW®

Search Radius: 2.000 Miles.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

GEOLOGIC AGE IDENTIFICATION

Geologic Code:	IK
Era:	Mesozoic
System:	Cretaceous
Series:	Lower Cretaceous

ROCK STRATIGRAPHIC UNIT

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Component Name: KLEJ

Soil Surface Texture: loamy sand

Hydrologic Group: Class B/D - Drained/undrained hydrology class of soils that can be drained and are classified.

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: LOW

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

Soil Layer Information

	Boundary			Classification			
Layer	**Upper**	**Lower**	**Soil Texture Class**	**AASHTO Group**	**Unified Soil**	**Permeability Rate (in/hr)**	**Soil Reaction (pH)**
1	0 inches	9 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COURSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 20.00 Min: 6.00	Max: 5.50 Min: 3.60
2	9 inches	39 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COURSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 20.00 Min: 6.00	Max: 5.50 Min: 3.60
3	39 inches	47 inches	sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COURSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COURSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 20.00 Min: 6.00	Max: 5.50 Min: 3.60
4	47 inches	60 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COURSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 2.00 Min: 0.00	Max: 5.50 Min: 3.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures:	sandy loam sand sandy clay muck loam mucky-peat
Surficial Soil Types:	sandy loam sand sandy clay muck loam mucky-peat
Shallow Soil Types:	sandy loam
Deeper Soil Types:	stratified sand silt loam

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	394459075270201	0 - 1/8 Mile SW
2	394515075271701	1/4 - 1/2 Mile NW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	394449075272001	1/4 - 1/2 Mile SW
A4	394449075272501	1/4 - 1/2 Mile WSW
5	394441075272501	1/2 - 1 Mile SW
6	394516075275001	1/2 - 1 Mile WNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

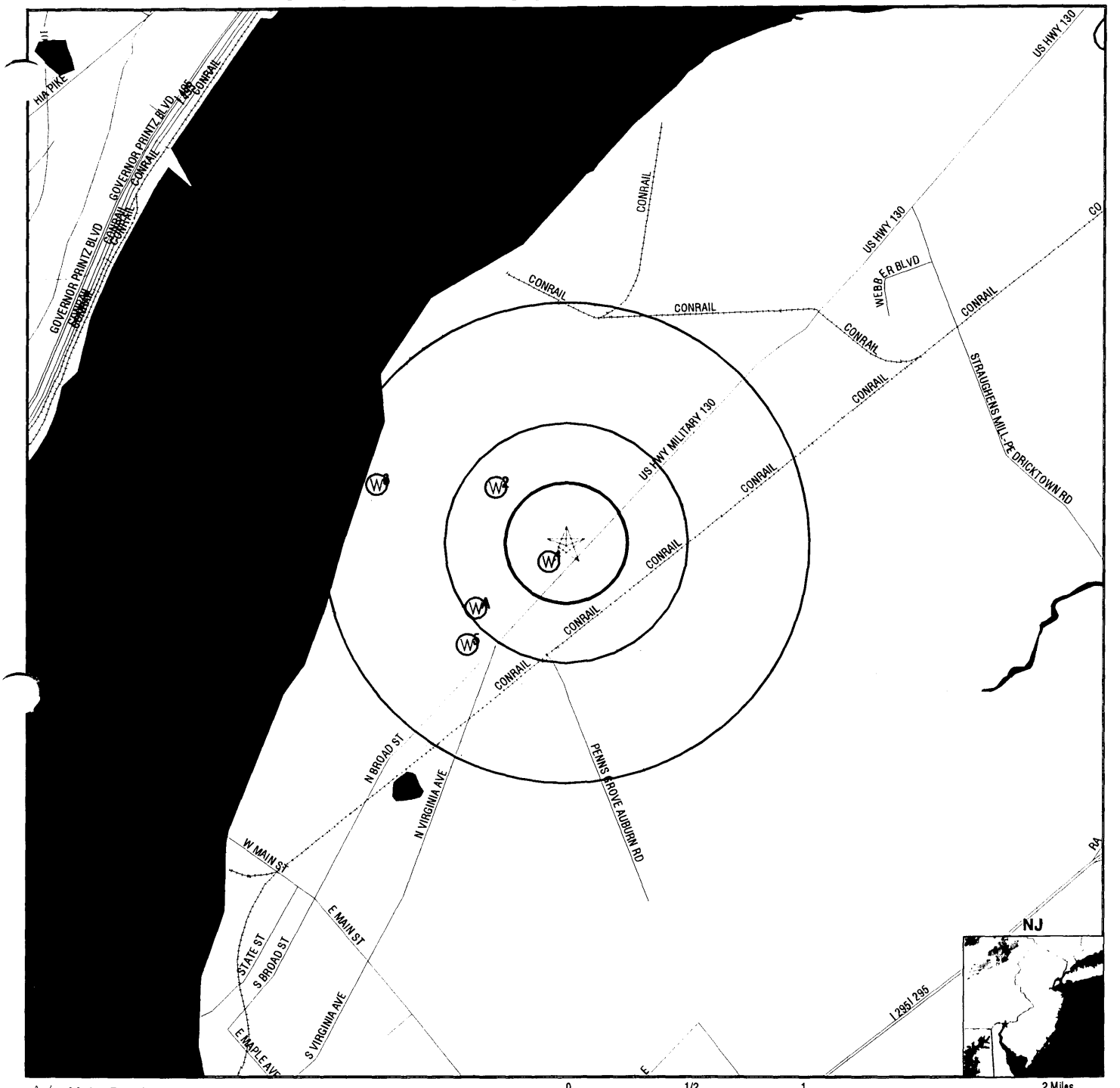
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 0616049.1r



