U.S. Army BRAC 2005
Environmental Condition of Property Report
Charles E. Kelly Support Facility, Oakdale, Pennsylvania

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The following lists of acronyms, abbreviations, and definitions are intended to be comprehensive and are contained in the ECP Report.

ACRONYMS AND ABBREVIATIONS

Acronym	Full Title
AAFES	Army and Air Force Exchange Service
AAI	All Appropriate Inquiry
ACM	Asbestos-containing Material
ADA	Air Defense Artillery
AG	Artillery Group
AM	Amplitude Modulation
AMSA	Area Maintenance Support Activity
AR	Army Regulation
ARADCOM	U.S. Army Air Defense Command
ARCOM	Army Reserve Command
ASR	Archives Search Report
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
BFI	Browning Ferris Industries
BIC	Business Initiative Council
BLS	Below Land Surface
BRAC	Base Realignment and Closure
BRACD	Base Realignment and Closure Division
BRRM	Base Redevelopment and Realignment Manual
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
CARC	Chemical Agent Resistant Coating
CC	Compliance Cleanup
CEKSF	Charles E. Kelly Support Facility
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CERFA	Community Environmental Response Facilitation Act
CESQG	Conditionally Exempt Small Quantity Generator
CFR	Code of Federal Regulations
CONEX	Container Express
CORRACTS	Corrective Action Sites
DA	Department of the Army
DeCA	Defense Commissary Agency
DMM	Discarded Military Munitions
DOD	U.S. Department of Defense
DOE	U.S. Department of Energy
DOI	U.S. Department of Interior
DOL	Directorate of Logistics
DRMO	Defense Reutilization and Marketing Office
DRO	Diesel-Range Organics
EBS	Environmental Baseline Survey
ECP	Environmental Condition of Property
EDR	Environmental Data Resources
EPCRA	Emergency Planning and Community Right-to-Know Act

ACRONYMS AND ABBREVIATIONS (Continued)

Acronym	Full Title
EPR	Environmental Program Review
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FINDS	Facility Index System
FORSCOM	Forces Command
gpd	Gallons per Day
gpm	Gallons per Minute
GPS	Global Positioning System
GSA	General Services Administration
HW	Hazardous Waste
INRMP	Integrated Natural Resource Management Plan
IRP	Installation Restoration Program
ISI	Initial Site Investigation
ISSA	Interservice Support Agreement
kVA	Kilo Volt Ampere
LBP	Lead-based Paint
LQG	Large Quantity Generator
LST	Landing Ship Tank
LUST	Leaking Underground Storage Tank
MEC	Munitions and Explosives of Concern
MEP	Military Equipment Parking
MINES	Mines Master Index File
MMRP	Military Munitions Response Program
MOU	Memorandum of Understanding
msl	Mean Sea Level
N/A	Not Applicable
NEPA	National Environmental Policy Act
NFA	No Further Action
NFRAP	No Further Remedial Action Planned
NORAD	North American Aerospace Defense Command
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRC	Nuclear Regulatory Commission
NRHP	National Register of Historic Places
NTS	National Technical Systems, Inc.
OWS	Oil/Water Separator
P.E.	Professional Engineer
PA	Preliminary Assessment
PADEP	Pennsylvania Department of Environmental Protection
PAM	Pamphlet
PCB	Polychlorinated Biphenyl
pCi/L	picoCuries per Liter
PER	Programmatic Environmental Review
PNDI	Pennsylvania Natural Diversity Inventory
POL	Petroleum, Oil, and Lubricants
POV	Private Owned Vehicle

ACRONYMS AND ABBREVIATIONS (Continued)

Acronym	Full Title
ppm	Parts per Million
psi	Pounds per Square Inch
PSYOPS	Psychological Operations
PVC	Polyvinyl Chloride
PX	Post Exchange
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RDX	1,3,5-Trinitro-1,3,5-triazine
ROTC	Reserve Officer Training Corps
RQ	Reportable Quantity
RRC	Regional Readiness Command
RSC	Regional Support Command
SAGE	Semi-Automatic Ground Environment
SAIC	Science Applications International Corporation
SI	Site Investigation
SOC	Service Operations Center
SQG	Small Quantity Generator
SR	State Route
T&E	Threatened and Endangered
TCE	Trichloroethene
TNT	2,4,6-Trinitrotoluene
TPH	Total Petroleum Hydrocarbons
TSDF	Treatment, Storage, and Disposal Facility
USACE	U.S. Army Corps of Engineers
USAEC	U.S. Army Environmental Center
USAEHA	U.S. Army Environmental Hygiene Agency
USAF	U.S. Air Force
USAR	U.S. Army Reserve
USARC	U.S. Army Reserve Command
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank
UTM	Universal Transverse Mercator
UXO	Unexploded Ordnance
VCP	Voluntary Cleanup Program
VSI	Visual Site Inspection
WCFS	Woodward-Clyde Federal Services
WWII	World War II

DEFINITIONS

Term	Definition
Closure	All missions of the installation have ceased or have been relocated. All personnel positions (military, civilian, and contractor) have either been eliminated or relocated, except for personnel required for caretaking, conducting any on-going environmental cleanup, and disposal of the base, or personnel remaining in authorized enclaves. In the context of this document, this may be referred to as "full closure."
Discarded Military Munitions	Military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. The term does not include unexploded ordnance (UXO), military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of, consistent with applicable environmental laws and regulations. (10 U.S.C. 2710(e)(2))
Disposal	Per Army Regulation (AR) 405-45, any authorized method of permanently divesting the Army of control of and responsibility for real estate and real property.
Environmental Baseline Survey	A process by which a characterization of the environmental condition of a facility or property is conducted. An environmental baseline survey (EBS) is required by the Army for the transfer or acquisition of real property and identifies potential cleanup requirements and liabilities. See definition for Environmental Condition of Property (ECP).
Environmental Condition of Property	A management approach for providing efficient and effective development of a comprehensive environmental condition/liability characterization for a facility or property. The ECP process applies industry best practices and standards; provides effective oversight and quality assurance, and unifies the EBS and the Munitions and Explosives of Concern (MEC) Archives Search Report (ASR) steps taken in prior Base Realignment and Closure (BRAC) rounds into a unified effort. The ECP is based on the Initial Site Investigation (ISI) project approved by the Business Initiative Council (BIC). The Army's ECP Report meets the U.S. Department of Defense's (DOD's) ECP Report requirement.
Environmental Professional	The U.S. Environmental Protection Agency's (USEPA's) All Appropriate Inquiry (AAI) Final Ruling states the definition of an environmental professional establishes a balance between the merits of setting a high standard of excellence for the conduct of all appropriate inquiries through the establishment of stringent qualifications for environmental professionals and the need to ensure that experienced and highly competent individuals currently conducting all appropriate inquiries are not displaced. In summary, the definition of environmental professional included in the final rule includes individuals who possess the following qualifications: • Hold a current Professional Engineer's or Professional Geologist's license or registration from a state, tribe, or U.S. territory and have the equivalent of 3 years of full-time relevant experience; or • Be licensed or certified by the Federal Government, a state, tribe, or U.S. territory to perform environmental inquiries as defined in Sec. 312.21 and have the equivalent of 3 years of full-time relevant experience; or • Have a Baccalaureate or higher degree from an accredited institution of higher education in science or engineering and the equivalent of 5 years of full-time relevant experience; or

DEFINITIONS (Continued)

Term	Definition
	• Have the equivalent of 10 years of full-time relevant experience. The definition of "relevant experience" is "participation in the performance of environmental site assessments that may include environmental analyses, investigations, and remediation which involve the understanding of surface and subsurface environmental conditions and the processes used to evaluate these conditions and for which professional judgment was used to develop opinions regarding conditions indicative of releases or threatened releases to the subject property." The final rule retains the proposed requirement that environmental professionals remain current in their field by participating in continuing education or other activities and be able to demonstrate such efforts.
Installation	Per AR 405-45, an aggregation of contiguous or near contiguous, common mission-supporting real property holdings under the jurisdiction of or possession controlled by the Department of the Army (DA) or by a State, commonwealth, territory, or the District of Columbia, and at which an Army unit or activity (Active, Army Reserve, or Army National Guard) is assigned. An installation is a single site or a grouping of two or more sites for the purposes of real property inventory control. The real property accountability officer is at the installation level.
Munitions and Explosives of Concern	MEC distinguishes specific categories of military munitions that may pose unique explosives safety risks, including UXO, as defined in 10 U.S.C. 2710(e)(9); Discarded Military Munitions (DMM), as defined in 10 U.S.C. 2710(e)(2); and munitions constituents (e.g., 2,4,6-trinitrotoluene [TNT], 1,3,5-trinitro-1,3,5-triazine [RDX]) present in high enough concentration to pose an explosive hazard.
Military Munitions	Military munitions means all ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of DOD, the Coast Guard, the U.S. Department of Energy (DOE), and the National Guard. The term includes confined gaseous, liquid, and solid propellants; explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives, and chemical warfare agents; chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges; and devices and components thereof. The term does not include wholly inert items; improvised explosive devices; and nuclear weapons, nuclear devices, and nuclear components, other than nonnuclear components of nuclear devices that are managed under the nuclear weapons program of DOE after all required sanitization operations under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) have been completed. (10 U.S.C. 101(e)(4)(A) through (C))

DEFINITIONS (Continued)

Term	Definition
Real Property	AR 405-90: Real property consists of lands and improvements to land, buildings, and structures, including improvements and additions, and utilities. It includes equipment affixed and built into the facility as an integral part of the facility (such as heating systems), but not movable equipment (such as plant equipment). In many instances, this term is synonymous with "real estate."
Realignment	Any action that both reduces and relocates functions and DOD civilian personnel positions, but does not include a reduction in force resulting from workload adjustments, reduced personnel or funding levels, skill imbalances, or other similar cause. A realignment may terminate the DOD requirement for the land and facilities on part of an installation. That part of the installation shall be treated as "closed," and in the context of this document referred to as a "partial closure."
Unexploded Ordnance	Military munitions that (A) have been primed, fused, armed, or otherwise prepared for action; (B) have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and (C) remain unexploded whether by malfunction, design, or any other cause. (10 U.S.C. 101(e)(5)(A) through (C)))

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1. EXECUTIVE SUMMARY

Science Applications International Corporation (SAIC) has prepared this Environmental Condition of Property (ECP) Report for the Charles E. Kelly Support Facility (CEKSF), Oakdale, Pennsylvania. CEKSF consists of three separate locations, including the Main Post (118 acres), Site 62 (13 acres), and Neville Island (15 acres), comprising a total of 146 acres. The Main Post consists of Study Sections 1 through 4; Site 62 is Study Section 5; and Neville Island is divided into Study Sections 6 and 7. The purpose of the ECP is to determine the environmental baseline condition of CEKSF in preparation for a Real Property Disposal.

The ECP was developed in compliance with Chapter 8, Section 3 of the Base Redevelopment and Realignment Manual (BRRM) (U.S. Department of Defense [DOD] 4165.66-M, 1 March 2006); Army Regulation (AR) 200-1, *Environmental Protection and Enhancement*, 21 February 1997; Department of the Army (DA) Pamphlet (PAM) 200-1, *Environmental Protection and Enhancement*, 17 January 2002; and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §120.

This Executive Summary briefly describes the current and former uses of the installation and areas of potential environmental concern that were evaluated during the ECP process. Detailed information associated with the summary presented below is provided in the remaining portion of this document.

1.1 SITE DESCRIPTION AND HISTORICAL USE

The Main Post and Site 62 are located approximately 12 miles southwest of Pittsburgh, Pennsylvania. Neville Island is located along the Ohio River approximately 6 miles west of Pittsburgh and 20 miles north of the Main Post.

A total of 72 buildings are located on the Main Post, Site 62, and Neville Island. Forty-eight buildings are at the Main Post. Developed land consists of approximately 38 percent of the Main Post. Developed land contains roads, paved areas, buildings, material and fuel storage areas, parking lots, lawns, landscaped areas, and a helicopter landing area. There are a total of five buildings at Site 62. The buildings at Site 62 currently are vacant. Most of the land surface within Site 62 is moderately steep. Grand Avenue bisects the Neville Island facility. Sixteen buildings are north of Grand Avenue, while south of Grand Avenue are three buildings and a graveled area that is used to stage miscellaneous military equipment that is either awaiting repair or reclamation. The installation's primary mission is to provide off-post area support to active and reserve activities, as well as to tenant activities. The area of responsibility includes the States of West Virginia and Ohio, a portion of western Maryland, and western Pennsylvania.

Archival information suggests that a farmstead once occupied a portion of the land where the Main Post and Site 62 were constructed in 1957 and became operational with Missile Master capabilities in 1960. Its function was to improve the coordination of its Nike surface-to-air missile batteries within the Pittsburgh Defense Area. Neville Island passed through a number of private owners and one corporate owner prior to Government ownership in 1941. The Neville Island facility originally was established by the Army in 1943 to repair, maintain, and upgrade military vehicles and equipment, as well as to provide support for the anti-aircraft gun batteries and Nike missile systems that defended the Pittsburgh Defense Area during the Cold War.

1.2 AREAS ASSESSED FOR ENVIRONMENTAL CONCERN

The following information was obtained through review of general property information, observation of neighboring properties, research of available historical information, interviews with knowledgeable parties, an environmental records search, and a site reconnaissance:

- ***Hazardous Substances***—Chemicals containing CERCLA hazardous substances would have been used and stored at CEKSF in amounts necessary to support unit-level vehicle and building maintenance activities. However, the quantities stored would not have exceeded corresponding CERCLA threshold planning quantities. There is no evidence that the chemicals used or stored ever were improperly handled, released, or disposed of at CEKSF.
- ***USTs/ASTs***—Eighteen petroleum underground storage tanks (USTs) once were present at the site (10 USTs at the Main Post, 5 at Site 62, and 3 at Neville Island). USTs were used between 1956 and 1997 to store diesel fuel, No. 2 heating oil, gasoline, and used oil. There are currently 15 aboveground storage tanks (ASTs) at CEKSF. Two of the 15 ASTs are no longer in use.
- ***Non-UST/AST Petroleum Storage***—There is no evidence that non-UST/AST petroleum products in excess of 55 gallons were stored for 1 year or more at CEKSF.
- ***Polychlorinated Biphenyls***—Nine polychlorinated biphenyl (PCB) transformers were identified at the Main Post. A total of six transformers were identified at Site 62. These six transformers contained less than 50 parts per million (ppm) of PCBs in oil. Two pole-mounted transformers were identified at the Neville Island facility. These transformers are owned by Duquesne Light Company. According to CEKSF personnel, all PCB transformers have been removed.
- ***Asbestos-containing Materials***—An asbestos-containing material (ACM) survey was conducted in 2003. The survey identified a widespread occurrence of ACM inside building structures. ACM identified during the surveys included drywall and joint compound, transite paneling, roofing material, window glazing, insulation, floor tile/mastic, pipe lagging, and siding.
- ***Lead-based Paint***—A lead-based paint (LBP) survey was conducted in 2005 at the Main Post, Site 62, and Neville Island. Lead was found on the interior and/or exterior of 31 buildings at a concentration greater than 0.05 ppm.
- ***Radiological Materials***—Storage of radiological commodities was not found at the Main Post, Site 62, or Neville Island. Typical types of radiological commodities managed in the past at CEKSF could have included radiac meters, chemical agent detectors, moisture density gauges, lensatic compasses, night-vision goggles, radioluminescent sites, and armored vehicle equipment gauges or weapons gauges. These items would have been tightly controlled and stored in the administration building's arms vault or in other secured equipment storage areas. There is no evidence of any release of radiological materials at CEKSF.
- ***Radon***—A radon survey was conducted at the Main Post in 2000. Of the sampled locations, only the basement of Building 14, the former Missile Control Building, continues to be monitored. Radon monitoring in Allegheny County indicates that levels exceeded the U.S. Environmental Protection Agency (USEPA) recommended radon action level of 4.0 picoCuries per liter (pCi/L). According to the Federal USEPA Radon Zone for Allegheny County, areas tested were classified in Zone 1, which has a predicted average indoor screening level greater than the USEPA recommended action level of 4 pCi/L.
- ***Munitions and Explosives***—No indications were found during the site reconnaissance or records review process of the past presence of munitions and explosives of concern (MEC).
- ***Surrounding Properties***—Potential environmental sites of concern, located within corresponding search radius distances from CEKSF, were evaluated. Overall, none of these sites evaluated exhibits environmental conditions that have a probability to adversely affect environmental conditions at CEKSF.

1.3 CONCLUSIONS

Property category codes are used to indicate the degree of contamination associated with the subject property. Table 1-1 identifies the criteria applicable to each category code. Each study section and significant area is assigned a property category code. Maps of the Main Post, Site 62, and Neville Island with designated property categories are included in Figures 1-1, 1-2, and 1-3, respectively.

Table 1-1. ECP Categories and Standard Map Colors

ECP Category	Definition	Map Color
1	Areas in which no release or disposal of hazardous substances or petroleum products has occurred, and to which there has been no migration of such substances from adjacent areas.	White
2	Areas in which only release or disposal of petroleum products has occurred.	Blue
3	Areas in which release, disposal, or migration of hazardous substances has occurred, but in concentrations that do not require a removal or other remedial response.	Light Green
4	Areas in which release, disposal, or migration of hazardous substances has occurred, but all removal or other remedial actions necessary to protect human health and the environment have been taken.	Dark Green
5	Areas in which release, disposal, or migration of hazardous substances has occurred, and removal or other remedial actions are underway, but all required actions have not yet been taken.	Yellow
6	Areas in which release, disposal, or migration of hazardous substances has occurred, but required remedial actions have not yet been implemented.	Red
7	Areas that have not been evaluated or require additional evaluation.	Gray

The following property is classified as Category 1, areas in which no release or disposal of hazardous substances or petroleum products has occurred, and to which there has been no migration of such substances from adjacent areas:

- ***Study Section 1 – Lower Main Post***—Entire property
- ***Study Section 2 – Mid Lower Main Post***—Entire property
- ***Study Section 3 – Mid Upper Main Post***—Entire property with the exception of Installation Restoration Program (IRP) Site 12
- ***Study Section 4 – Upper Main Post***—Entire property with the exception of IRP Sites 7 and 8
- ***Study Section 5 – Site 62***—Entire property with the exception of IRP Site 9, the fenceline, and building perimeters
- ***Study Section 7 – Neville Island Facility South of Grand Avenue***—Entire property.

The following IRP sites are classified as Category 2, areas in which only release or disposal of petroleum products has occurred:

- ***Study Section 3 – Mid Upper Main Post***—IRP Site 12
- ***Study Section 4 – Upper Main Post***—IRP Site 7
- ***Study Section 5 – Site 62***—IRP Site 9.