- Major Roads
- Contour Lines
- (W) Water Wells
- (P) Public Water Supply Wells
- Groundwater Flow Direction
- (GI) Indeterminate Groundwater Flow at Location
- (GV) Groundwater Flow Varies at Location
- Cluster of Multiple Icons
- (◎) Earthquake epicenter, Richter 5 or greater
- (HD) Closest Hydrogeological Data

TARGET PROPERTY:	Camp Pedricktown	CUSTOMER:	URS Corporation
ADDRESS:	Route 130	CONTACT:	Susan King
CITY/STATE/ZIP:	Pedricktown NJ 08085	INQUIRY #:	0616049.1r
LAT/LONG:	39.7510 / 75.4489	DATE:	April 06, 2001 12:54 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
1 **SW** **0 - 1/8 Mile** **Higher**	**FED USGS**	**394459075270201**

BASIC WELL DATA

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1982	County:	Salem
Altitude:	23.00 ft.	State:	New Jersey
Well Depth:	88.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	11.60 ft.	Prim. Use of Site:	Observation
Date Measured:	Not Reported	Prim. Use of Water:	Unused

---

2 **NW** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**394515075271701**

BASIC WELL DATA

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1980	County:	Salem
Altitude:	8.79 ft.	State:	New Jersey
Well Depth:	43.00 ft.	Topographic Setting:	Valley flat
Depth to Water Table:	Not Reported	Prim. Use of Site:	Test
Date Measured:	Not Reported	Prim. Use of Water:	Unused

A3 **SW** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**394449075272001**

BASIC WELL DATA

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1982	County:	Salem
Altitude:	10.00 ft.	State:	New Jersey
Well Depth:	82.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	3.80 ft.	Prim. Use of Site:	Observation
Date Measured:	Not Reported	Prim. Use of Water:	Unused

A4 **WSW** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**394449075272501**

BASIC WELL DATA

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1982	County:	Salem
Altitude:	9.00 ft.	State:	New Jersey
Well Depth:	68.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	3.80 ft.	Prim. Use of Site:	Observation
Date Measured:	Not Reported	Prim. Use of Water:	Unused

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
5 **SW** **1/2 - 1 Mile** **Higher**		**FED USGS**	**394441075272501**

BASIC WELL DATA

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1982	County:	Salem
Altitude:	15.00 ft.	State:	New Jersey
Well Depth:	72.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	6.30 ft.	Prim. Use of Site:	Observation
Date Measured:	Not Reported	Prim. Use of Water:	Unused

---

6 **WNW** **1/2 - 1 Mile** **Higher**		**FED USGS**	**394516075275001**

BASIC WELL DATA

Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	1980	County:	Salem
Altitude:	10.27 ft.	State:	New Jersey
Well Depth:	33.00 ft.	Topographic Setting:	Not Reported
Depth to Water Table:	3.00 ft.	Prim. Use of Site:	Observation
Date Measured:	06271980	Prim. Use of Water:	Unused

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Radon Information for Zip Code: 08085

Tier	Comment	> 4 pCi/L	Sites Tested	Municipality, County
2 (Moderate Pot.)	(no change)	12 Sites	67	SWEDESBORO, GLOUCESTER

Federal EPA Radon Zone for SALEM County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

SALEM COUNTY, NJ

Number of sites tested: 44

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area	0.990 pCi/L	93%	7%	0%
Basement	1.370 pCi/L	89%	11%	0%

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 1999 from the U.S. Fish and Wildlife Service.

New Jersey State Wetlands
Source: New Jersey Department of Environmental Protection
This data was obtained by EDR in 1998 from the New Jersey Department of Environmental Protection.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the national Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-260-2805
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-260-2805
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STATE RECORDS

New Jersey Public-Community Water-Supply Wells
Source: New Jersey Department of Environmental Protection
Telephone: 609-292-5550

New Jersey Monitoring Wells
Source: Department of Environmental Quality
Telephone: 609-984-6587
Ambient Groundwater Quality of the New Jersey Part of the Newark Basin. Natural groundwater quality in the Newark Basin summarize natural groundwater quality in sedimentary bedrock formations of the Newark basin part of the Piedmont physiographic province of New Jersey.

New Jersey Radon Tier Assignment Report
Source: Department of Environmental Protection
The DEP's tier system classifies municipalities as having high, moderate or low potential for indoor radon problems based on the percentage of homes with radon concentrations greater than or equal to 4 picocuries/liter (pCi/l).

RADON

Area Radon Information: The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones: Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