IRP Site 8 and Study Section 6 are classified as Category 4, areas in which a release, disposal, or migration of hazardous substances has occurred, but all removal or other remedial actions necessary to protect human health and the environment have been taken. IRP Site 8 is classified as Category 4 due to

petroleum contamination at a former UST site. Study Section 6 is classified as Category 4 due to the presence of trichloroethene (TCE) in groundwater at concentrations that have attenuated below cleanup standards and likely resulted from the deposition of spent solvent onto the ground. IRP Site 10 and Buildings 1001, 1002, 1003, 1004, 1011, 1012, 1013, 1016, 1103, 1104, 1105, 1106, 1107, 1108, 1109, and 1110 are within Study Section 6. A petroleum release occurred at IRP Site 10 and no releases are known to have occurred at any of the buildings in Study Section 6.

The fenceline of Study Section 5 and the building perimeters within the study section are classified as Category 7, an area that has not been evaluated or requires additional evaluation. Information obtained during environmental baseline survey (EBS) interviews indicated that pesticides and herbicides may have been applied in excess of manufacturers' recommendations or inappropriately (i.e., used in combination with waste hydraulic fluids). The fenceline and building perimeters within Study Section 5 are Category 7 because waste hydraulic fluids, oils, or fuels may have accumulated in the soils, and sampling has not been conducted.

2. PURPOSE

The following sections describe the general purpose of the ECP, scope of work, assumptions, limitations, and report organization.

2.1 GENERAL

The ECP meets the DOD requirement to prepare an ECP Report per the BRRM (DOD 4165.66-M, 1 March 2006). The ECP was conducted to collect reliable information regarding the environmental condition of the property to determine the property's suitability for outgrant or transfer, and to meet the requirements under Title 40, Code of Federal Regulations (CFR), Part 373, § 373.1, and AR 200-1, Environmental Protection and Enhancement. The information gathered during this assessment also will be used with the objective of assisting the Army, the General Services Administration (GSA), and the purchaser in making informed business decisions about the transfer of the property by reducing uncertainty regarding its environmental condition.

AR 200-1 (paragraph 15-6) requires an EBS be prepared to determine the environmental conditions of properties being considered for disposal. The Base Realignment and Closure Division (BRACD) has developed the ECP to surpass the requirements of the EBS in a manner that is more consistent with internal Army requirements regarding disposal of real property under the Base Realignment and Closure (BRAC) 2005 program. The Army prepares an ECP to:

- Identify, characterize, and document recognized environmental conditions
- Identify, characterize, and document the release or possible release of any hazardous substances or petroleum products from an adjacent property that would likely cause or contribute to contamination at the installation
- Provide a basis for determining if the property is suitable for transfer, lease, or assignment
- Provide information to satisfy legal requirements, including:
  - Notification requirements under §120(h)(1) and (3)(A)(i) of CERCLA and state or local real property transfer requirements
  - Uncontaminated parcel identification requirements of Section 120(h)(4) of CERCLA
  - State or local real property transfer requirements that are applicable to the Federal Government and the transaction.

This report is not intended to be a definitive investigation of all possible contamination at the subject property. Soil and groundwater were not sampled at CEKSF.

The ECP contains the information required to comply with the provisions of 40 CFR, Part 373 that require a notice to accompany contracts for the sale of, and deeds entered into for the transfer of, Federal property on which hazardous substances may have been stored, released, or disposed of. CERCLA §120(h) stipulates that a notice is required if certain quantities of designated hazardous substances have been stored on the property for 1 year or more—specifically, quantities exceeding (1) 1,000 kilograms or the reportable quantity (RQ), whichever is greater, of the substances specified in 40 CFR 302.4; or (2) 1 kilogram of acutely hazardous waste as defined in 40 CFR 261.5 and 261.30. A notice also is required if hazardous substances have been disposed of or released on the property in an amount greater than or equal to the RQ. AR 200-1 requires that an ECP address asbestos (AR 200-1 Chapter 8), LBP (AR 200-1 Section 4-6), radon (AR 200-1 Chapter 9), and other substances potentially hazardous to health.

The ECP Report is not prepared to satisfy a real property purchaser's duty to conduct an "appropriate inquiry" to establish an "innocent purchaser defense" to CERCLA 107 liability. Any such

use of the ECP by any party is outside the control of the Army and beyond the scope of the ECP. The Army, its officers, employees, or contractors make no warranties or representations that any ECP Report satisfies any such requirements for any party.

2.2 SCOPE

The scope of work for the ECP requires conformance with "Environmental Quality, Environmental Protection and Enhancements," AR 200-1 (paragraph 15-6), dated 21 February 1997 and CERCLA §120.

The ECP covers the entire CEKSF, located in Allegheny County, Pennsylvania, as shown in Figure 2-1. CEKSF consists of the following three areas:

- Main Post (formerly the Oakdale Army Air Defense Base or Nike Missile Master)
- Site 62 (the Nike Control Area, Site PI-62C)
- Neville Island Maintenance Support Facility.

The Main Post, Site 62, and Neville Island Maintenance Support Facility are shown in Figures 2-2, 2-3, and 2-4, respectively.

2.3 LIMITATIONS

The ECP Report summarizes readily available information on the environmental conditions of, and concerns relative to, the land, facilities, and real property assets at CEKSF. Its findings are based on extensive environmental investigations, reports, site historical documents, and a site reconnaissance conducted between 12 and 15 June 2006. Information obtained from these other studies is reflected within the ECP Report by reference. A complete list of references is provided in Section 8.

All installation buildings were visually inspected during the site reconnaissance. A 100 percent visual inspection of all undeveloped areas was not practical because of the size of the installation. No sampling or analysis was conducted during this survey.

2.4 REPORT ORGANIZATION

The remainder of this report expounds on the ECP setting, method, and findings. Section 3 describes the methods used to conduct the ECP. Section 4 provides a description of the CEKSF environment, an overview of facility operations and history, and a summary of previous environmental investigations. Findings of the ECP organized by relevant environmental "issues" (e.g., contaminant, contamination matrix, facility, or operation) are elaborated in Section 5. Conclusions are presented in Section 6. Section 7 includes the certification form. The references used in preparing this report are listed in Section 8.

The appendices are arranged to allow the reader to determine the full range of environmental issues relating to the installation. Appendix A includes the building inspection forms and Appendix B includes the property inspection forms. A complete set of site photographs is included in Appendix C. State and Federal database reports (i.e., the Environmental Data Resources [EDR] Radius Atlas with GeoCheck, NEPACheck, Sanborn maps, aerial photographs, and topographs) are provided in Appendix D. A title search document is included in Appendix E. Interview reports are included in Appendix F. Appendix G includes closure documentation.

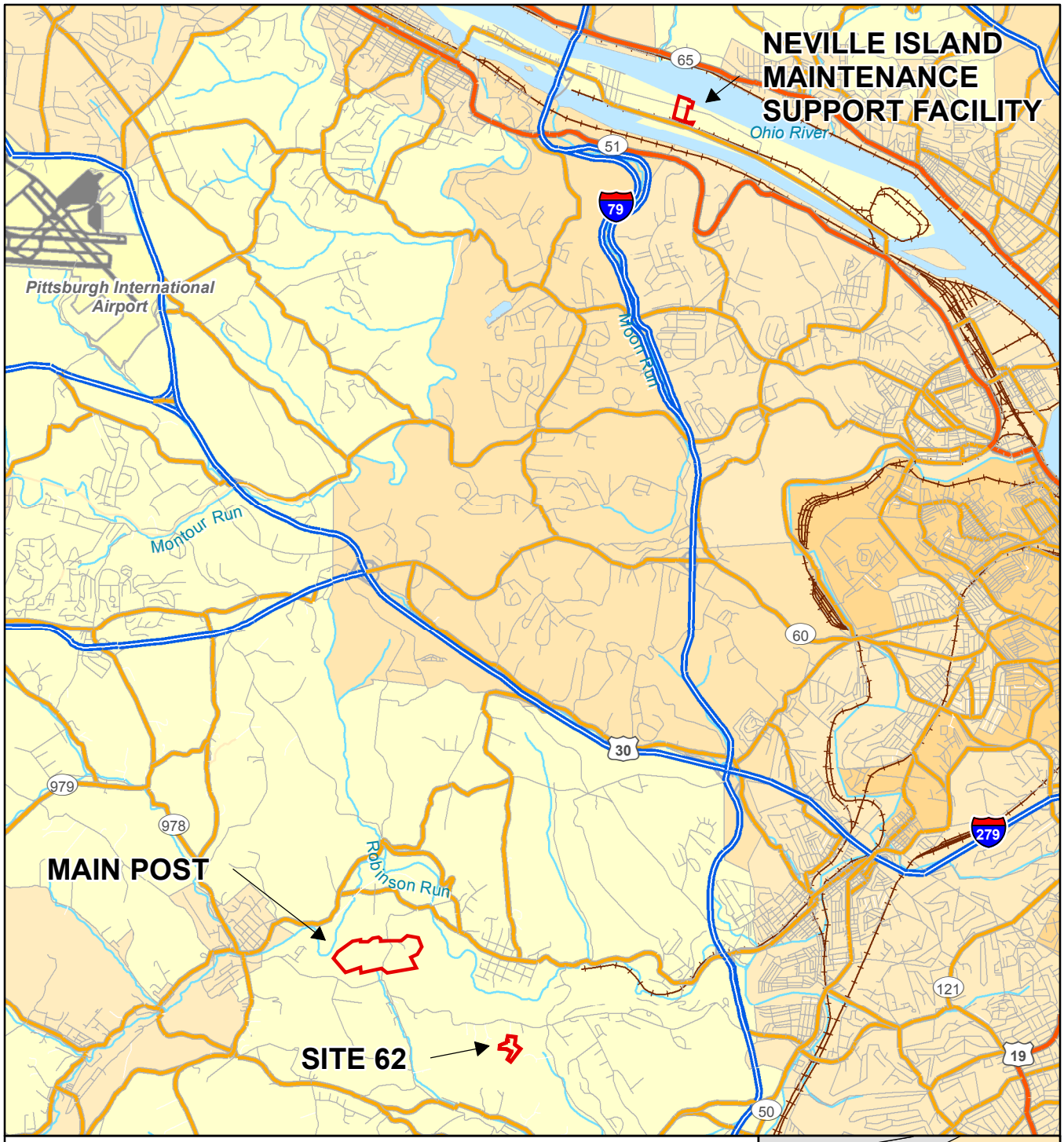


FIGURE 2-1
REGIONAL LOCATION MAP

Legend

Main Post Boundary

N

0.1 0.05 0 0.1
Miles

FIGURE 2-2
MAIN POST LOCATION

Legend

Site 62 Boundary

N

250 125 0 250 Feet

FIGURE 2-3
SITE 62 LOCATION

Legend

Neville Island Maintenance Support Facility Boundary

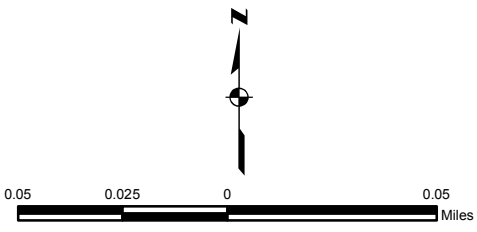


FIGURE 2-4
NEVILLE ISLAND MAINTENANCE SUPPORT FACILITY LOCATION

3. SURVEY METHODOLOGY

The following sections describe the process of developing study sections, the visual site inspection (VSI), and the aerial photography analysis.

3.1 DEVELOPMENT OF STUDY SECTIONS

To aid data collection, management, and retrieval, CEKSF was divided into study sections. Site information then was collected and organized by study section. Development of sections was based on the following considerations:

- Boundaries must be readily identifiable in the field
- Boundaries must correspond closely with those of properties destined for transfer to specific entities
- Boundaries have to be of a manageable size for survey
- Study sections must encompass all of the installation property
- No land area can fall into more than one section
- Sections must correspond with existing IRP study areas.

Accordingly, section boundaries were generally designated at the center of roads or streams, along fences, and along township section lines. Therefore, the Main Post is divided into Study Sections 1 through 4, Site 62 is defined as Study Section 5, and Neville Island is divided into Study Sections 6 and 7. Study section boundaries are shown in Figures 3-1 through 3-3.

3.2 VISUAL SITE INSPECTION

A VSI involving a driving tour of the facility and its perimeter, as well as a systematic survey by vehicle and on foot through each section of the property, was conducted between 12 and 15 June 2006 to field-verify information produced in the document review and to identify potential environmental concerns. All roads on the facility accessible by two-wheel drive vehicle were driven during the VSI. A VSI was conducted for all 72 buildings. Building inspection forms are included in Appendix A and property inspection forms are included in Appendix B. Appendix C presents the site photographs.

During the site reconnaissance, Universal Transverse Mercator (UTM) coordinates for the buildings surveyed and environmental findings were collected. A global positioning system (GPS) unit (Trimble® GeoXT™ hand-held) was used to determine coordinates. This unit is capable of sub-meter accuracy.

A reconnaissance of the base perimeter was conducted to evaluate adjacent property uses that could contribute to any environmental contamination detected onsite. The field team drove on roads along the perimeter to visually identify any contiguous properties that appeared, in the team's professional judgment, to have contamination that could migrate to the installation. Typical of properties that could pose a contamination risk are dry cleaners, gas stations, and industrial facilities. The findings of the perimeter survey are presented in Section 5.16.

3.3 AERIAL PHOTOGRAPHY ANALYSIS

Aerial photographs of the Main Post, Site 62, and Neville Island were reviewed during the programmatic environmental review (PER). Sanborn maps of Neville Island also were reviewed during the PER. Subsets of the aerial photographs and Sanborn maps, found during a database search conducted for the ECP, are included in Appendix D.