APPENDIX B

SITE PHOTOGRAPHS

Photo B-1. Building 404, Looking Northwest

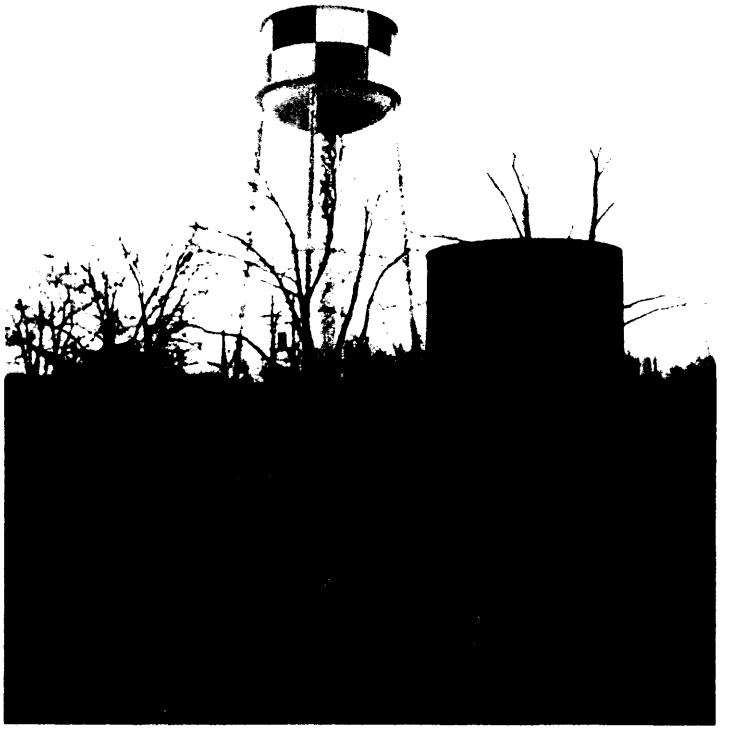


Photo B-2. Facilities 239 (Left) and 249 (Right), Looking South

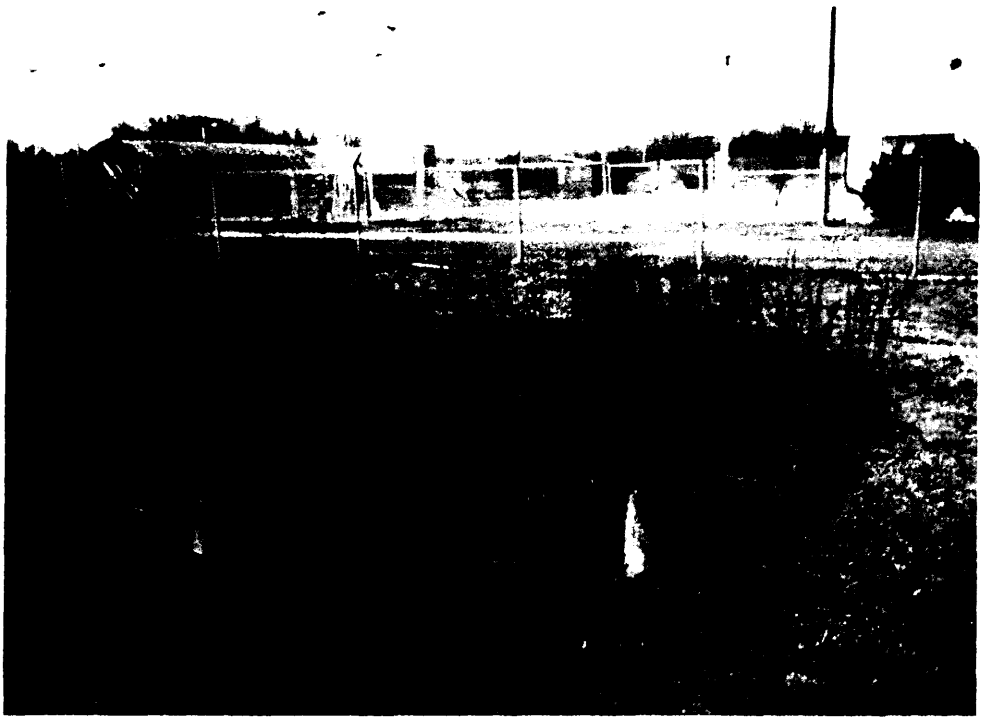


Photo B-3. Rectangular Depression at Northern End of Military Vehicle Parking Area

Photo B-4. Building 278 (Center), Building 277 (Right), and Building 288 (Garage to Left), Looking Northeast

APPENDIX C

SAMPLE INTERVIEW FORM AND VISUAL INSPECTION FORM

Installation Code: _____; Area: _____; Parcel: _____;
Facility No. : _____; Facility Name: _____;
Map ID: _____; Coordinates: _____; Address: _____;
Team Member Name: _____; Date: _____

Interviewee Information:
Name:_____; Organization: _____; Title: _____;
Role/Responsibility: _____; Phone: _____;
Period for which the person would have specific and detailed knowledge of the area or facility in question:
_____
Any other areas or facilities for which the person would have specific and detailed knowledge?
Area or Facility Period:
1) _____
2) _____
3) _____

Who can I talk to regarding previous uses or processes of this area/facility?
Period: _____Contact: _____
Period: _____Contact: _____
Period: _____Contact: _____
Period: _____Contact: _____
Period: _____Contact: _____

TABLE I-1: FACILITIES WITH COMMON USE OR PURPOSE

FACILITY NO.	FACILITY NAME	DATE CONSTRUCTED	DATE EXPANDED

Installation Code: _____; Area: _____; Parcel: _____; Facility No: _____
Team Member Name: _____; Date: _____
Interviewee: _____

USE HISTORY

Use the following questions to complete Table I-2. Include historical perspective on disposal practices and locations, and state amounts of stored chemicals and wastes in the comments column.

Was or is the area/facility in question used as a gasoline station, motor or machine fabrication or repair facility, dry cleaners, photo developing laboratory, plating shop, paint shop, electronics or electro-optical manufacturing or repair facility, medical or dental facility, training area, or as a waste treatment, disposal (such as junkyard or landfill), processing, or recycling facility? Y/N

Was or is the area in question used as a firing and/or bombing range? Y/N

Describe the use history of this area or facility, including the processes for which the area or facility was used.