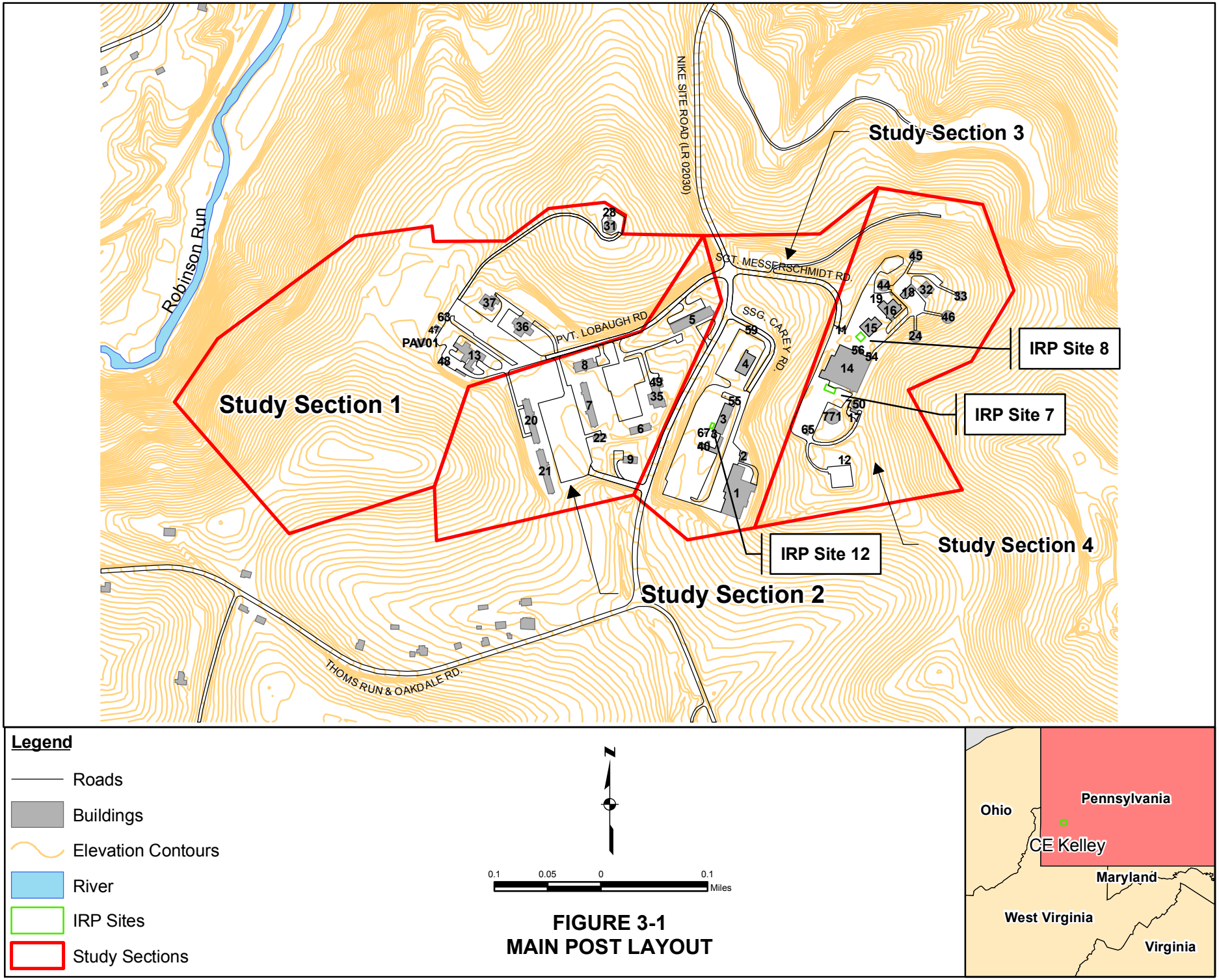


FIGURE 3-1
MAIN POST LAYOUT

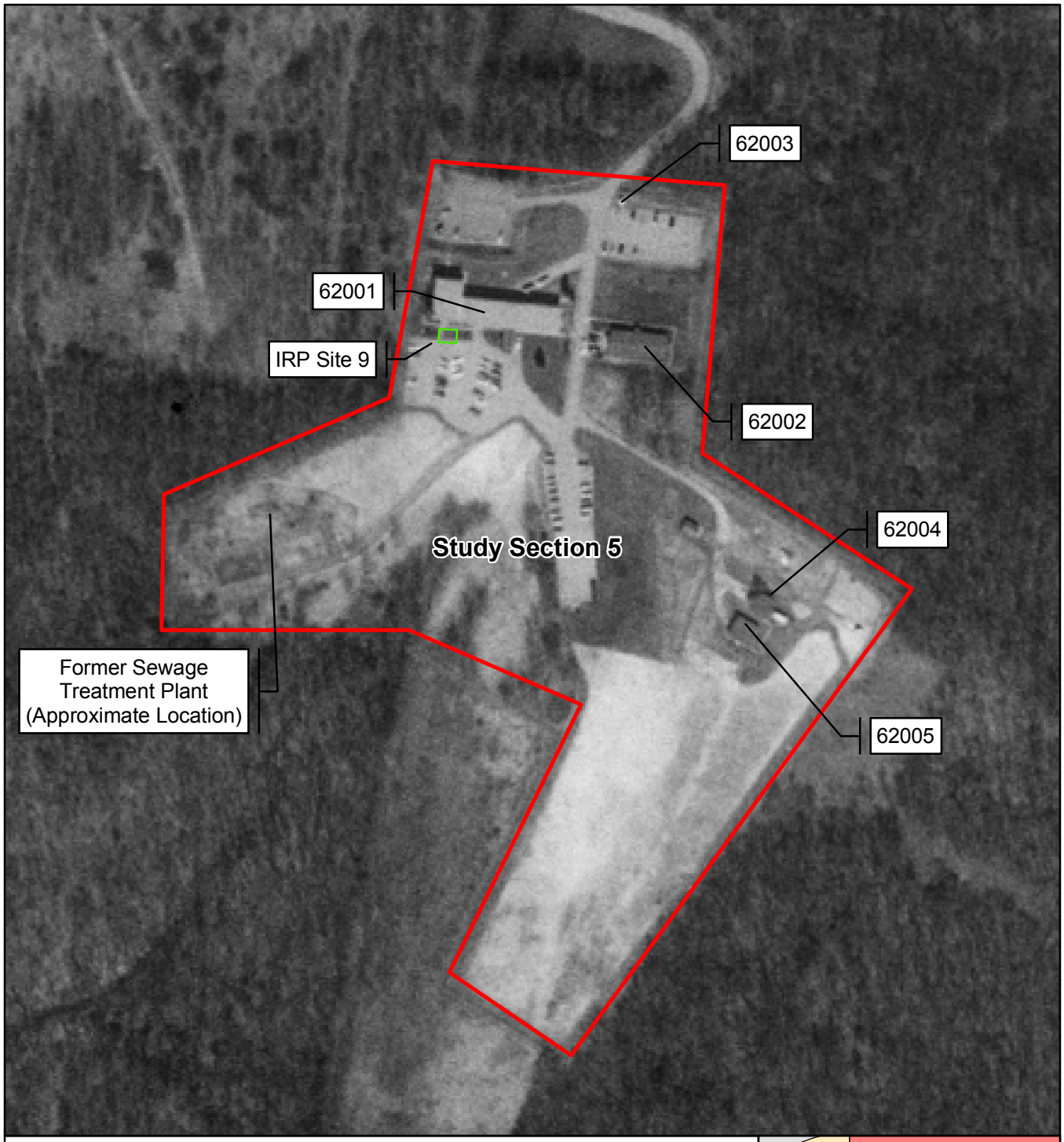


FIGURE 3-2
SITE 62 LAYOUT

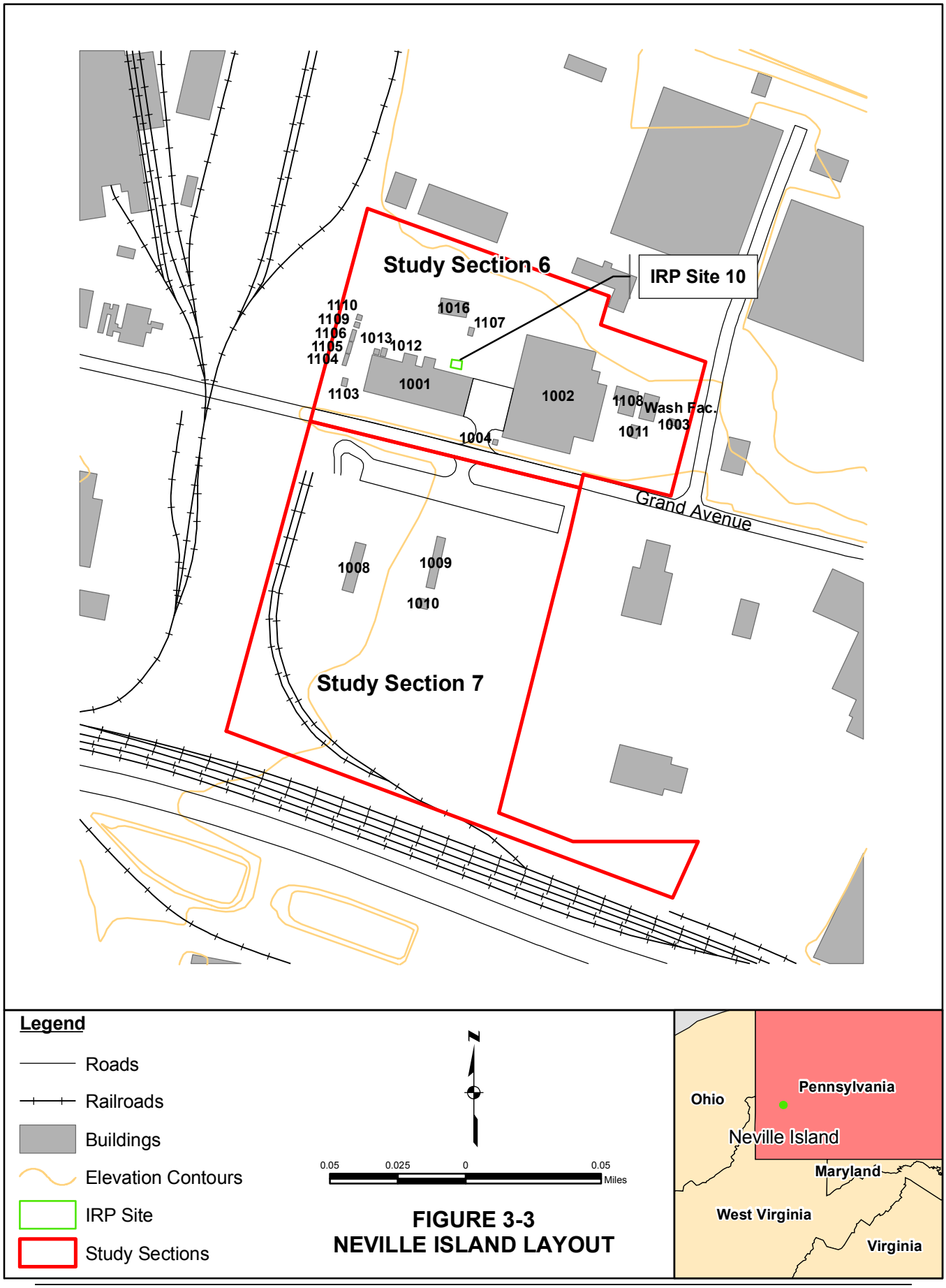


FIGURE 3-3
NEVILLE ISLAND LAYOUT

Main Post and Site 62—Seven aerial photographs (1939, 1949, 1959, 1969, 1982, 1993, and 2001) for the Main Post were obtained and reviewed for the 2004 EBS (USACE 2004). A farmstead is evident in the 1939 and 1949 aerial photographs. Construction of Building 14, Building 32, and four of the five aircraft and missile tracking radar towers can be observed on the 1959 aerial photograph. The 1969 photograph shows the entire Oakdale Army Air Defense Base during operation. Radomes on top of the aircraft and missile tracking radar towers, military equipment parking (MEP) around the motor vehicle maintenance building (Building 4), and aboveground steam lines branching from Building 9 are visible in the aerial photograph. The 1982 aerial photograph shows the Oakdale Support Element and a radome on top of Building 32. The 1993 aerial photograph shows three of the six aircraft and missile tracking radar towers without radomes. The 2001 aerial photograph shows the Main Post and Site 62 as the facilities exist today. All of the photographs show the surrounding and adjacent properties as farmland or wooded areas. Currently, housing developments are being constructed south of Site 62.

Neville Island—Seven aerial photographs (1939, 1949, 1959, 1969, 1982, 1993, and 2002) for Neville Island were obtained and reviewed for the 2004 EBS (USACE 2004). According to the 1939 aerial photograph, the land where the facility exists today was vacant with train cars or trailers located on the southern portion of the site. Industry existed northwest and southwest of the facility in 1939. Building 1002 and structures north and east of the site utilized by the U.S. Army Corps of Engineers (USACE) and the U.S. Army Reserve Corps are observable in the 1949 aerial photograph. The 1959 aerial photograph shows Building 1001, vehicles and/or equipment located in the south section of the site, and development occurring north of the facility. Industry southwest of the site and development south of Neville Road are also visible. The MEP area north of Building 1001, the MEP area south of Buildings 1008 and 1009, and privately owned vehicles (POVs) parking south of Grand Avenue and on the site are visible in the 1969 aerial photograph. The 1982 aerial photograph shows a new USACE structure north of the site and a building south of the site across Neville Road. MEP within the south section of the site is visible in the 1993 photograph. The 2002 photograph shows the site as it exists today.

A 1926 Sanborn fire insurance map shows small structures to the north that appear residential in nature. A 1939 aerial photograph no longer shows the structures that were present in 1926. By 1949, USACE had fully developed the property north of the site, at 3510 Grand Avenue, and operated a repair station for lock and dam structures in the Pittsburgh area (USACE 2004). Objects of interest that existed on the USACE property included an armory, two large warehouses, maintenance shops, and a 150,000-gallon water tower. No significant changes other than the removal of the 150,000-gallon water tower are shown on a 1959 aerial photograph and a 1965 fire insurance map of the property (USACE 2004).

A 1926 Sanborn fire insurance map and 1939 aerial photograph show no commercial or industrial development of the land to the east of the site. By 1949, an access road had been constructed along the eastern boundary of the site, north of Grand Avenue, to allow access to the USACE property. USACE also had constructed an administration building in the northeast corner of the site. Immediately east of this roadway was a building that housed a fire department and substation transfer yard. A building identified as the "Seamanship Building" existed farther east of the site and north of Grand Avenue. In addition, by 1949, the U.S. Army Reserve had constructed four building structures, with one labeled as "radar." A 1959 aerial photograph showed no significant changes in land use to the east of the site. However, by 1965, the Army Reserve structures south of Grand Avenue had been removed and replaced with one large building that housed a motor freight company. To the north of Grand Avenue, the fire station still remained, but the transfer yard was gone and the building farther east no longer was identified as a "Seamanship Building." Land use to the east of the site has continued to remain commercial over the years (USACE 2004).

A 1926 Sanborn fire insurance map and 1939 aerial photograph show no commercial or industrial development of the land to the south of the site, with the exception of the PC & Y Railroad tracks immediately south of the site. By 1949, PC & Y had added additional track lines and Neville Road had

been developed. A 1959 aerial photograph shows development on the property south of the site and across Neville Road. According to a 1965 Sanborn map and 1969 aerial photograph of the area, no visible changes had occurred since a decade earlier. By 1982, the property to the south of Neville Road had become fully developed for industrial use (USACE 2004).

A 1926 Sanborn fire insurance map showed a row of six residences to the west of the site, north of Grand Avenue. To the south of Grand Avenue and to the west was the Dravo Contracting Company facility, which owned the site prior to its purchase by the U.S. Government in 1943. The Dravo complex included a large erecting shop, stock house, machine shop, carpenter shop, and other ancillary buildings. By 1939, the Dravo facility and residences to the west of the site had been demolished and revegetation of the former Dravo property could be seen. It appears that the land to the west of the site most likely was purchased by the Vulcan Detinning Company, as the 1939 and 1949 aerial photographs, and a 1950 Sanborn map indicate that this company operated the facility farther west of the site. As shown in the 1950 Sanborn map, Vulcan operated a storage yard and weigh scales to the southwest of the Neville Island facility and a Detinning Plant to the northwest of the site. The Detinning Plant took scrap tinplate steel and extracted the tin for resale. The plant consisted of a wastewater treatment plant, a pump house, a storage warehouse, a boiler room, nitrate storage and department, an electrical substation, a warehouse containing electrolytic cells and evaporators, and detinning equipment. Vulcan operations to the immediate west of the site have not changed significantly since 1949. In 1988, the Vulcan Detinning Plant was purchased by AMG Resources Corporation, but operations did not change. The property southwest of the site, south of Grand Avenue, currently is utilized by American Steel Processing & Systems, Inc., another scrap steel processing facility (USACE 2004).

3.4 RECORDS REVIEW

The following sections identify the record sources, interviews, and method for data management.

3.4.1 Standard Environmental Record Sources

A search of state and Federal environmental databases was undertaken for CEKSF and any listed sites within standard search distances. The search was conducted to identify records of adjacent properties that exhibit potential environmental concerns. The findings of the search are summarized in Table 3-1 and a summary of the search results is provided in Section 5.16. The complete EDR Report is included in Appendix D.

3.4.2 Additional Record Sources

Reasonably accessible Army environmental documents; county, city, and state records; and aerial photographs of the property were reviewed to investigate land uses at the site. Local authorities were contacted to learn about historical uses of buildings and lands on the site. Available information on past land uses and their potential impacts was assessed. Other documents and resources of historical importance that were used include:

- Readily available records and files documenting where hazardous materials are stored and used onsite (a summarized list is included in Section 5.3).
- A chain-of-title summary, prepared to document the historical use of the property. This inquiry included a review of recorded deeds, leases, mortgages, easements, and other appropriate documents. A copy of the chain-of-title report is presented in Appendix E.
- Environmental documents and files at the U.S. Army Environmental Center (USAEC).
- Copies of permit applications and any notices of violations concerning the site.

Table 3-1. Database Search

Record(s) Source	Number of Sites – Main Post and Site 62	Number of Sites – Neville Island	Search Distance (miles)
Federal CERCLIS NFRAP List	0	1	0.5
Federal RCRA CORRACTS Facilities List	0	1	1.0
Federal RCRA Generators List	10	7	0.25
U.S. Brownfields	0	2	0.5
Federal MINES	4	0	0.25
Federal FINDS	19	0	Property only
State Landfill and/or Solid Waste Disposal Site Lists	0	1	0.5
State Leaking UST Lists	3	4	0.5
State Registered UST Lists	1	2	0.25
State Archive UST Lists	3	0	0.25
State Registered AST Lists	5	4	0.25
State VCP	0	1	0.5
State Brownfields	0	2	0.5

3.5 INTERVIEWS

Several interviews of key past and current facility employees were conducted to help identify environmental conditions at the installation. Interviews included topics of general environmental interest and specific areas of interest identified during the records review and were used to guide the VSI. After the VSI, additional interviews were conducted to fill remaining data gaps, including interviews with tenants at CEKSF. Copies of the interview reports are included in Appendix F. Table 3-2 lists the interviews conducted.

Table 3-2. List of Interviews

Title	Years Familiar with Parcels	Telephone No.
CESKF Personnel		
Base Commander	26 years	(724) 693-1845
Director, Project Office	6 years	(724) 693-1801
Realty Specialist	28 years	(724) 693-1839
Environmental Program Manager	14 years	(724) 545-3156
Tenants at CEKSF		
PX contact	1 year	(724) 693-2434
Commissary contact	5 years	(724) 693-2463
FAA (SOC Manager)	6 years	(412) 461-8825 ext. 246
312th Training Support Battalion contact	2 to 3 years	(724) 693-2002
99th RRC contact	20 years	(412) 604-8417
GSA contact	13 years	(724) 693-2404

3.6 DATA MANAGEMENT

The environmental conditions at the installation, developed as described above, were evaluated facility wide, and findings were compiled in an electronic database. The database is organized by study section and building number. This database is included in Appendix A. Photographs were taken of all facilities and any additional areas of concern. Photographs also are organized by study section and/or facility number. A complete set of site photographs is included in Appendix C. Interviews that were conducted with CEKSF employees and tenants were documented. Interview forms are organized by last name of the interviewee. These forms are included in Appendix F.

4. PROPERTY DESCRIPTION

The following sections describe the location, history, environmental setting, and biological and cultural resources.

4.1 INSTALLATION LOCATION AND DESCRIPTION

Main Post and Site 62—The Main Post is approximately 12 miles southwest of Pittsburgh, Pennsylvania, and comprises roughly 118 acres. There are a total of 48 buildings enclosing a combined 228,504 square feet. These buildings are shown in Figure 3-1 and described in Table 4-1. Developed land within the Main Post accounts for more than 45 acres, or approximately 38 percent, of the site. Developed land contains roads, paved areas, buildings, material and fuel storage areas, parking lots, lawns, landscaped areas, and a helicopter landing area. Forested land and open area together comprise the predominant land uses of the Main Post and total more than 70 acres (nearly 60 percent) surrounding the developed portions of the facility. A small recreation area to the northwest contains a baseball field and comprises approximately 4 percent of the land area of the Main Post (CEKSF 2005).

Site 62 is also approximately 12 miles southwest of Pittsburgh and 3 miles from the Main Post. Site 62 comprises approximately 13 acres. There are a total of five buildings, enclosing a combined 15,208 square feet. These buildings are shown in Figure 3-2 and described in Table 4-1. Most of the land surface within Site 62 is moderately steep. Surface elevations range from 1,115 to almost 1,181 feet above mean sea level (msl), representing a slope of approximately 8 percent from the northern to southern portion of the site. Between 1996 and 2001, the 99th Regional Support Command (RSC) was headquartered at CEKSF and occupied facilities at the Main Post, Site 62, and Site 63. In late 2003, all RSCs were redesignated to Regional Readiness Commands (RRCs). In 2001, the 99th RRC relocated its headquarters from CEKSF to a new training center in Coraopolis, Pennsylvania. Sites 62 and 63 were vacated and all tenant activities were consolidated at the Main Post. Site 63 was transferred out of U.S. Government control; however, Site 62 remains vacant (CEKSF 2005).

Neville Island—Neville Island is located along the Ohio River and is approximately 6 miles west of Pittsburgh and 20 miles from the Main Post. It is the location of the Army Reserve Area Maintenance Support Activity. Neville Island consists of approximately 18 acres with 19 buildings encompassing approximately 55,359 square feet. These buildings are shown in Figure 3-3 and described in Table 4-1. The northern portion of the site (north of Grand Avenue) contains 16 buildings. The southern portion consists of an open graveled area of land that contains three storage buildings. The graveled area is used to stage miscellaneous military equipment that is either awaiting repair or reclamation. The extreme southern portion of the site is an open grassy area that abuts a railroad right-of-way. Land use surrounding the Neville Island facility is entirely industrial. The zoning designation for Neville Island and surrounding areas is industrial park (CEKSF 2005).

4.2 HISTORICAL LAND USE

Main Post and Site 62—Archival information (USACE 2004) suggests that a farmstead once occupied a portion of the land on which the Main Post and Site 62 were constructed. The farmstead consisted of a dwelling and outbuilding (presumably a barn). According to available historical maps, the buildings were constructed as early as 1851. Although the exact construction date is unknown, the parcel remained within the Hays family through the early 20th century. These structures are visible in 1939 and 1949 aerial photographs of CEKSF. In 1957, the Army acquired 201 acres, including and encompassing the location of the preexisting farmstead. The land was acquired by condemnation or through agreement for the purpose of constructing and operating the Oakdale Army Air Defense Base. Construction of the facility began in 1959 and air defense operations were conducted between 1960 and 1974. In 1974, approximately 72 of the 201 acres of land were released to the U.S. Department of Interior (DOI) for the "Legacy of Parks" program. In June 1977, the base was redesignated as the Oakdale Support Element. The facility was designated as the Charles E. Kelly Support Facility in May 1987 (CEKSF 2005).

Table 4-1. Description of Buildings

Study Section	Building Number	Building Name	Area (ft^2)	Year of Construction	Construction Materials
1	13	PX	7,020	1961	Beige concrete block and metal structure that is in good condition.
1	28	Storage Shed	192	1975	Metal shed in poor condition residing on asphalt. We did not gain access during our 2006 survey.
1	31	Radar Tracking	4,060	1961	Two-story beige metal structure.
1	36	Distance Learning Center	7,000	1962	Beige concrete block structure that is in good condition. Outside is a grease trap located immediately north of the building.
1	37	Military Clothing Store	3,910	1962	Beige concrete block structure in good condition. Grease trap located at the northeast corner of the building.
1	47	Pumping Station	120	1955	Beige concrete block and wood panel structure in good condition residing on a concrete foundation. We did not gain access during our 2006 survey.
1	48	PX Layaway Storage	750	1955	Wood frame structure with beige corrugated metal and aluminum siding exterior that is in fair condition. It stands on a concrete foundation that is in good condition; however, the metal roof is beginning to rust.
1	63	Restrooms	224	1994	Small beige concrete block structure in good condition.
2	5	Administration	23,800	1961	Three-story beige concrete block structure that is in good condition with a metal roof.
2	6	Administration	6,400	1961	Beige concrete block structure that is in good condition with a metal roof.
2	7	Barracks	3,430	1961	Beige concrete block structure that is in good condition with a metal roof. Fitness center is carpeted.
2	8	Mess Hall	4,800	1961	Beige concrete block structure that is in good condition. Outside is a grease trap located immediately south of the building. No longer used for food preparation (functions are catered). Contains a large kitchen, serving area, and mechanical room.
2	9	Heating Plant	2,200	1961	Beige concrete block and corrugated metal structure that is in fair condition.
2	20	Administration	13,900	1961	Two-story beige concrete block structure that is in good condition with a metal roof. Metal shed in back of building stores furniture.
2	21	Administration	13,900	1961	Two-story beige concrete block structure that is in good condition with a metal roof.
2	22	Security Operations	1,270	1962	Beige corrugated metal structure that is in fair condition.

Table 4-1. Description of Buildings (Continued)

Study Section	Building Number	Building Name	Area (ft^2)	Year of Construction	Construction Materials
2	35	Checkerboard Community Center	6,150	1962	Beige concrete block structure that is in good condition with a metal roof. A grease trap is located immediately north of the building. Outside, there is a patio east of the building used for seasonal dining.
2	49	Storage	425	1969	Beige corrugated metal shed that is in good condition.
2	69	Storage Shed	485	1961	Beige corrugated metal shed that is in good condition.
3	1	C.E. Kelly Commissary	22,740	1961	Beige concrete block structure that is in fair condition, with a metal roof and asbestos tile floors. Two freezer units are located along the east side of the building. Building utilizes a grease trap.
3	2	Storage for Commissary	1,270	1961	Beige concrete block structure that is in good condition, with a metal roof and resides on a concrete foundation. We were unable to gain access during our 2006 survey due to a malfunctioning lock.
3	3	Field Maintenance	7,160	1961	Beige concrete block structure that is in good condition, with a metal roof and resides on a concrete foundation.
3	4	Administration	6,070	1961	Beige concrete block structure that is in good condition.
3	40	Maintenance Shop Storage	2,970	1962	Composed of six sub-units that are wood frame structures with aluminum siding, ply-wood, corrugated-metal, and corrugated-fiberglass exterior. The building is in poor condition, with damaged floors, peeling paint, and debris present.
3	43	Radar Tracking	18	1996	Concrete structure that is in good condition and resides upon a concrete foundation.
3	55	Storage Shed	128	1979	Red wood-paneled structure that is in good condition and resides upon a concrete foundation. We did not gain access during our 2006 survey.
3	67	Storage Shed	86	1975	Concrete block structure that is in good condition and resides upon a concrete foundation.
4	11	Guard Shack	42	1960	Beige concrete block guard shack that is in good condition and resides upon a concrete foundation.
4	12	Emergency Response	64	1978	A small, green, corrugated metal shed that is in fair condition and resides upon a concrete foundation.

Table 4-1. Description of Buildings (Continued)

Study Section	Building Number	Building Name	Area (ft^2)	Year of Construction	Construction Materials
4	14	Control Room	33,000	1960	A large multi-level beige steel-reinforced concrete structure that is in fair condition with a metal roof. There is a concrete ramp, and two concrete loading docks on its southern side. The building housed boilers that provided steam for the Main Post.
4	15	Consolidated Power Generator	5,370	1960	Beige concrete block structure that is in good condition residing on a concrete foundation.
4	16	Air Defense Command Operations	6,120	1960	Beige concrete block building that is in good condition with a metal roof and tile floor. The temperature is currently controlled by a boiler located within the building and is supplied heating oil from an AST located immediately north of the building.
4	17	Pump House	550	1960	Beige concrete block structure that is in good condition with a metal roof, and resides on a concrete foundation. We did not gain access during our 2006 survey, but were able to look through the windows.
4	18	Administration	1,730	1965	Beige concrete block structure that is in good condition with carpeting, and a metal roof.
4	19	Storage Shed	140	1996	Concrete block structure that is in good condition with a metal roof and resides upon a concrete foundation.
4	23	Storage Shed	110	1996	Concrete structure that is in good condition and resides upon asphalt.
4	24	Radar Tracking	3,620	1960	Two-story beige metal structure that is in good condition.
4	32	FAA Building	21,800	1961	Multilevel steel-reinforced concrete structure that is in good condition.
4	33	Radar Tracking	3,780	1962	Two-story beige metal structure that is in good condition. We did not gain access during our 2006 survey.
4	34	Storage Shed	99	1962	A small corrugated metal shed that is in poor condition. We did not gain access during our 2006 survey.
4	44	Radar Tracking	3,680	1961	Two-story beige metal structure that is in good condition. We did not gain access during our 2006 survey.
4	45	Radar Tracking	3,630	1960	Two-story beige metal structure that is in good condition. We did not gain access during our 2006 survey.
4	46	Radar Tracking	3,650	1960	Two-story beige metal structure that is in good condition.
4	54	Storage Shed	88	1995	Concrete block structure that is in good condition and resides upon a concrete foundation.

Table 4-1. Description of Buildings (Continued)

Study Section	Building Number	Building Name	Area (ft^2)	Year of Construction	Construction Materials
4	56	Storage Shed	88	1995	Concrete block structure that is in good condition and resides upon a concrete foundation. Grated floor for secondary containment.
4	64	Hazardous Waste Storage	155	1996	Gray metal CONEX storage trailer with secondary containment that resides on concrete and is in good condition.
4	65	Former Hazardous Waste Storage	155	1996	Gray metal CONEX storage trailer that resides on concrete and is in good condition.
4	66	Former Hazardous Waste Storage	155	1996	Gray metal CONEX storage trailer that resides on concrete and is in good condition.
5	62001	Missile Control	11,206	1955	Large concrete block structure with a metal roof, basement, and corrugated metal addition.
5	62002	Mess Hall	2,540	1955	Concrete block structure residing on a concrete foundation, with a metal roof.
5	62003	Sentry Building	24	1955	Small wooden shed residing on a concrete foundation.
5	62004	Generator Building	624	1955	Concrete block structure residing on a concrete foundation, with a metal roof.
5	62005	Storage Shed	814	1955	Concrete block structure residing on a concrete foundation, with a metal roof. Has asbestos floor tile. Still contains showers and a sauna.
6	1001	Vehicle Maintenance	13,600	1956	Attached to the north wall of the metal building are a mechanical room that houses a furnace, and a compressor room, which previously was utilized as the electrical generator building.
6	1002	Vehicle Maintenance	33,550	1943	Timber framed with beige metal exterior that is in good condition, residing on a concrete foundation.
6	1003	Used Black Beauty Storage	210	1961	Gable-roofed concrete block garage that is in poor condition and resides upon a concrete foundation.
6	1004	Utility Building	240	1996	A small beige concrete block structure that is in good condition. While the interior of the building could not be accessed, rust on the metal door and a small deteriorated wood structure immediately west of the building were observed.
6	1011	Unused Black Beauty Abrasive Storage	380	1994	Gable roofed wood framed with corrugated-plastic exterior that is in good condition and resides upon a concrete foundation. The building was not accessible during the 2006 ECP.
6	1012	Flammable Material Storage	140	1994	Gable roofed concrete block structure that is in good condition and resides upon a concrete foundation with a recessed floor providing secondary containment.

Table 4-1. Description of Buildings (Continued)

Study Section	Building Number	Building Name	Area (ft^2)	Year of Construction	Construction Materials
6	1013	Former Flammable Material Storage	160	1994	A small gable roofed concrete block structure that is in good condition and resides upon a concrete foundation with a recessed floor providing secondary containment.
6	1016	Loading Ramp	400	1996	Concrete loading ramp.
6	1103	Fuel Pumping Station	200	1996	AST fuel pumping station.
6	1104	CARC Paint Storage	155	1996	Gray metal CONEX trailer that resides on concrete and is in good condition. Contains secondary containment beneath the storage items.
6	1105	Hazmat Storage	155	1996	Gray metal CONEX trailer that resides on concrete and is in good condition. Contains secondary containment beneath the storage items.
6	1106	Hazmat Storage	155	1996	Gray metal CONEX trailer that resides on concrete and is in good condition. Contains secondary containment beneath the storage items. This trailer also contains heating units for temperature control.
6	1107	Storage	190	1967	Metal storage shed in very bad condition residing on a concrete foundation.
6	1108	Vehicle Painting Preparation	1,864	1997	Gable roofed concrete block structure that is in good condition and resides upon a concrete foundation.
6	1109	Flammable Material Storage	90	1999	Gable roofed concrete block structure that is in good condition and resides upon a concrete foundation with a recessed floor providing secondary containment.
6	1110	Flammable Material Storage	90	1999	Gable roofed concrete block structure that is in good condition and resides upon a concrete foundation with a recessed floor providing secondary containment.
7	1008	Hazardous Waste Storage	1,820	1964	Corrugated metal Quonset hut built over an arched steel frame that is in fair condition and resides upon a concrete foundation. Rust along the exterior of the building was observed.
7	1009	General Purpose Storage	1,820	1964	Corrugated metal Quonset hut built over an arched steel frame that is in fair condition and resides upon a concrete foundation. Rust along the exterior and old lights within the building were observed.
7	1010	Storage Building	330	1994	Gable roofed wood framed structure with red wood paneling exterior that is in good condition and resides upon a concrete foundation.

Neville Island—According to archival information, the Neville Island property passed through a number of private owners and one corporate owner prior to U.S. Government ownership. John Neville purchased the entire island in 1776, when the land was known as Long Island or Montours Island. After Neville's death, his daughter, Amelia, and her husband, Issac Craig, moved to Neville's home on the island circa 1815. The Hamilton family also settled on the island by the 1840s. Amelia Craig's children inherited portions of the island estate, her son, Oldham G. Craig, inherited the Neville Island home. A map of Neville Island in 1876 depicts a large tract near the site that was owned by O.G. Craig and Miss A.N. Craig and that contained one residence. This residence was located on the tract of land that was purchased by the U.S. Government, but would have stood beyond the northern boundary of the site, probably on land now occupied by USACE. The bulk of the inherited land, 60 acres including the Craig farmhouse, went to T.R. Pittock.

The U.S. Government purchased land on Neville Island that extended westward from T.R. Pittock's inheritance, into two roughly 7-acre tracts belonging to heirs of John Craig. The western tract was owned by Henry K. Craig and others; the eastern tract belonged to Anna M. Berlin. It appears that the current Building 1001 at the site straddles the Berlin/Pittock boundary line, and Building 1002 is on the former Pittock tract. A frame structure had been constructed north of the railroad on T.R. Pittock's land by 1905. It appears that the location of this former structure would have been immediately east of the current site boundary that surrounds Buildings 1008 and 1009 located south of Grand Avenue. According to historical maps, by 1926 the Dravo Corporation owned a large tract of land, where the Neville Island facility exists today. Located south of Grand Avenue and west of the current site was a large facility that was dedicated to the construction of landing ship tank (LST) boats, which provided a pivotal role for naval success during World War II (WWII). North of Grand Avenue was a large material yard. The U.S. Government purchased a roughly 52-acre tract from the Dravo Corporation in 1943, including the land on which the site currently rests. This purchased land was acquired through a Declarations of National Emergency by President Roosevelt dated 8 September 1939 and 27 May 1941 (CEKSF 2005).

4.3 FACILITY HISTORY

Main Post and Site 62—CEKSF has been the site of various missions since the early 1960s. Headquarters, U.S. Army Support Detachment, Oakdale moved from South Park, a county park of Allegheny County, Pennsylvania, to the present location of CEKSF in 1961. The facility was first occupied by Headquarters and Headquarters Battery 18th Air Defense Artillery (ADA) Group and the 662nd Radar Squadron (U.S. Air Force [USAF]). In 1962, the Federal Aviation Administration (FAA) assumed part of the radar mission from the USAF and in 1972 assumed the complete radar mission. In 1974, the 18th Artillery Group (AG) was inactivated, leaving the U.S. Army Support Detachment and the FAA as the remaining activities at Oakdale. Approximately 72 of the 201 acres of land were released to DOI in 1974 for the "Legacy of Parks" program. In September 1974, Forces Command (FORSCOM) approved a plan for continued support of reserve components in western Pennsylvania and West Virginia. This reorganization and consolidation of the U.S. Army Support Detachment oriented its logistical and training functions toward increasing the readiness posture of the 99th Army Reserve Command (ARCOM) (encompassing 11,870 personnel and 34,829 major pieces of equipment) and its major units consisting of an artillery group, a petroleum group, an ordnance group, a field depot, two artillery battalions, a supply and storage battalion, a personnel and administration battalion, a general hospital, and three U.S. Army Reserve (USAR) schools. The U.S. Army Support Detachment continued to provide base support functions to units of the 83rd ARCOM located in Ohio, U.S. Army Readiness Group, 14 Reserve Officer Training Corps (ROTC) activities, and the Armed Services Recruiters.

In June 1977, FORSCOM implemented the one-post concept, deactivating Headquarters, U.S. Army Support Detachment. The post was redesignated as the Oakdale Support Element and those support activities remaining were transferred to the existing Directorships of Fort Indiantown Gap, Annville, Pennsylvania. In October 1983, Oakdale Support Element became a sub-installation of Fort

George G. Meade, Maryland. In May 1987, the facility was designated as the Charles E. Kelly Support Facility. In July 1988, it became a Garrison Headquarters under First U.S. Army and, in October 1993, it was realigned under Fort Drum, New York.

The number of Reserve command posts nationally was reduced by half in 1996, under the BRAC Act. As of October 1997, CEKSF was realigned under Fort Dix and the U.S. Army Reserve Command (USARC). The 99th RSC absorbed two other command divisions and expanded its jurisdiction to Pennsylvania, West Virginia, Virginia, Maryland, Delaware, and the District of Columbia. Total troops in its jurisdiction rose from 8,000 to 22,000, and personnel working at CEKSF rose from 295 to 576. The 99th RSC Headquarters has since built new facilities at Pittsburgh International Airport's old terminal site (CEKSF 2005).

Neville Island—The Neville Island facility originally was established by the Army in 1943 to repair, maintain, and upgrade military vehicles and equipment, as well as to provide support for the anti-aircraft gun batteries and Nike missile systems that defended the Pittsburgh Defense Area during the Cold War (CEKSF 2005).

4.3.1 Operational History

Main Post and Site 62—The base became operational with Missile Master capabilities in 1960. From 1961 through 1963, the base housed the Headquarters and Headquarters Battery of the Army's 5th Battalion and 3rd Artillery Brigade. Its function was to improve the coordination of its Nike surface-to-air missile batteries located within the Pittsburgh Defense Area. In addition to housing the headquarters for Army air defense operations in the Pittsburgh area, the Base also contained FAA and USAF units associated with civilian and military radar coverage of the region and with the operations with the North American Aerospace Defense Command (NORAD) and Semi-Automatic Ground Environment (SAGE). In 1962, FAA assumed part of the radar mission from the USAF and in 1972 assumed the complete radar mission. Through 1966, the Base served as a Missile Master installation and then was upgraded to Missile Mentor status during the period from 1967 to 1974 (CEKSF 2005).

Site 62 was used from 1958 to 1962 by the U.S. Army Air Defense Command (ARADCOM) and the 662nd Radar Squadron of the USAF. The site was used as a control site by the Army for various Nike missile sites. During this same period, it also was used as a communications center by the USAF and for the storage of equipment for the ARADCOM. In 1962, FAA assumed part of the radar mission from the USAF and, in 1972, FAA assumed the entire radar mission. ARADCOM operations were deactivated in 1975 (WCFS 1997). Site 62 then was used for equipment storage and vehicle storage and light maintenance. The site has been vacant since 2003 (CEKSF 2005).

Neville Island—Historically, Neville Island has had varied roles, from producing marine landing craft for the Navy during WWII to its current vehicle support role. During the Cold War era, complete missiles would not have been brought onsite; rather, various missile components would have been brought onsite for maintenance, testing, and upgrading; Buildings 1001 and 1002 historically have served as military vehicle and missile component maintenance shops. Likewise, other buildings at the site historically have been used in a similar fashion as they are today. According to onsite personnel, Building 1001 once was utilized by the Navy as a sheet metal shop for repairing and constructing LST boats during WWII.

To facilitate cooperation and communication between the U.S. Army and its Nike missile contractors, offices for technical representatives of the Douglas Aircraft Company (designers of the airframes of both the Ajax and Hercules missiles) and the Western Electric Corporation (the prime contractor responsible for the Nike system) were located within the missile shop (Building 1001) (CEKSF 2005).