Describe the process chemicals and petroleum products which have been or are **used** in this facility or area?

Describe the process chemicals and petroleum products which have been or are **stored** in this facility or area, and where these materials are stored.

Describe any pesticides, paints, or other chemical containers, or damaged or discarded automotive or industrial batteries which have been or are located, stored, or used in this facility or area.

Describe any other drums, sacks, or cartons containing chemicals located in this facility or area.

Describe the wastes which have been or are generated in this facility or area, and the rates at which these wastes were and are generated.

Describe chemical or petroleum products wastes which have been or are stored in this facility or area, the amounts of stored wastes, and where these wastes are stored.

Does the facility generate used oil? Y/N

Were or are radioactive elements (such as radium, uranium) used in a manufacturing process or contained in machinery/devices which were repaired? Y/N If yes, what are the radioactive elements? Where were/are raw materials stored? Where were/are wastes disposed? Can you provide copies of permits? Y/N

Is or was mercury used or contained in any machinery parts, or electrical, pressure, or vacuum instruments? Y/N

FORM 3 - INTERVIEWS (continued)

Installation Code: _____; Area: _____; Parcel: _____; Facility No: _____
Team Member Name: _____; Date: _____
Interviewee: _____

TABLE I-2: AREA OR FACILITY USE HISTORY

PERIOD	USE/PROCESS	CHEMICALS / PETROLEUM PRODUCTS USED OR GENERATED	TYPE[1]	CLASS[2]	GEN. RATE	STORAGE[3]	DISPOSAL

1 - P = process, W = waste, C = cleaning, O = other such as pesticides and paint stored for incidental use.
2 - PP = petroleum product, HS = hazardous substance.
3 - Identify specific location in area or facility. For USTs and ASTs use Table I-3.

Installation Code: _____; Area: _____; Parcel: _____; Facility No: _____
Team Member Name: _____; Date: _____
Interviewee: _____

UST AND AST INVENTORY

Have there been or are there any above ground or under ground storage tanks containing hazardous substances or petroleum products located on the installation/area/facility? Y/N If yes, can you provide a complete list of all tanks, a tank location map, and a copy of all permit(s)? Y/N If yes, Document ID: _____; otherwise complete:

TABLE I-3: UST AND AST INVENTORY

TANK NO.	UST or AST	YEAR INSTALLED	CAPACITY/ (GAL) CONSTRUCTION	CONTENTS	CLASS[1]	STATUS	SITE NO.	FUTURE ACTIONS	COMMENTS[2]

1 - PP = petroleum product, HS = hazardous substance.

2 - Include compliance monitoring, if present, and results.

Installation Code: _____; Area: _____; Parcel: _____; Facility No: _____
Team Member Name: _____; Date: _____
Interviewee: _____

POTENTIAL RELEASES

To the best of your knowledge, have spills, leaks or other releases of hazardous substance or petroleum products occurred in this facility or area? Y/N If yes, What chemical or petroleum product was released?

_____

How much was released? _____; Map ID:_____; Coordinates: _____
Is or was an investigation and remedial action conducted? Y/N *If yes, enter required information into Table I-4.*

Are or have liquid or solid wastes or debris including tires, automotive or industrial batteries, ordnance or any other waste materials been Dumped, Buried, Burned, or Discharged (circle one or more) in this area? Y/N/U If yes, What materials? _____
Period? _____; Map ID:_____; Coordinates: _____
Is or was an investigation and remedial action conducted? Y/N *If yes, enter required information into Table I-4.*

Is this area or facility treated with pesticides? Y/N/U Inside? Y/N ; Outside? Y/N ; What types?