4.3.2 Process Descriptions (Industrial Facilities Only)

Industrial operations at CEKSF are limited to those associated with light vehicle storage and maintenance. The Neville Island facility maintains heavy equipment and vehicles. Shop operations at Neville Island include parts cleaning and repair, a sand blasting building, and a paint booth (CEKSF 2005).

4.3.3 Occupancy, Lease, and Easement History

There are 14 leased buildings at the Main Post of CEKSF with tenants including FAA, GSA, Defense Commissary Agency (DeCA), Army and Air Force Exchange Service (AAFES), and the 99th RRC. Building and tenants include:

- Building 1 – Commissary to DeCA
- Building 5 – Administrative Offices to 2/312th Training Support Battalion
- Building 6 – Portion as Administrative Office to FAA
- Building 13 – Post Exchange (PX) and Class Six Store to AAFES
- Buildings 15/16/21 – 23rd AG
- Building 18 – Administrative Offices to GSA Fleet Management
- Building 20 – Administrative Offices to 864th Replacement
- Building 21 – Administrative Offices to 303rd PSYOPS
- Building 22 – Physical Security
- Building 32 – Radar Facility to FAA
- Building 36 – Barber Shop and Union Office to AAFES and Distance Learning Center
- Building 37 – Military Clothing Store
- Building 45 – Storage to 99th RRC.

Interservice Support Agreements (ISSAs) exist with the 99th RRC and include Buildings 5, 15, 16, 20, 21, and 45. The uses of the buildings are included in the bulleted list above, but the ISSA for these tenants are all with the 99th RRC.

The commissary, located in Building 1, is run by the DeCA and is the only commissary in the Pittsburgh area. While the customer base in the area has been increasing recently, the number of active duty personnel in the area has remained fairly steady.

AAFES operates the PX (Building 13), military clothing store (Building 37), and barber shop (Building 36) at the Main Post. The military clothing store does military issue for approximately 150 Reserve units. The majority of sales activities at the facility are by telephone sales orders (approximately 65 percent) from Reserve units located elsewhere. The Distance Learning Center in Building 36 is operated under a Memorandum of Understanding (MOU).

Two easements exist on the Main Post. One includes a petroleum pipeline that crosses the recreational area and the second involves a microwave tower. There are no leases or agreements associated with either Site 62 or Neville Island (Personnel Communication 2006a).

4.3.4 Range Operations

CEKSF does not have any operational or historical ranges (CEKSF 2005).

4.4 INSTALLATION UTILITIES (HISTORICAL AND CURRENT)

The following sections provide a description of each utility system at CEKSF. The systems discussed include water, industrial sewers, sanitary sewers, stormwater management, natural gas, and electricity.

4.4.1 Water Systems

Main Post and Site 62—Potable water service is provided to the Main Post and Site 62 by the Penn-American Water Company. The potable water distribution system consists of approximately 9,800 linear feet of water lines made of copper or polyvinyl chloride (PVC). The pipes range in size from 1½ to 10 inches in diameter. There is one 125,000-gallon capacity steel AST (Tank 750), and a pump house (Building 27) with a capacity of 54,000 gallons per day (gpd) that supplies the Upper Post, the portion of the Main Post east of State Route (SR) 02030. In addition, there is a 210,000-gallon capacity AST steel tank (Tank 771) with overflow near the pump house. A letter dated 14 April 2003 from the Allegheny County Health Department states that CEKSF does not qualify as a public water supply and, therefore, is not required to conduct routine water quality testing. Water service is available to a majority of the Main Post buildings and is monitored monthly on a voluntary basis (CEKSF 2005).

Neville Island—The West View Water Authority provides potable water service for the Neville Island facility. The potable water distribution system consists of approximately 490 linear feet of small service lines and larger distribution lines with diameters up to 6 inches. The piping system appears to be constructed of cast iron exclusively. The Water Authority owns the meter that serves the system. The meter vault is of a standard design by the Pennsylvania American Water Company. The estimated daily maximum demand is 1,000 gpd and the estimated annual consumption is 102,000 gallons of water (CEKSF 2005).

4.4.2 Industrial and Sanitary Sewers and Treatment Plants

Main Post and Site 62—The Collier Township Municipal Authority provides wastewater treatment for the Main Post and Site 62 at a maximum rate of approximately 1.5 million gallons per year. The wastewater collection system at the Main Post consists of approximately 7,580 linear feet of gravity flow sewerlines, not including service connections to buildings. Wastewater collection pipes range in size from 6 to 8 inches in diameter. Piping materials used in construction of the gravity sewerlines consist of mostly cast iron and PVC. There are approximately 46 sanitary manholes associated with the sanitary sewer collection system (CEKSF 2005).

CEKSF operated a wastewater treatment facility at Site 62. The treatment system was constructed in the late 1950s to early 1960s to process raw sewage. The former treatment system location is shown in Figure 3-2. It consisted of septic/flotation tanks that drained through sand filter beds and discharged outside the site boundaries. It was operational until 1999 when it was closed via a letter from the Pennsylvania Department of Environmental Protection (PADEP) dated April 1999 (CEKSF 2005).

Neville Island—The Collier Township Municipal Authority provides wastewater treatment to the Neville Island facility at a maximum rate of approximately 0.064 million gallons per year. The wastewater system collection system at the site consist of approximately 590 linear feet of gravity flow sewerlines, not including service connections to buildings. Wastewater collection pipes consist of cast iron pipes, 6 inches in diameter. The majority of the sanitary manholes are constructed of concrete with open-pick-hole type covers. The wastewater stream is principally from domestic wastewater with smaller and/or intermittent contributions from nondomestic sources. The nondomestic flows associated with the sandblasting and painting operation are pre-treated at the source by means of oil/water separators (OWSs) and grease traps, respectively, prior to entering the collection system. The wastewater collection system at the site contains no lift station and, therefore, no force mains (CEKSF 2005).

4.4.3 Stormwater System

Main Post and Site 62—The Upper Post can be divided into two surface flow areas. The first is centrally located around Buildings 15 and 16. The other surface flow area is topographically lower and is configured around Buildings 1, 3, and 4. Stormwater collection points within the first surface flow area are designed to discharge stormwater directly to the environment. For buildings located northeast of Building 14, stormwater is diverted off the ridge in either a northwest or southeast direction toward Robinson Run. Located northwest of Buildings 14, 15, 16, 18, and 32 are nine surface drains and two catch basins that discharge stormwater off the ridge and hillside in a northwest direction. The six drains and three catch basins located southeast of Buildings 14, 15, 16, 18, and 32 drain to the southeast and off the hillside (CEKSF 2005).

The topographically lower portion of the Upper Post is occupied by Buildings 1, 3, and 4. Stormwater flowing downhill or in the northwest direction within this area is diverted around the back of these buildings and at Building 3 the stormwater is diverted into open drain channels that direct the flow in either a southwest or northeast direction. Stormwater runoff from the hillside behind Building 3 that flows southwest behind the commissary and its front parking lot collects in a series of drainage channels that discharge near the corner of SR02030 and Old Oakdale Road. Stormwater runoff from the hillside behind Building 3 that flows northeast behind Building 4 flows inside drain channels that parallel SSG Carey Road and discharges into stormwater drainage swales along SR02030 (CEKSF 2005).

The Lower Post, the portion of the Main Post west of SR02030, is located in a topographic depression at the headwaters of Thoms Run. The network of buried drains and channels convey stormwater from the north end of the Lower Post into three underground pipes that direct flow into one 36-inch pipe that travels south into Thoms Run located off the property. The northwestern extent of the Lower Post near Buildings 13, 31, and 36 is drained by a network of inlets, catch basins, and open channels that convey stormwater into an underground pipe that runs behind Building 20. The second underground line collects stormwater from the hillside, PVT Lobaugh Street, and from a series of buried drains east of Building 20. The third underground pipe collects stormwater from PVT Lobaugh Street and a parking lot located in front of Building 6. The stormwater from all three pipes flows into an underground union in front of Building 7 and then south through a 36-inch underground line that collects water from the parking lot in front of Building 21 and discharges into Thoms Run, which is located south of the property (CEKSF 2005).

Neville Island—Stormwater collection points at Neville Island are configured as direct discharges to the environment. Stormwater that impacts the southern portion of the site, south of Grand Avenue, permeates into the fill layer atop a concrete substrate. This substrate covers an undetermined amount of the area. Unabsorbed stormwater tends to pool and evaporate in the vicinity where it fell. Stormwater that impacts the site north of Grand Avenue permeates into unpaved parking surfaces or pools/evaporates in-place on asphalt surfaces. The stormwater that permeates into the unpaved surface areas flows north into the nearby Ohio River. Rainwater collected from the office/maintenance buildings and supply building gutters discharge via downspouts directly to the outside pavement at ground surface (CEKSF 2005).

4.4.4 Electrical System

Main Post and Site 62—Electrical power for the site is provided by Duquesne Light Company, which enters the Main Post substation at 4,160 volts. There are a total of 20 pad-mounted and 6 pole-mounted transformers at the Main Post and Site 62. There are three substation transformers rated at 833⅓ kilo volt ampere (kVA) that are owned by Duquesne Light Company. All other transformers are rated at 10 to 500 kVA. The distribution system consists of approximately 55,908 linear fleet of overhead distribution lines and 23,255 linear feet of exterior lighting (CEKSF 2005).

Neville Island—Electrical power for Neville Island also is provided by Duquesne Light Company. There are approximately 29 poles, 3 25-kVA single-phase pole-mounted transformers, and 2 pad-mounted transformers. The distribution system consists of approximately 900 linear feet of overhead distribution lines and 900 linear feet of exterior lighting (CEKSF 2005). The annual power consumption, as indicated by the two meters, is 35.64 and 145.6 megawatt-hours. The Neville Island facility operates 40 hours per week for an average consumption of 1.8 megawatts per year (Personnel Communication 2006b).

4.4.5 Natural Gas Distribution

Equitable Gas Company supplies natural gas to the Main Post and Site 62 and has a peak demand of 7,396 thousand cubic feet per month and an annual consumption of 40,306 thousand cubic feet per year. The natural gas distribution system consists of steel and polyethylene piping and is supplied at a pressure of 30 pounds per square inch (psi) gauge throughout the property. The size of the mains range from 1½ to 6 inches in diameter, and service lines range from 1 to 1¼ inches in diameter. The distribution system consists of approximately 150 linear feet of 6-inch steel, 1,370 linear feet of 4-inch polyethylene, 1,525 linear feet of 3-inch polyethylene, and 1,350 linear feet of 2-inch polyethylene piping (USACE 2004).

Columbia Gas of Pennsylvania supplies gas to the Neville Island facility and has a peak demand of 4,540 thousand cubic feet per month and an annual consumption of 22,417 thousand cubic feet per year. The natural gas distribution system consists of approximately 660 linear feet of 2-inch steel. Natural gas is supplied through a meter station located in the meter house (Building 1004). The lines from the meter house to the buildings are the original steel lines installed in the early to mid-1940s. There has been no significant maintenance performed on the distribution system under Army ownership, dating back to the early 1960s. Natural gas is utilized to meet space and water heating requirements on the facility, primarily in buildings. There are no gas fired air conditioners, compressed gas fueling stations, or propane ASTs on the Neville Island facility (USACE 2004).

4.5 ENVIRONMENTAL SETTING – NATURAL AND PHYSICAL ENVIRONMENT

The following sections describe the environmental setting of CEKSF and include information on climate, topography, surface water hydrology, geology, groundwater, and demography and land use.

4.5.1 Climate

The climate of Allegheny County is humid continental marked by extreme seasonal temperature changes. The main air masses affecting the region originate in the Gulf of Mexico, the western United States, and Canada. Annual precipitation is 36 to 40 inches. Approximately 58 percent of this rainfall occurs between April and September. Record maximum event totals range from 8 to 9 inches. Snowfall in the area is approximately 43.8 inches per year. Successive freeze/thaw periods occur every winter, which could impact construction project schedules. Normal daytime temperatures in the winter range from the low 40s in the south to the mid-30s at higher elevations in the central and northern parts of the county. Summer daily maximum temperatures generally range from 79 to 83°F. Spring (47 to 71°F) and fall (50 to 75°F) have wide ranges in daily maximum temperatures (CEKSF 2005). The record low temperature is approximately -22°F and the record high temperature is approximately 103°F (NOAA 2006).

4.5.2 Topography

CEKSF is located in Allegheny County, which lies in the Appalachian Plateau physiographic province. The province is characterized by flat-topped hills separated by steep-sided stream valleys. The

hilltops range in elevation from approximately 1,210 to 1,310 feet above msl and the valley bottoms generally at an elevation of 700 to 800 feet above msl (CEKSF 2005).

Most of the Main Post is rolling, open, or developed land with remaining areas being tree-covered. The Main Post occupies a hill and part of the Robinson Run valley. Much of the undeveloped land consists of relatively steep slopes ranging from approximately 20 to 27 percent slope (JGA 2004). SR02030 runs north/south and divides the Main Post into two topographic regions: the "Lower Post" and the "Upper Post." The Upper Post is located east of SR02030 and is approximately 1,280 feet above msl. Located west of SR02030, the Lower Post is approximately 1,120 feet above msl (CEKSF 2005).

Most of the land surface within Site 62 is moderately steep. Elevation extremes range from 1,115 to almost 1,181 feet above msl, representing a slope of approximately 8 percent from the northern to southern portion of the site (CEKSF 2005).

Neville Island is an island in the Ohio River having a maximum elevation of 770 feet above msl. The land surface within Neville Island is level with a site elevation of 705 feet above msl. Normal river stage is controlled at approximately 700 feet above msl (CEKSF 2005).

4.5.3 Surface Water Hydrology

CEKSF is within the Lower Chartiers Creek watershed and is just south of Robinson Run and north of Thoms Run, which feed Chartiers Creek. The Main Post is located on high ground and few water resources exist onsite. The only streams that do exist are intermittent and occasionally drain into perennial streams located outside the site boundary (CEKSF 2005).

Surface water runoff in the northern portion of the Main Post flows into Robinson Run, located to the northeast of the installation. Surface water runoff in the central and southern sections of the Main Post flows into Thoms Run located southwest of the installation. Both of these water bodies flow into Chartiers Creek. Chartiers Creek flows north for approximately 8 miles, where it discharges into the Ohio River (SAIC 2000).

Surface water runoff from Site 62 flows into Boyds Run (warm-water fishery) on the northeast and Thoms Run (trout-stocked stream) on the southeast. Both of these bodies of water flow into Chartiers Creek (warm-water fishery). Chartiers Creek discharges to the Ohio River (warm-water fishery) approximately 8 miles downstream from the site (SAIC 2000).

There are no surface water features, such as streams or ponds, located on the Neville Island facility. The site is within the Upper Ohio watershed and is located at the center of Neville Island. Surface water runoff on Neville Island that is not retained discharges to the Ohio River. Neville Island is an elongated, narrow island roughly 4.8 miles long where the main channel of the Ohio River flows along the north shore of Neville Island, approximately 800 feet from the site. A smaller back channel of the Ohio River flows along the southern shore of Neville Island, approximately 1,400 feet from the site. The Ohio River is controlled though a series of lock and dams located on both channels of the Ohio River, with the Emsworth Dam located on the main channel approximately 7,500 feet upstream of the site. Federal Emergency Management Agency (FEMA) flood insurance rate mapping indicates that Neville Island is not within the 100- or 500-year floodplain (CEKSF 2005).

4.5.4 Geology

The rocks of Allegheny County are sedimentary in origin and have horizontal layering. A gentle regional dip is located to the south. Sandstone, shale, claystone, siltstone, limestone, dolomite, and coal are the rocks exposed in the county. Conglomerate also is occasionally present. All rocks are of Permian and Pennsylvania age of the Paleozoic era.

Rocks of the Casselman and Monongahela Groups underlie the Main Post, Site 62, and Neville Island. The Monongahela Group consists of approximately 270- to 350-foot-thick cyclic sequences of limestone, shale, and coal with underclay. The major water-bearing units of the Monongahela are primarily the limestone and sandstone rocks where the median yields approach 15 gallons per minute (gpm). Well yields as high as 100 gpm have been documented in these limestone and sandstone sequences. Excessive dissolved iron and hardness are the frequent water quality problems found in groundwater from wells in the Monongahela.

The Casselman Group consists of 235- to 550-foot-thick cyclic sequences of shale, siltstone, red beds, thin impure limestone, and thin nonpersistent coal. The red beds are associated with landslides in certain areas of Allegheny County. Groundwater yields from wells in the Casselman Group are highly variable, with higher yields found in the sandstone sequence. Groundwater from wells in the Casselman Group is considered of fair water quality.

River terrace deposits of unconsolidated gravel, sand, and silt are present in a linear pattern along the Ohio, Allegheny, Monongahela, and Youghiogheny Rivers and some of the larger tributary streams. The oldest of these river terraces were deposited during the time of glacial activities to the north of the county. Recent stratified alluvium is in the low-lying floodplains adjacent to the present streams (CEKSF 2005).

Abandoned coal mines are known to underlie CEKSF. Two test borings drilled at the installation indicated that the soil and rock cover in the area is greater than 100 feet. One boring was located at the Main Post (total depth of 142 feet) and the other boring was located at Site 62 (total depth of 220 feet). Based on the test borehole results, the facility Use/Replacement Economic Feasibility Assessment concluded that ground subsidence was unlikely (STV 1995); however, the document reviewers suggested that there was no guarantee that subsidence would not occur in the future (WCFS 1997).

4.5.5 Groundwater

Previous site assessments and drilling observations confirm that the Upper Post is underlain by a thin soil layer on top of bedrock (approximately 5 to 15 feet below land surface [BLS]) in which a shallow perched groundwater zone is found above the bedrock/soil interface. The lateral extent of the area that exhibits the perched water condition is limited and constrained by the nearby building foundations and the topography. The bedrock beneath the perched zone is dominantly low-permeability material such as shale and siltstone. Vertical infiltration of groundwater through the low-permeability materials is variable and controlled by the presence of fractures. Data from monitoring wells located around Buildings 14 and 15 indicate that an upper groundwater table exists approximately 15 to 23 feet BLS and regional groundwater flows in a northern direction. The next encountered groundwater table is more than 100 feet BLS. There is no site-specific groundwater data for the Lower Post; however, based upon relative topography and the emergence of Thoms Run at the southern boundary of the property, groundwater is most likely closer to ground surface in this portion of the Main Post (USACE 2004).

Depth to groundwater at Site 62 is unknown. Shallow groundwater, if present, may flow radially because it is located on a hilltop (WCFS 1997).

Based upon the results of the quarterly groundwater monitoring program at the Neville Island facility, groundwater occurs at a depth of approximately 32 to 35 feet BLS and is entirely within the lower alluvium unit. The water table aquifer is unconfined, with underlying bedrock acting as the lower confining unit. The primary sources of groundwater in Neville Island are river infiltration and direct precipitation. Previous groundwater monitoring events indicate that the hydraulic gradient ranges from 0 to 0.001 ft/ft and the groundwater flow direction is complex. The fluctuating river stage of the Ohio River apparently influences the groundwater flow direction and hydraulic gradient at the Neville Island facility (USACE 2004).

4.5.6 Demography and Land Use

CEKSF provides essential support services for an estimated population of 1,300 active duty military, reservists, and civilians; approximately 4,100 dependents; and approximately 21,000 retirees throughout Pittsburgh and the southwestern Pennsylvania region. The Main Post lies east of the borough of Oakdale, Pennsylvania (population 1,667) and the Neville Island Maintenance Facility is located in Neville Township (population 1,170).

Land use surrounding the Main Post consists of primarily forested, residential, and agricultural lands. The Main Post has a local zoning designation of residential, with surrounding areas zoned conservation and special conservation, industrial, and suburban residence district.

Land use surrounding Site 62 is primarily forested and residential areas. Site 62 has a local zoning designation of suburban residence district, with surrounding areas zoned similarly.

Land use surrounding the Neville Island facility is primarily industrial/commercial. The zoning designation for Neville Island and surrounding areas is industrial park (CEKSF 2005).

4.6 BIOLOGICAL AND CULTURAL RESOURCES SUMMARY

The following sections describe the biological and cultural resources at CEKSF.

4.6.1 Biological Resources

The U.S. Fish and Wildlife Service (USFWS) lists 13 animals and 3 plants as threatened or endangered within the Commonwealth of Pennsylvania. The Commonwealth of Pennsylvania tracks a large number of biota of concern through the Pennsylvania Natural Diversity Inventory (PNDI). According to the PNDI , no state or federally listed species are known to occur on or near CEKSF. This process involves an evaluation of not only currently listed species, but also species of concern and candidate species. Similarly, field surveys in September 2002 and January 2003 found no listed species on CEKSF.

Portions of the Main Post were cleared for agriculture prior to Army acquisition. Approximately 40 acres (34 percent) of land remain forested, while 44 acres are classified as developed. The remaining 33 acres consists of open or recreational land. The Integrated Natural Resource Management Plan (INRMP) describes mature woodlands along the northern and western boundaries of the Main Post consisting of white oak *(Quercus alba),* red oak *(Quercus rubra),* sugar maple *(Acer saccharum),* white ash *(Fraxinus americana)*, and hickory *(Carya glabra)*. Secondary woodlands along the eastern boundary consist of Russian olive *(Elaagnus angustifolia)*, black cherry *(Prunus serotina),* slippery elm *(Ulmus rubra)*, and white ash *(Fraxinus americana)*. Open areas of the Main Post consist of Canadian goldenrod *(Solidago canadensis),* crown vetch *(Coronilla caria),* Canadian thistle *(Cirsium arvense),* blackberry *(Rubus spp)*, and multiflora rose *(Rosa mutliflora)* (CEKSF 2003).

The Neville Island Maintenance Facility consists entirely of pavements, buildings, and graveled areas. Vegetation consists of scrub grasses and shrubs. Wildlife is generally absent from the site because of a lack of functioning habitat (CEKSF 2003).

The INRMP surveys found no wetlands present on the Main Post, Site 62, or at the Neville Island Maintenance Facility (CEKSF 2003).

4.6.2 Cultural Resources

Properties listed on the National Register of Historic Places (NRHP) must meet standards for significance to be eligible, and generally are at least 50 years old. A preliminary survey of CEKSF was

completed. The focus of the survey was to determine if any eligible buildings or structures of historic significance are present.

The results of an architectural inventory conducted in 2002 indicated that a number of buildings and structures were potentially eligible for the NRHP because of their association with Cold War-era air defense systems. Further review determined that 37 base operations buildings were noncontributing due to their conversion to active base operations facilities. The State Bureau for Historic Preservation in a letter dated 7 January 2004 has made a determination that CEKSF is eligible for listing in the NRHP. The archaeological survey identified one historic archaeological site on the Main Post (Site 36AL507) that was recommended for phase two evaluation. Initial investigations suggest the site of a late 19th or early 20th century residence. Cultural resources such as the Cold War-era buildings and structures and the archaeological site (Site 36AL507) may require preservation or protection in accordance with Federal law and Army policy (CEKSF 2003). However, the Army has chosen not to pursue the listing (Personnel Communication 2006b).

4.7 SITE MAPS

A list of the site maps presented in the ECP Report is provided in the List of Figures on page v.

5. ENVIRONMENTAL CONDITIONS

The following sections describe environmental permits and licenses, environmental cleanup, hazardous substances, petroleum and petroleum products, ACM, lead and LBP, radioactive material, historical landfills/dumps, explosives-contaminated structures, radon, pesticides, and the general condition of CEKSF.

5.1 ENVIRONMENTAL PERMITS AND LICENSES

Permits and licenses were used at CEKSF for Resource Conservation and Recovery Act (RCRA) status, solid waste, storage tanks, National Pollutant Discharge Elimination System (NPDES), drinking water, air, and radiological materials.

5.1.1 RCRA Status

CEKSF does not have any permitted hazardous waste treatment, storage, and disposal facilities (TSDFs). The Main Post facility is registered as a RCRA conditionally exempt small quantity generator (CESQG) of hazardous waste (between 100 and 1,000 kilograms per month) with Federal Identification Number PAD981947245. Hazardous waste is stored on the Main Post at Buildings 64 through 66. During the site survey, these metal sheds were vacant with the exception of 55-gallon drums containing waste trichlorofluoromethane (CEKSF 2005).

The Neville Island facility is registered as a RCRA small quantity generator (SQG) of hazardous waste (between 100 and 1,000 kilograms per month) with Federal Identification Number PA D210022109. There are two hazardous waste storage areas at the Neville Island facility that are controlled by the Directorate of Logistics (DOL) on Neville Island (CEKSF 2005).

Hazardous waste disposal is contracted through the Defense Reutilization and Marketing Office (DRMO) at Letterkenny Army Depot. Types of waste generated include used oil, used oil filters, oily rags, and spent parts cleaning solvent (petroleum naphtha) (CEKSF 2005).

5.1.2 Solid Waste Permits

Browning Ferris Industries (BFI) currently provides solid waste disposal services for the Main Post, Site 62, and Neville Island (CEKSF 2005).

5.1.3 UST/AST Permits

Currently, there are no permits identified for any tanks. All USTs at the Main Post, Site 62, and Neville Island either have been removed or closed in-place and are discussed further in Section 5.4. There are currently 11 ASTs at the Main Post, 1 AST at Site 62, and 3 ASTs at the Neville Island facility.

All ASTs are painted and constructed of steel. According to the *Integrated Contingency Plan Installation Contingency Plan* and *Spill Prevention, Control, and Countermeasures Plan*, each AST is equipped with a direct reading-level gauge and the venting capacity of each is suitable for the fill and withdrawal rates. All diesel or fuel oil containing ASTs are either of double-wall construction and conform to UL-142 construction specifications or are contained in a diked enclosure. All double-walled ASTs are equipped with inter-wall sensors hardwired to audible alarms that activate in the event the petroleum product enters the space between the two tank walls (CEKSF 2005).

5.1.4 NPDES Permits

The sewage treatment plant at Site 62 was discharging to surface waters without an NPDES permit. The preliminary assessment (PA) recommended that discharge from the sewage treatment plant at Site 62

be brought into compliance with Federal regulations. A drain field subsequently was constructed and connected to the municipal sewer system so an NPDES permit would no longer be required (ESE 1982).

The sewage treatment facility was closed in 1999. In a 13 September 2002 letter, PADEP approved the cancellation of the NPDES permit requirement for Site 62 based on the elimination of the discharge. Monitoring or reporting no longer are required. A copy of the letter is included in Appendix G. No current permits were identified for the Main Post, Site 62, or Neville Island (Personnel Communication 2006b).

5.1.5 Drinking Water Permits

On 14 April 2003, the Allegheny County Health Department notified CEKSF that it does not qualify as a public water supply and, therefore, is not required to conduct routine water quality testing. In addition, CEKSF is not located over or in the recharge zone of a sole source aquifer. Drinking water for the Main Post, Site 62, and Neville Island is supplied by the local municipalities (CEKSF 2005).

5.1.6 Air Permits

CEKSF was given an exemption from Allegheny County to operate a gas-fired boiler on the Main Post. CEKSF has applied for an air permit for the paint booth located at the DOL Maintenance Shop on Neville Island (Personnel Communication 2006b).

5.1.7 Nuclear Regulatory Commission Licenses

CEKSF does not hold a Nuclear Regulatory Commission (NRC) license for radiological materials. The use of radiological materials has been confined to low-light-level rifle sight containing promethium-147 or tritium and instruments containing low levels of tritium and radium. Such materials are under the control of the 99th RSC and are confined to a secure storage room located in Building 1001 at Neville Island (CEKSF 2005).

5.1.8 Other Permits/Licenses

Certification/indemnification documents, dated 31 August 1995 and 24 February 1995, were used for two generators of used oil and a generator of used antifreeze at Site 62. The documents covered the shipment of used oil and used antifreeze from Site 62 to the Safety-Kleen Corporation in Elgin, Illinois (WCFS 1997).

5.2 ENVIRONMENTAL CLEANUP

Previous environmental investigations have been conducted at CEKSF, as described in the following sections.

5.2.1 Installation Restoration Program

The DOD IRP is designed to identify, evaluate, and remediate sites where activities may threaten public health, welfare, or the environment.

A PA of CEKSF, including the Main Post, Site 62, and Neville Island, was conducted in 1982 (ESE 1982). The following paragraphs summarize the significant findings.

Petroleum, oil, and lubricants (POL) were being stored in drum storage areas on the Main Post, Site 62, and Neville Island without facilities for containing potential spillage. The PA recommended that POL be properly stored (ESE 1982).

Vehicle wash rack wastewater generated at the Neville Island Maintenance Facility was being discharged to the municipal sewer without oil/water separation. The PA recommended that the vehicle wash rack at the Neville Island Maintenance Facility be brought into compliance with Army regulations. OWSs subsequently were installed and connected to the sanitary sewer system (ESE 1982).

The sewage treatment plant at Site 62 was discharging to surface waters without an NPDES permit. The PA recommended that discharge from the sewage treatment plant at Site 62 be brought into compliance with Federal regulations. A drain field subsequently was constructed and connected to the municipal sewer system so an NPDES permit no longer would be required (ESE 1982).

The remaining IRP sites are former UST locations. These sites are described below.

Site 7 is located at the Main Post near Building 14. Two adjacent 2,000-gallon heating oil USTs were removed on 20 April 1994 along with the surrounding soil. During the removal, a sheen was observed on the groundwater in the tank pit. Soil and groundwater data were collected to support an evaluation of possible offsite contamination. The results from one round of sampling indicate no contaminants above state regulatory levels (USACE 2004). In a 25 April 2000 letter, PADEP approved the no further action (NFA) request. A copy of the letter is included in Appendix G.

Site 8 is a former UST site at Building 15 where a 650-gallon used oil tank was located. Building 15 is currently used as an Area Maintenance Support Activity (AMSA) shop, but it formerly was used as the primary power generator building of the Pittsburgh NIKE Missile Master Control Facility. The tank was removed on 6 April 1994. Groundwater results from this site exceeded action levels. Additional investigation also identified solvent contamination at the site. A soil gas survey was conducted in September 1997 and identified potential petroleum and solvent source areas. The site was remediated to PADEP standards through the removal of the 650-gallon UST (6 April 1994). Two additional USTs also were identified. One is located near the western corner of Building 15 (2,000-gallon UST) and the second tank is located approximately 80 feet southeast of Building 15 (250,000-gallon UST) (USACE 2004). The 2,000-gallon UST was removed in 1994 and the 250,000-gallon UST was closed in place. CEKSF requested approval from PADEP on closure of this former UST site. Since PADEP did not respond to the request, CEKSF considers this site to be closed according to PADEP Document Number 255-4000-001. Section C contains a list of possible PADEP actions with regard to submission of a site characterization report, remedial action plan, or remedial action completion report, one of which states, "Take no action, in which case the report or plan becomes deemed approved" (Personnel Communication 2006b).

Site 9 is located at Site 62. This was a former UST location supplying Building 62001, which was occupied by the Pittsburgh Readiness Group. The site is adjacent to the property line. A 2,000-gallon and a 1,500-gallon heating oil UST were removed on 12 April 1994. The tank pit was backfilled with the original soil. Post excavation soil and groundwater sampling confirmed there was no contamination above action levels. The three monitoring wells installed at this site were properly closed (USACE 2004). CEKSF submitted a Remedial Action Completion Report to PADEP on 24 June 1998. In a letter dated 16 July 1998, PADEP agreed that no remedial activities were necessary at the site. A copy of the letter is included in Appendix G.

Site 10 is a former 5,000-gallon heating oil UST located at Building 1001 on Neville Island. The tank was removed on 24 March 1994. The site also includes two former leaded gasoline/diesel USTs at Building 1001. The PADEP database for leaking UST sites did not identify the Neville Island facility as an active leaking UST site (USACE 2004). According to a 30 September 2004 letter (included in Appendix G), the site was remediated to PADEP standards.

Site 12 is the site of a former UST located at Building 3. Building 3 is on the CEKSF Main Post. The 500-gallon diesel UST was removed on 7 March 1994 along with surrounding soil. During removal of the tank, not all of the contaminated soil was removed and a sheen was observed on the groundwater in

the tank pit. A portion of the tank pit was backfilled with clean soil; however, the geology of the property and existing power lines precluded removal of all of the contaminated soil. Sampling results demonstrate that soil concentrations were below nonresidential criteria (USACE 2004). In a letter dated 25 April 2000, PADEP approved the NFA request and the monitoring wells were properly closed. A copy of the letter is included in Appendix G.

As stated in the PER, CEKSF was declared installation-wide response complete (RC) in 2004 (CEKSF 2005).

5.2.2 Military Munitions Response Program

No Military Munitions Response Program (MMRP) sites have been identified at CEKSF.

5.2.3 Compliance Cleanup

No compliance cleanup (CC) sites have been identified.

5.2.4 Previous Environmental Investigations

An onsite installation assessment was conducted by ESE (1982) at CEKSF to assess past and present use of toxic and hazardous material, as well as the potential for these substances to migrate offsite. No significant findings requiring environmental sampling at CEKSF were recommended based on ESE's installation assessment.

The U.S. Army Environmental Hygiene Agency (USAEHA) completed an Environmental Program Review (EPR) at CEKSF in December 1989 to ensure compliance with applicable Federal, state, local, and DA environmental regulations; identify existing and/or potential environmental hazards; and help improve existing environmental programs at CEKSF. The EPR indicates that a petroleum spill occurred at Site 62 from a 55-gallon drum once stored next to the shed located east of Building 62004. Some cleanup was completed in the fall of 1990. No records are available documenting the volume of petroleum spilled from the 55-gallon drum or the amount of soil removed from the site during initial remediation.

A series of UST site assessments, removal, and closure reports was prepared for the heating oil tank at Neville Island between 1994 and 1996 by Parsons Engineering Science. Between 1998 and 1999, similar assessments and closure reports were prepared associated with the 550-gallon UST by Pacific Northwest Laboratories. A limited Site Investigation (SI) was conducted by GZA GeoEnvironmental, Inc. in 1998. These activities were compiled into an SI summarization report prepared by CH2MHill dated July 2000.

An EBS was conducted by Woodward-Clyde Federal Services (WCFS) for Sites 62 and 63 (WCFS 1997). The purpose was to identify, characterize, and document the presence or likely presence of a release of hazardous substance or petroleum product associated with the use of the sites and properties adjacent to the sites. A separate EBS was conducted by USACE for the Main Post and Neville Island facility in 2004.

5.3 HAZARDOUS SUBSTANCES

Hazardous substances are currently being stored at both the Main Post and Neville Island. There is no storage of such substances at Site 62. Activities conducted between 1974 and 2002 at Site 62 included the use of generic solvents, paint, and adhesives (in amounts less than their RQs), and POL products (in quantities of less than 600 gallons) for light vehicle maintenance (WCFS 1997).

Hazardous substances currently are used at CEKSF for vehicle maintenance activities. These materials typically include oils, lubricants, solvents, paints, hydraulic fluids, and batteries. Small working levels of these substances were observed in the shops. Neville Island is subject to Emergency Planning

and Community Right-to-Know Act (EPCRA) (Section 312) hazardous substance notification and reporting requirements due to the onsite bulk storage quantities of six chemical products over the default threshold of 10,000 pounds, which include battery acid, black beauty (sandblasting material), chemical agent resistant coating (CARC) paints, No. 2 fuel oil/diesel, lead acid batteries, and lubricating oils. According to the Integrated Contingency Plan (SAIC 2000) one spill incident was reported at Building 14. On 20 July 1994, 200 to 300 gallons of freon gas leaked from the cooling system. The hazardous materials currently stored within each building and their spill history are listed in Table 5-1.

5.4 PETROLEUM AND PETROLEUM PRODUCTS

Eighteen petroleum USTs were once present at CEKSF (10 USTs at the Main Post, 5 at Site 62, and 3 at Neville Island). USTs were used between 1956 and 1997 to store diesel, fuel oil, No. 2 heating oil, gasoline, and used oil. USTs are described in Table 5-2. There are currently 15 ASTs at CEKSF. Two of the 15 ASTs are no longer in use. ASTs are described in Table 5-3.

Main Post—Ten petroleum USTs were once present at the Main Post. The USTs were used between 1959 and 1994, ranged in capacity from 500 to 250,000 gallons, and stored diesel fuel, No. 2 fuel oil, gasoline, or used oil.

One 550-gallon diesel fuel UST (IRP Site 12) was once located southwest of Building 3, inside and adjacent to the fenceline, below the overhead power lines. This UST was installed in 1961 and was removed on 7 March 1994. During the removal action, noticeable holes were observed in the steel tank and a film of petroleum was visible on the surface of the pit water. The petroleum sheen was removed from the pit using sorbent pads and the excavated area was backfilled with the excavated soil. An environmental assessment of the former UST location was conducted in May 1994 and is documented in the *UST Site Assessment Report 550-Gallon Diesel Fuel UST Building 3*. During this assessment, all analyzed soil and groundwater samples were less than corresponding Federal and state action levels. As such, no further remedial action was warranted at this location (CEKSF 1994).