_____

Are/have they been applied according to manufacturer's directions? Y/N/U; Application personnel: (*Installation personnel, Outside contractor*)

WASTE WATER

How is sewage disposed? (*Sanitary sewer, Septic system, Treatment system*)

Are any liquid wastes, wastewaters, or process cooling waters discharged to the sewer system? Y/N If yes, What are the constituents in the waste or wastewater? _____
_____;
Can you provide testing documentation and permit information? Y/N If yes, Document IDs: _____

Are there any drains or abandoned drains onsite? Y/N If yes, where?: _____;
What drains into them? _____;
Where do they discharge to? _____;
What possible chemicals or petroleum products drain into them? _____

Are there any sumps or dry wells in this area/facility? Y/N If yes, What is discharged into it? _____

_____

When was it installed? _____; Abandoned? Y/N; When? _____; Is or was an investigation and remedial action conducted? Y/N *If yes, enter required information into Table I-4*

Installation Code: _____; Area: _____; Parcel: _____; Facility Number: _____
Team Member Name: _____; Date: _____
Interviewee: _____

COMPLIANCE ISSUES

Has an asbestos survey been performed? Y/N If yes, when? _____; Can you provide a copy of the survey? Y/N If yes, Doc. ID: _____; Did the survey identify any ACM? Y/N If yes, where?

Was the asbestos removed? Y/N ; If yes, when? _____

Has a lead-based paint survey been performed? Y/N If yes, when? _____; Can you provide a copy of the survey? Y/N If yes, Doc. ID: _____; Did the survey identify any lead-based paint onsite? Y/N; Was the paint removed? Y/N ; When? _____

Has a radon survey been performed? Y/N If yes, When? _____; Can you provide a copy of the survey? Y/N If yes, Doc. ID: _____; Was radon detected above regulatory levels? Y/N Have mitigation actions been instituted? Y/N ; When? _____

Has the potable water supply been tested? Y/N If yes, can you provide the test results? Y/N
If yes, Doc. ID: _____
Process Water Supply: (*Installation, City, County, Facility well, River, Other:* _____);

Are there any PCB-containing equipment other than transformers in this area/facility? Y/N If yes, can you provide a list identifying the status of each and a map locating all identified locations? Y/N If yes, Document ID: _____; If no, Map ID:_____; Coordinates: _____;
Are any of these investigation or cleanup sites? Y/N *If yes, enter required information into Table I-4*

Are there any transformers in the area or facility? Y/N If yes, Can you provide a list and a map of them? Y/N If yes, Document ID:_____; If no, list: Map ID:_____;
Pole No._____; Coordinates: _____;
Pole No._____; Coordinates: _____;
Pole No._____; Coordinates: _____;
Have these transformers been inspected and tested? Y/N If yes, Can you provide documentation? Y/N If yes, Document ID: _____; Are any of these investigation or cleanup sites? Y/N *If yes, enter required information into Table I-4.*

Where is transformer retrofitting conducted? _____; Does the installation have a storage site for PCB wastes? Y/N If yes, Facility: _____; Map ID: _____; Coordinates: _____

Are or have there been air emissions from this installation/facility? Y/N If yes, can you provide a copy of the permit(s) and a complete list of all sources and a map locating the historical and present sources? Y/N If yes, Doc. ID: _____; If no, Describe: _____;

Installation Code: _____; Area: _____; Parcel: _____; Facility No: _____
Team Member Name: _____; Date: _____
Interviewee: _____

Is the facility under a consent order, compliance schedule, or ever received a Notice of Violation for air emissions? Y/N ; If yes, Explain: _____
_____

INVESTIGATION AND CLEANUP ACTIVITIES

Describe any past or present investigation or cleanup sites in this area or associated with this facility.

TABLE I-4: INVESTIGATION AND CLEANUP SITES

SITE ID	NAME	CONTAMINANTS	STATUS/ ACTIVITY	DOC ID MAP ID	MAP COORD

Installation Code: _____; Area: _____; Parcel: _____; Facility No: _____
Team Member Name: _____; Date: _____
Interviewee: _____

MISCELLANEOUS

Are there any pipelines located in this area/facility? Y/N If yes, sketch in approximate location(s). Map ID: _____; Coordinates: _____; Size:_____; Construction: _____; Contents:_____; Pressure tested? Y/N Date of last test: _____; Has it leaked? Y/N If yes, Is or was an investigation and remedial action conducted? Y/N *If yes, enter required information into Table I-4.*