Two 2,000-gallon heating oil USTs (IRP Site 7) were once located south of Building 14, just south of where the current heating oil AST is located. The USTs were installed in 1960 and were removed on 20 April 1994. During the removal action, no holes were observed in the steel tanks, but noticeable holes were observed in the product lines. Stained soils and water with a hydrocarbon film also were observed during excavation. Analytical data for post-excavation soil samples indicated that further investigation of the area was required. An environmental assessment of the former UST location was conducted in July 1997 and is documented in the *Remedial Action Completion Report, Two 2,000 Gallon Heating Oil USTs, Building 14*. During this assessment, all analyzed soil and groundwater samples were less than corresponding Federal and state action levels. As such, no further remedial action was warranted at this location (CEKSF 1997).

One 650-gallon used oil UST (IRP Site 8) was once located outside and adjacent to the southwest wall of Building 15. This UST was removed on 6 April 1994 and a release of petroleum product was discovered at the time of excavation. The *Draft Site Characterization/Final Act 2 Report* summarizes the soil and groundwater investigations that were conducted between 1994 and 2001 to characterize the environmental conditions in the vicinity of the former UST. During this assessment, all analyzed soil and point-of-compliance groundwater samples were less than corresponding Federal and state action levels. As such, no further remedial action was warranted at this location (CEKSF 2001).

Records indicate that a 2,000-gallon UST, located southwest of Building 15, also was removed from the Main Post in 1994 and a 250,000-gallon UST, located southeast of Building 15, was closed in place in the early 1990s. The 250,000-gallon UST was cleaned and filled with sand and dirt. Based upon visible, olfactory, and analytical testing, a release of petroleum products did not occur from these USTs.

Table 5-1. Current Hazardous Materials Storage

Study Section	Building	Shop	Containment	Hazardous Substances	Spills
1	13 – PX	General	Shelf	Household cleaners	None observed.
2	5 – Administration	Utility closet	Shelf	Paint	None observed.
2	20 – Administration	Utility closet	Shelf	Paint	None observed.
2	22 – Security Operations	General	Shelf	Brake fluid, WD-40, glue	None observed.
2	69 – Storage Shed	General	Shelf	Insecticide, lubricants, enamel paints, gasoline	None observed.
3	3 – Field Maintenance	Carpenter shop	Flammables cabinet	Adhesive, oils, paint	Evidence of minor spills of oils and solvents observed on the floor.
		Electrical shop	Shelf	Wasp and hornet killer	Evidence of minor spills of oils and solvents observed on the floor.
		Maintenance shop	Flammables cabinet	Oil, break free, wasp and hornet killer, paint, antifreeze/coolant	Evidence of minor spills of oils and solvents observed on the floor.
		Mechanical shop	Flammables cabinet	PVC cement, cutting fluid, WD-40, enamel, antifreeze, solvents	Evidence of minor spills of oils and solvents observed on the floor.
3	67 – Storage Shed	General	Shelf	Oil, antifreeze/coolant, solvents, hydraulic fluid, brake fluid	None observed.
4	14 – Control Room	General	Flammables cabinet	Lubricants	Evidence of minor oil spills observed on the floor. On 20 July 1994, 200 to 300 gallons of freon gas leaked from the cooling system.
4	15 – Consolidated Power Generator	Battery room	Shelf	Batteries	Evidence of minor oil spills were observed on the floor.
		General	Shelf	Cleaners and lubricants	Evidence of minor oil spills were observed on the floor.
4	16 – Air Defense Command Operations	General	10-gallon containers	Fuel oil, gasoline	None observed.
			Cardboard box	Bleach, deicing/ defrosting fluids, cleaners, lubricants	None observed.
4	19 – Storage Shed	General	Shelf	Antifreeze/coolant, deionized water, brake fluid, lubricants, starting fluid, paint, WD-40, hydraulic fluid	None observed.
4	23 – Storage Shed	General	Shelf	Lubricants, brake fluid	None observed.

Table 5-1. Current Hazardous Materials Storage (Continued)

Study Section	Building	Shop	Containment	Hazardous Substances	Spills
4	24 – Radar Tracking	General	Shelf	Lubricants, kerosene	None observed.
4	32 – FAA Building	General	55-gallon drum	Coolant/antifreeze	Evidence of minor spills of oils and solvents were observed.
			Flammables cabinet	Wasp freeze, lubricants	Evidence of minor spills of oils and solvents were observed.
			Shelf	Antifreeze, batteries, lead, insecticide, lubricant, solvents, bleach, coolant	Evidence of minor spills of oils and solvents were observed.
6	1001 – Vehicle Maintenance	General	Flammables cabinet	Lubricants, gasoline, starter fluid, antifreeze, solvents, paint, adhesives, sealant, WD-40, buffing solution, sulfuric acid	Evidence of minor spills of oils and solvents observed on the floor.
6	1002 – Vehicle Maintenance	General	Flammables cabinet	Paint, thinner, WD-40, adhesive, lubricant, starting fluid, acetone, solvents, coolant/antifreeze, hydraulic fluid, wasp/hornet killer	Evidence of minor spills of oils and solvents observed on the floor.
6	1011 – Unused Black Beauty Abrasive Storage	General	55-gallon drum	Black Beauty slag sandblasting abrasive	None observed.
6	1012 – Flammable Material Storage	General	55-gallon drum	Lubricants, batteries	None observed.
6	1104 – CARC Paint Storage	General	Shelf	CARC paint	None observed.
6	1105 – Hazmat Storage	General	Shelf	Hydraulic fluid, paint thinner, antifreeze, corrosion prevention compound	None observed.
6	1106 – Hazmat Storage	General	Shelf	Hydraulic brake fluid, dent filler, detergent, oil, primer, rust inhibitor	None observed.
6	1108 – Vehicle Painting Preparation	General	55-gallon drum	Sandblasting abrasive	None observed.
6	1109 – Flammable Material Storage	General	Shelf	Oil	None observed.
6	1110 – Flammable Material Storage	General	Shelf	Oil	None observed.

Table 5-2. UST Information

Study Section	Building	Year Installed	Tank Capacity (gal.)	Construction Material	Product Stored	Secondary Containment	Status	Remediation
1	28 – Storage Shed	Unknown	20,000	Steel	Heating oil	None	Removed in 1994	None
		Unknown	20,000	Steel	Heating oil	None	Removed in 1994	None
1	47 – Pumping Station	Unknown	Unknown	Unknown	Gasoline	None	Removed	None
2	9 – Heating Plant	Unknown	Unknown	Steel	Diesel	None	Removed in 1988	None
3	3 – Field Maintenance	1961	550	Steel	Diesel	None	Removed in 1994	Petroleum-contaminated soil was removed
4	14 – Control Room	1960	2,000	Steel	Heating oil	None	Removed in 1994	Petroleum-contaminated soil was removed
		1960	2,000	Steel	Heating oil	None	Removed in 1994	Petroleum-contaminated soil was removed
4	15 – Consolidated Power Generator	1960	250,000	Steel	Fuel oil	None	Closed in place	None
		1960	2,000	Steel	Unknown	None	Removed in 1994	None
		1960	650	Steel	Used oil	None	Removed in 1994	Petroleum and solvent contaminated soil was removed
5	62001 – Missile Control	Unknown	1,500	Steel	Heating oil	None	Removed in 1994	Petroleum-contaminated soil was removed
		Unknown	2,000	Steel	Heating oil	None	Removed in 1994	Petroleum-contaminated soil was removed
		Unknown	2,500	Steel	Fuel	None	Closed in place	None
5	62005 – Storage Shed	Unknown	Unknown	Steel	Heating oil	None	Removed	None
5	Former Sewage Treatment Plant	Unknown	Unknown	Steel	Unknown	None	Closed in place	None
6	1001 – Vehicle Maintenance	Unknown	3,900	Steel	Leaded gasoline/ diesel	None	Removed in 1993	Petroleum-contaminated soil was removed
		1956	5,000	Steel	Heating oil	None	Removed in 1994	Petroleum-contaminated soil was removed
		1956	550	Steel	Leaded gasoline/ diesel	None	Removed in 1997	Petroleum-contaminated soil was removed

Table 5-3. AST Information

Study Section	Building	Tank Capacity (gal.)	Construction Material	Product Stored	Secondary Containment	Status	Any Release from Tank?
2	5 – Administration	500	Steel	Diesel fuel for generator	Double-wall	In use	No
2	9 – Heating Plant	500	Steel	Fuel	Double-wall	Not in use	No
3	1 – C.E. Kelly Commissary	500	Steel	Diesel fuel for generator	Double-wall	In use	No
3	3 – Field Maintenance	275	Steel	Diesel fuel for generator	Double-wall	In use	No
		500	Steel	Diesel	Double-wall	In use	No
4	16 – Air Defense Command Operations	3,000	Steel	Heating oil	Double-wall	In use	No
		1,000	Steel	Propane	Double-wall	In use	No
4	17 – Pump House	100	Steel	Diesel	Double-wall	In use	No
4	18 – Administration	1,000	Steel	Heating oil	Double-wall	In use	No
4	32 – FAA Building	1,000	Steel	Diesel	Double-wall	In use	No
		3,000	Steel	Heating oil	Double-wall	In use	No
5	62001 – Missile Control	1,000	Steel	Diesel fuel	Double-wall	Not in use	No
6	1001 – Vehicle Maintenance	5,000	Steel	Heating oil	Double-wall	In use	No
6	1002 – Vehicle Maintenance	400	Steel	Used oil	Double-wall	In use	No
		400	Steel	Antifreeze	Double-wall	In use	No

According to site personnel, a gasoline UST of unknown construction and capacity was once located beside Building 47, which once served as a fuel pumping station for U.S. Government vehicles. Information regarding when and how the UST was removed could not be located. A search of the state UST and leaking UST databases also provided no specific information (USACE 2004).

ASTs are located at Buildings 1, 3, 5, 9, 16, 17, 18, and 32. The AST at Building 9 is no longer in use. These ASTs are generally used for heating oil or diesel fuel for generators.

Site 62—Five petroleum USTs were once present at Site 62. The USTs were used between 1961 and 1994, ranged in capacity from 1,500 to 2,500 gallons, and stored fuel.

A 2,500-gallon UST (IRP Site 9) was located at Building 62001, which was occupied by the Pittsburgh Readiness Group. The UST was removed and the tank pit was backfilled with the original soil. In addition, a 2,000-gallon and a 1,500-gallon heating oil UST were removed on 12 April 1994. Post excavation soil and groundwater sampling confirmed there was no contamination above action levels. The three monitoring wells installed at this site were properly closed (CEKSF 2005).

In addition, an UST was associated with the former emergency generator at Building 62005 and another UST was associated with the chlorinator building at the former sewage treatment plant. The tank at Building 62005 was removed and the tank at the chlorinator building was closed in place (CEKSF 2005).

One 1,000-gallon steel AST at Building 62001 is no longer in use. The AST previously stored diesel fuel and no leaks have been reported (Personnel Communication 2006b).

Neville Island—Three petroleum USTs were once present at Neville Island. The USTs were used between 1956 and 1997; ranged in capacity from 550 to 5,000 gallons; and stored diesel fuel, No. 2 heating oil, or gasoline.

A 3,900-gallon diesel/gasoline UST (IRP Site 10), which was once located adjacent to Building 1001, was excavated and removed from the Neville Island facility in 1993. Post-excavation soil sample data indicated that the applicable PADEP cleanup criterion was met for total petroleum hydrocarbons (TPH) and that removal of the USTs and impacted fill material and soils was successful. As such, NFA was required (USACE 2004).

A 5,000-gallon UST (Tank Number 02-81442-2; IRP Site 10), which was once located adjacent to Building 1001, and the associated product line were excavated and removed from the Neville Island facility on 24 March 1994. Visual inspection of the excavated UST did not reveal noticeable holes after removal. An UST closure report and associated permits that documented the disposal of the excavated 5,000-gallon UST were submitted to the PADEP Division of Storage Tanks on 16 May 1994. During the removal of the UST, the excavation in the area was extended to 8 feet BLS. Three soil samples then were collected from the excavation bottom and the product line bottom and sidewalls and submitted for laboratory analysis of TPH as diesel-range organics (DRO) (USACE 2004).

In May 1994, a site assessment in the vicinity of the 5,000-UST excavation area was conducted to evaluate the nature and extent of potential effects to the soil and groundwater in the area of the removed UST. Seven subsurface soil samples and four groundwater samples were collected an analyzed for TPH and benzene, toluene, ethylbenzene, and xylenes (BTEX) constituents. The elevated detection of TPH in the soil samples led to the over-excavation that was conducted in November 1994 (see preceding paragraph). No BTEX was detected in any of the groundwater samples and only a slight detection of TPH (0.2 mg/L) was measured in two of the three monitoring wells (USACE 2004).

On the basis of analytical test results, a trench was excavated in November 1994 to remove additional soils from areas that exhibited TPH-DRO soil concentrations above the PADEP TPH action level of 200 mg/kg. Confirmation soil samples again were collected from the excavation trench and sidewalls for laboratory analysis of TPH-DRO. TPH was not detected in any of the confirmation samples. As such, the trench excavation was backfilled with clean soil and stockpiled soils were disposed of at the BFI Imperial Landfill (USACE 2004).

In September 1997, a 550-gallon UST (Tank Number 02-81442-3; IRP Site 10), which was once located immediately north of Building 1001 and east of Building 1012, was unearthed. The UST was found to be full of water despite the fact that three small cavities were observed during removal. During an analysis of the water, small amounts (37 mg/L) of gasoline-range petroleum hydrocarbons were detected. The excavation was roughly 8 feet wide, 10 feet long, and 9 feet deep. The excavation limits were extended 2 to 3 feet beyond the limits of the UST to remove visibly stained soil. A total of three soil samples were collected during the excavation of the UST. Two samples were collected from below the former tank location: one under the fill spout for the tank (west end) and the other at the opposite end of the tank (east end). The third soil sample was a composite taken from the stockpile of soil removed from the tank excavation. In each of the three samples, no petroleum hydrocarbons were detected. The composite sample from the soil pile did, however, contain 22.2 mg/kg lead, which was below the action level of 45 mg/kg, but above the clean fill standard of 20 mg/kg lead. As a result, the excavated soil was disposed of at a permitted facility (USACE 2004).

Overall, analytical results associated with UST closures at the Neville Island facility indicate that any remaining source of petroleum contamination was successfully removed. A closure report for each UST removal was submitted to PADEP, and review of the PADEP database for leaking UST sites did not identify the Neville Island facility as an active leaking UST site. As such, no further remedial action with regard to the former petroleum USTs is warranted or necessary (USACE 2004).

One 5,000-gallon heating oil AST is located at Building 1001 and two 400-gallon ASTs containing used oil and antifreeze are located at Building 1002. None was found to be leaking (USACE 2004).

5.4.1 Polychlorinated Biphenyls

National Technical Systems, Inc. (NTS) conducted a survey of transformers in 2003 and a survey of fluorescent light fixtures in 2004. Results of the survey are presented in Table 5-4. CEKSF does not have any PCB transformers currently in service. CEKSF has three pole-mounted PCB-containing transformers. In addition, CEKSF has 103 in-service fluorescent light fixtures containing PCB ballasts and 5 out-of-service fluorescent light fixtures containing PCB ballasts. The ballasts contain small capacitors. No other PCB, PCB-contaminated, or PCB-containing items are present (NTS 2004).

Table 5-4. Results of 2003 and 2004 PCB Surveys

Study Section	Building Number	Type	Status
1	37	Transformer (Westinghouse 56M5161) containing 4 ppm PCBs	No leaks apparent
2	21	Two fluorescent light fixtures (two 4-foot tubes)	No leaks apparent
2	35	Seven fluorescent light fixtures (two 4-foot tubes)	No leaks apparent
3	1	One fluorescent light fixture (two 4-foot tubes)	No leaks apparent
3	2	Two fluorescent light fixtures (two 4-foot tubes)	No leaks apparent
3	3	Transformer (Eisler 3091D3) containing 2 ppm PCBs	No leaks apparent
		Transformer (Eisler 3091D5) containing 45 ppm PCBs	No leaks apparent
		Five fluorescent light fixtures (one 4-foot tube)	No leaks apparent
		Eleven fluorescent light fixtures (two 4-foot tubes)	No leaks apparent
		One fluorescent light fixture (four 4-foot tubes)	No leaks apparent
4	14	Five fluorescent light fixtures (one 4-foot tube)	No leaks apparent
		Four fluorescent light fixtures (two 4-foot tubes)	No leaks apparent
		Four fluorescent light fixtures (four 4-foot tubes)	No leaks apparent
4	15	Three fluorescent light fixtures (two 4-foot tubes)	No leaks apparent
4	16	Fifty fluorescent light fixtures (two 4-foot tubes)	No leaks apparent
6	1001	Seven fluorescent light fixtures (two 4-foot tubes)	No leaks apparent
		Four fluorescent light fixtures (two 8-foot tubes)	No leaks apparent, not in service
		One fluorescent light fixture (four 8-foot tubes)	No leaks apparent, not in service
		Two fluorescent light fixtures (three 4-foot tubes)	No leaks apparent
6	1002	One fluorescent light fixture (two 4-foot tubes)	No leaks apparent

5.5 ASBESTOS-CONTAINING MATERIALS

CEKSF completed ACM building surveys in 1996 and 1998 culminating in an Asbestos Management Plan prepared by IT Corporation (December 1998). A reinspection survey was conducted in 2003. The widespread occurrence of ACM in site buildings has been verified and principally consists of thermal system insulation and miscellaneous materials such as floor tile, wall board, mastic, transite paneling, roofing material, and window glazing. Storage sheds and concrete buildings constructed in the 1990s were not included in the survey (ITCORP 2003). Known ACM is listed in Table 5-5.