Have there been any demolition activities in this area or in relation to this facility? Y/N If yes,
What was demolished?
_____
Where was it located? Map ID:_____; Coordinates: _____
Where was the demolition wastes disposed? Map ID:_____; Coordinates: _____
Use Table I-2 to describe the demolished facility's use history.
Were there associated USTs or ASTs? Y/N/U *If yes, enter required information into Table I-3.*
Is or was an investigation and remedial action conducted? Y/N *If yes, enter required information into Table I-4.*

Are there any pending, threatened, or past litigation, administrative proceedings, or notices from any governmental entity regarding any possible violation of laws or possible liability relating to hazardous substances or petroleum products in, on, or from the area or facility? Y/N Explain: _____
_____
_____;
Can you provide documentation? Y/N If yes, Document ID: _____

FORM 4 - VISUAL INSPECTIONS

Team Member Name: _____; Date: _____
Installation Name: _____; Installation Code: _____
Area: _____; Parcel: _____; Facility No. _____;
Facility Name: _____; Map ID: _____; Coordinates: _____
Address: _____
Area/Facility Use: (*Undeveloped, Agriculture, Housing, Recreation, Commercial, Utilities, Light Industrial, Heavy Industrial, Other:*_____); Acreage: _____;
Associated IRP Site, SWMU, or OU? Y/N/U ; If yes, Site ID(s): _____
Area/Facility contact name/title: _____; Phone: _____

Escort Information:
Name:_____; Organization: _____; Title: _____
Role/Responsibility: _____; Phone: _____;
Period for which the person would have specific and detailed knowledge of the area or facility in question:
_____

Inspection Information:
Methods used to observe area or facility: (*Air, Auto, Walk, Onsite, Remote:* _____)
Inspection Complete? Y/N If no, explain: _____
_____

Setting:
Adjoining land use (show on map): _____
_____
Roads without outlets? Y/N ; Describe use: _____
Wetlands, Streams, Springs/seeps?: Y/N (delineate on map as W, S, SS, respectively);
Surface Cover: (*Vegetation, Manmade; Type:* _____);

Construction:
Structure: (*Metal frame, Wood frame, Concrete*);
Siding (*Metal, Wood, Concrete, PVC, Other*_____);
Flooring Material: (*Wood, Concrete, Ceramic, Vinyl*);
Roofing Material: (*Composition, Sheet Metal, Tar, Tiles, Slate, Cedar Shake, Rubberized, Fiberglass*)
Insulation Material: (*Fiberglass, Foam, Unknown*)

Facility Utilities:
Heating/Ventilation/Cooling (HVAC) System: (*Oil/forced air, Gas/forced air, Electrical, Steam, Hot water*);
HVAC Power: (*Gas, Oil, Coal, Electric*); Backup Power Supply? Y/N;
Boiler Room? Y/N; Exhaust System? Y/N

Use History:
Describe in Table I-2 additional information regarding the use history of this area or facility discovered during the visual inspection that was not already described during interviews.

Installation Code: _____; Area: _____; Parcel: _____; Facility No: _____
Team Member Name: _____; Date: _____

FEATURES (Circle each form used. Use the appropriate form listed below.)

FORM V1: STORAGE TANKS: ASTs, USTs, Oil/Water Separators
FORM V2: HAZARDOUS SUBSTANCES AND/OR PETROLEUM PRODUCTS USED OR GENERATED, AND THEIR STORAGE AND DISPOSAL (except for USTs and ASTs).
FORM V3: POTENTIAL RELEASES: As indicated by stains, pools, stressed vegetation, odors, burned areas, illicit dumping and other uncontrolled waste.
FORM V4: WASTE WATER: Occurrence and disposition, including storm water, cooling water, waste water from processes, facility floors, oil-water separators, sumps, dry wells, etc.
FORM V5: PIPELINES
FORM V6: TRANSFORMERS: inventory, including capacitors.
FORM V7: PONDS: Including infiltration ponds, waste water treatment reservoirs, etc.
FORM V8: AIR EMISSIONS: Including incinerators, boilers, process, or laboratory exhaust.
FORM V9: POTENTIAL ASBESTOS CONTAINING MATERIALS
FORM V10: WELLS: Including drinking water, process water, agricultural, monitoring, injection, oil, and gas.

PHOTOGRAPHS

Frame Number Compass View Subject _____