Table 5-5. Asbestos Information

Building/Structure/ Site Number	Year Built	Asbestos Information
01-00013 – PX	1961	Floor tile/1 to 2 percent chrysotile
01-00028 – Storage Shed	1975	Building not surveyed
01-00031 – Radar Tracking	1961	None identified
01-00036 – Distance Learning Center	1962	Paneling along lower portion of the walls, floor tile, mastic, pipe elbow insulation
01-00037 – Military Clothing Store	1962	Paneling along lower portion of the walls, floor tile, mastic, insulation on heating pipes
01-00047 – Pumping Station	1955	Transite panels on the exterior of the building, floor tile
01-00048 – PX Layaway Storage	1955	Mastic
01-00063 – Restrooms	1994	Building not surveyed
02-00005 – Administration	1961	Floor tile, pipe insulation/35 to 40 percent chrysotile, hard packed pipe elbows/20 to 25 percent chrysotile
02-00006 – Administration	1961	Floor tile/3 to 5 percent chrysotile, mastic/10 to 15 percent chrysotile
02-00007 – Barracks	1961	Floor tile/1 to 10 percent chrysotile, mastic/3 to 25 percent chrysotile
02-00008 – Mess Hall	1961	Floor tile, mastic/5 to 7 percent chrysotile, pipe lagging/10 to 60 percent chrysotile, hard packed elbows/45 to 50 percent chrysotile
02-00009 – Heating Plant	1961	Mastic, window glazing
02-00020 – Administration	1961	Mastic, window glazing
02-00021 – Administration	1961	Floor tile, mastic
02-00022 – Security Operations	1961	Floor tile, mastic
02-00035 – Checkerboard Community Center	1962	Floor tile, mastic, rigid sheeting on the ceiling, insulation on the flue pipe
02-00049 – Storage	1962	Floor tile, mastic
02-00069 – Storage Shed	1989	Building not surveyed
03-00001 – C.E. Kelly Commissary	1961	Floor tile, mastic
03-00002 – Storage for Commissary	1961	Floor tile, mastic, tar wrap on chiller pipes
03-00003 – Field Maintenance	1961	Floor tile, mastic
03-00004 – Administration	1961	None identified
03-00040 – Maintenance Shop Storage	1961	Floor tile, mastic
03-00043 – Radar Tracking	1961	Floor tile, mastic
03-00055 – Storage Shed	1961	Floor tile, mastic
03-00067 – Storage Shed	1961	None identified
04-00011 – Guard Shack	1962	None identified
04-00012 – Emergency Response	1996	Building not surveyed

Table 5-5. Asbestos Information (Continued)

Building/Structure/ Site Number	Year Built	Asbestos Information
04-00014 – Control Room	1960	Floor tile/3 to 5 percent chrysotile, mastic/5 to 10 percent chrysotile, hard packed elbows/50 to 60 percent chrysotile, tar over entrance/5 to 10 percent chrysotile
04-00015 – Consolidated Power Generator	1960	Pipe lagging/1 to 2 percent chrysotile
04-00016 – Air Defense Command Operations	1960	Floor tile/1 to 5 percent chrysotile, mastic/5 to 7 percent chrysotile, hard packed elbows/55 to 60 percent chrysotile, pipe lagging
04-00017 – Pump House	1960	Pipe lagging
04-00018 – Administration	1960	Floor tile, mastic, hard packed elbows, pipe lagging, duct insulation
04-00019 – Storage Shed	1960	Floor tile, mastic, hard packed elbows, pipe lagging, duct insulation
04-00023 – Storage Shed	1960	Floor tile, mastic, hard packed elbows, pipe lagging, duct insulation
04-00024 – Radar Tracking	1960	Ceiling tile/35 to 40 percent chrysotile, floor tile, mastic/20 to 25 percent, hard packed elbows, pipe lagging , insulation on generator/15 to 20 percent chrysotile
04-00032 – FAA Building	1960	Pipe lagging, steam line
04-00033 – Radar Tracking	1961	Floor tile, mastic, insulation on generator
04-00034 – Storage Shed	1961	Floor tile, mastic, insulation on generator
04-00044 – Radar Tracking	1961	Floor tile, mastic, insulation on generator
04-00045 – Radar Tracking	1961	Floor tile, mastic, insulation on generator
04-00046 – Radar Tracking	1961	Floor tile, mastic, insulation on generator
04-00054 – Storage Shed	1962	None identified
04-00056 – Storage Shed	1962	Building not surveyed
04-00064 – Hazardous Waste Storage	1961	Hard-packed elbows, pipe lagging, tar coating on 14-inch lines
04-00065 – Former Hazardous Waste Storage	1960	Hard-packed elbows, pipe lagging, tar coating on 14-inch lines
04-00066 – Former Hazardous Waste Storage	1960	Hard-packed elbows, pipe lagging, tar coating on 14-inch lines
05-62001 – Missile Control	1955	Floor tile, pipe lagging, transite paneling
05-62002 – Mess Hall	1955	Floor tile, pipe insulation, transite wallboard
05-62003 – Sentry Building	1955	Floor tile, pipe lagging, HW tank insulation, boiler breeching-interior and exterior near smoke stack transite paneling
05-62004 – Generator Building	1955	Floor tile, pipe lagging, HW tank insulation, boiler breeching-interior and exterior near smoke stack transite paneling
05-62005 – Storage Shed	1955	Floor tile, pipe lagging, HW tank insulation, boiler breeching-interior and exterior near smoke stack transite paneling
06-01001 – Vehicle Maintenance	1955	Floor tile, pipe lagging, HW tank insulation, boiler breeching-interior and exterior near smoke stack transite paneling
06-01002 – Vehicle Maintenance	1955	Floor tile
06-01003 – Used Black Beauty Storage	1956	Building not surveyed
06-01004 – Utility Building	1956	Building not surveyed
06-01011 – Unused Black Beauty Abrasive Storage	1956	Building not surveyed

Table 5-5. Asbestos Information (Continued)

Building/Structure/ Site Number	Year Built	Asbestos Information
06-01012 – Flammable Material Storage	1956	Building not surveyed
06-01013 – Former Flammable Material Storage	1943	Building surveyed; the original asbestos shingle cladding was removed and replaced
06-01016 – Loading Ramp	1961	Building not surveyed
06-01103 – Fuel Pumping Station	1996	Building not surveyed
06-01104 – CARC Paint Storage	1994	Building not surveyed
06-01105 – Hazmat Storage	1994	Building not surveyed
06-01107 – Storage	1967	Building not surveyed
06-01106 – Hazmat Storage	1994	Building not surveyed
06-01108 – Vehicle Painting Preparation	1996	Building not surveyed
06-01109 – Flammable Material Storage	1996	Building not surveyed
06-01110 – Flammable Material Storage	1996	Building not surveyed
07-01008 – Hazardous Waste Storage	1996	Building not surveyed
07-01009 – General Purpose Storage	1996	Building not surveyed
07-01010 – Storage Building	1997	Building not surveyed

5.6 LEAD AND LEAD-BASED PAINT

An LBP survey was conducted in 2005 at the Main Post, Site 62, and Neville Island. Storage sheds and buildings constructed in the 1990s were not included in the survey. Table 5-6 summarizes the sample results from the survey. Sampling was performed using American Society for Testing and Materials (ASTM) Method E 1729-05, Standard Practice for Field Collection of Dried Paint Samples for Subsequent Lead Determination. The cold scrap method was used and field equipment was decontaminated with Alconox wipes. Samples were collected in August, September, and October 2005. A representative on each component to be tested was identified before sampling. A representative sample was determined by paint condition, paint color, substrate material, and available history.

5.7 RADIOACTIVE MATERIAL

Throughout the course of use by the Army, typical types of radiological commodities managed at CEKSF could have included radiac meters, chemical agent detectors, moisture density gauges, lensatic compasses, night-vision goggles, radioluminescent sites, and armored vehicle equipment gauges or weapons gauges. Such commodities are generally designed for extreme weather and combat conditions with a limited amount of radionuclides in a nondispersible form. Each of these items, along with other sensitive and valued items, is tightly controlled and stored in secured equipment storage areas. Storage of radiological commodities was not found at the Main Post, Site 62, or Neville Island.

Table 5-6. Results of 2005 LBP Sampling

Study Section	Building Number	Exterior Sample Range (%)	Exterior Samples Testing Positive	Interior Sample Range (%)	Interior Samples Testing Positive
1	13	<0.005 – 4.37	2 of 5	Below 0.05 ppm	0 of 5
1	28	Not sampled	N/A	Not sampled	N/A
1	31	Not sampled	N/A	Not sampled	N/A
1	36	Below 0.05 ppm	0 of 2	<0.005 – 0.93	4 of 13
1	37	Below 0.05 ppm	0 of 4	Not sampled	N/A
1	47	0.02 – 0.7	1 of 2	Below 0.05 ppm	0 of 2
1	48	Below 0.05 ppm	0 of 3	Not sampled	N/A
1	63	Below 0.05 ppm	0 of 3	Below 0.05 ppm	0 of 3
2	5	Below 0.05 ppm	0 of 2	Not sampled	N/A
2	6	Below 0.05 ppm	0 of 1	<0.005 – 1.23	1 of 2
2	7	0.01 – 2.49	1 of 4	Below 0.05 ppm	0 of 5
2	8	0.01 – 3.17	2 of 4	0.06 – 1.66	4 of 7
2	9	0.04 – 6.42	2 of 8	0.17 – 15.20	2 of 3
2	20	<0.005 – 3.04	2 of 6	<0.005 – 4.50	5 of 7
2	21	<0.005 – 2.47	1 of 10	<0.005 – 3.86	8 of 14
2	22	0.01 – 1.41	3 of 4	<0.005 – 0.51	1 of 2
2	35	Below 0.05 ppm	0 of 3	0.01 – 1.14	2 of 4
2	49	Not sampled	N/A	Not sampled	N/A
2	69	Not sampled	N/A	Not sampled	N/A
3	1	0.01 – 2.22	1 of 3	<0.005 – 7.84	1 of 13
3	2	0.04 – 2.43	1 of 2	0.22 – 4.60	3 of 6
3	3	Below 0.05 ppm	0 of 4	Below 0.05 ppm	0 of 7
3	4	0.02 – 4.09	2 of 5	0.03 – 2.66	2 of 4
3	40	Below 0.05 ppm	0 of 2	Not sampled	N/A
3	43	1.06	1 of 1	Not sampled	N/A
3	55	Not sampled	N/A	Not sampled	N/A
3	67	Not sampled	N/A	Not sampled	N/A
4	11	0.51 – 4.67	3 of 13	0.33 – 0.91	1 of 2
4	12	Below 0.05 ppm	0 of 2	Not sampled	N/A
4	14	0.01 – 1.65	1 of 4	<0.005 – 9.07	3 of 10
4	15	Below 0.05 ppm	0 of 3	Below 0.05 ppm	0 of 4
4	16	Below 0.05 ppm	0 of 3	0.02 – 1.63	2 of 7
4	17	0.02 – 0.79	1 of 6	0.01 – 4.67	3 of 7
4	18	<0.005 – 0.96	1 of 7	0.08 – 1.15	1 of 3
4	19	Not sampled	N/A	Not sampled	N/A
4	23	Not sampled	N/A	Not sampled	N/A
4	24	0.25 – 3.23	5 of 7	Not sampled	N/A
4	32	Not sampled	N/A	<0.005 – 10.90	2 of 15
4	33	<0.005 – 10.10	3 of 8	Not sampled	N/A
4	34	Below 0.05 ppm	0 of 5	Not sampled	N/A
4	44	0.01 – 2.21	2 of 8	Not sampled	N/A
4	45	<0.005 – 5.12	5 of 8	Not sampled	N/A
4	46	0.07 – 4.85	3 of 7	Not sampled	N/A
4	54	Not sampled	N/A	Not sampled	N/A

Table 5-6. Results of 2005 LBP Sampling (Continued)

Study Section	Building Number	Exterior Sample Range (%)	Exterior Samples Testing Positive	Interior Sample Range (%)	Interior Samples Testing Positive
4	56	Not sampled	N/A	Not sampled	N/A
4	64	Below 0.05 ppm	0 of 2	Not sampled	N/A
4	65	Below 0.05 ppm	0 of 2	Not sampled	N/A
4	66	Below 0.05 ppm	0 of 2	Not sampled	N/A
5	62001	0.01 – 2.68	4 of 5	<0.005 – 1.80	5 of 21
5	62002	Not sampled	N/A	Not sampled	N/A
5	62003	Not sampled	N/A	Not sampled	N/A
5	62004	Not sampled	N/A	Not sampled	N/A
5	62005	Not sampled	N/A	Not sampled	N/A
6	1001	0.02 – 5.38	2 of 4	<0.005 – 7.66	5 of 19
6	1002	0.01 – 4.81	1 of 4	<0.005 – 12.40	13 of 23
6	1003	5.34	1 of 1	3.09	1 of 1
6	1004	Below 0.05 ppm	0 of 1	Not sampled	N/A
6	1011	Not sampled	N/A	Not sampled	N/A
6	1012	Below 0.05 ppm	0 of 1	Not sampled	N/A
6	1013	Not sampled	N/A	Not sampled	N/A
6	1016	Not sampled	N/A	Not sampled	N/A
6	1103	Not sampled	N/A	Not sampled	N/A
6	1104	Below 0.05 ppm	0 of 2	Not sampled	N/A
6	1105	Below 0.05 ppm	0 of 2	Not sampled	N/A
6	1106	Below 0.05 ppm	0 of 2	Not sampled	N/A
6	1107	Not sampled	N/A	Not sampled	N/A
6	1108	Below 0.05 ppm	0 of 1	Below 0.05 ppm	0 of 1
6	1109	Not sampled	N/A	Not sampled	N/A
6	1110	Below 0.05 ppm	0 of 1	Not sampled	N/A
7	1008	0.50	1 of 1	Not sampled	N/A
7	1009	0.89 – 2.32	2 of 2	Not sampled	N/A
7	1010	Not sampled	N/A	Not sampled	N/A

N/A – Not Applicable

There is also no evidence to suggest that these items have ever been improperly managed at CEKSF, or that any radionuclides within these sealed-source items ever were released. As such, and based on the nature of the commodities stored (i.e., contained a limited amount of radionuclides in a nondispersible form), there is no indication that the environmental conditions at CEKSF have been negatively impacted by the storage of these items onsite (USACE 2004).

5.8 HISTORICAL LANDFILLS/DUMPS

CEKSF operated a small storage area of demolition debris and road base material at the Main Post near the former wastewater treatment plant. All material from this area has been removed. No such features are reported to have existed at Site 62 or Neville Island.

5.9 EXPLOSIVES-CONTAMINATED STRUCTURES

No explosives-contaminated structures are located at the Main Post, Site 62, or Neville Island.

5.10 RADON

As stated in the PER, a radon survey was conducted at the Main Post in 2000. Of the locations sampled, only the basement of Building 14, the former Missile Control Building, continues to be monitored (CEKSF 2005). Radon monitoring at 103 locations within the same zip code as the Main Post and Site 62 (zip code 15071) indicates that 30 percent of the locations tested exceeded the USEPA recommended radon action level of 4.0 pCi/L. Measured indoor activities ranged from 0.1 to 85.6 pCi/L.

Radon monitoring at 21 locations within the same zip code as Neville Island (zip code 15225) indicates that 43 percent of the locations tested exceeded the USEPA recommended radon action level of 4.0 pCi/L. Measured indoor activities ranged from 0.2 to 8.9 pCi/L. Based upon the regional radon data generated, Allegheny County, which includes the Main Post, Site 62, and Neville Island, lies within USEPA Radon Zone Level 1, which has a predicted average indoor screening level greater than the USEPA recommended radon action level of 4.0 pCi/L (see Appendix D).

5.11 PESTICIDES

Currently, pesticides are mixed and applied by a local licensed contractor once per year. Over the counter pesticides, such as wasp and hornet killers, are stored in Buildings 3, 32, 69, and 1002. All usage and applications are in accordance with the manufacturers' recommendations.

Pesticides and herbicides reportedly were used regularly for weed and pest control along fencelines and building perimeters at Site 62. Information obtained during EBS interviews indicated that these substances may have been applied in excess of manufacturers' recommendations or inappropriately (i.e., used in combination with waste hydraulic fluids) (WCFS 1997).

5.12 OTHER IDENTIFIED CONCERNS

A vehicle wash pad and OWS were located northwest of Building 4 on the Main Post. The wash pad currently is not used, but was utilized when Building 4 served as the motor pool. The OWS that was connected to the wash pad was closed in place (Personnel Communication 2006b). The OWS location had been paved over at the time of the site survey.

Four grease traps are located at the Main Post. Grease traps are located near Buildings 8, 35, 36, and 37, where food service historically has been offered. The grease traps currently are inactive and a majority of the units contain sediment and collect stormwater runoff (Personnel Communication 2006b). The sediment should be removed, containerized, and characterized to allow for offsite disposal.

Past environmental investigations and groundwater monitoring at Neville Island indicated that several CERCLA hazardous substances, which are associated with the past use of a chlorinated solvent (degreaser) and petroleum products, were released (USACE 2004). TCE, a common parts degreaser, was used at Neville Island until the early 1970s and was the predominant site contaminant. Although the presence of TCE was discovered during petroleum UST removal activities, it most likely resulted from the deposition of spent solvent onto the ground adjacent to the north side of Building 1001 and possibly in the northwestern portion of the site. According to a 30 September 2004 letter (included in Appendix G), the site was remediated to PADEP standards.

5.13 IDENTIFICATION OF UNCONTAMINATED PROPERTY

Study Sections 1, 2, 3, 4, 5, and 7 are classified as Category 1, an area or parcel of real property where no release or disposal of hazardous substances or petroleum products or their derivatives has occurred, including no migration of these substances from adjacent properties. A description of each ECP Category 1 parcel is provided in Table 5-7.

Table 5-7. ECP Category 1 Parcel Descriptions and Acreage

Parcel Identifier	Description	Acreage
Study Section 1	***Lower Main Post***—Consists of rugged hills that are consistently wooded with mature forest and dense shrub understory. Small developed area that includes Buildings 13, 28, 31, 36, 37, 47, 48, and 63, and an asphalted MEP area. A pavilion is constructed of concrete block.	49
Study Section 2	***Mid Lower Main Post***—Developed area that includes Buildings 5, 6, 7, 8, 9, 20, 21, 22, 35, 49, and 69, and an asphalted MEP area. This study section consists of gently rolling hills that are covered with open grassy fields and wooded with low shrubs and trees.	22
Study Section 3	***Mid Upper Main Post***—Developed area that includes paved areas and Buildings 1, 2, 3, 4, 40, 43, 55, and 67. IRP Site 12 is not classified as Category 1. This study section consists of gently rolling hills that are covered with open grassy fields and wooded with low shrubs and trees.	21
Study Section 4	***Upper Main Post***—Developed area that includes Buildings 11, 12, 14, 15, 16, 17, 18, 19, 23, 24, 32, 33, 34, 44, 45, 46, 54, 56, 64, 65, and 66, and an asphalted MEP area. This study section consists of moderately steep hills interspersed with open grassy fields and wooded along the installation boundary. IRP Sites 7 and 8 are not classified as Category 1.	25
Study Section 5	***Site 62***—This study section consists of moderately steep land that contains five buildings (62001, 62002, 62003, 62004, and 62005) and several acres of open space. Five feet in from the property fenceline and 5 feet beyond the building perimeter are not classified as Category 1. IRP Site 9 is not classified as Category 1.	11
Study Section 7	***Neville Island Facility South of Grand Avenue***—Open graveled area that contains three buildings (1008, 1009, and 1010). The southern portion of the site is an open grassy area that abuts a railroad right-of-way.	9
	Total	137

5.14 DESCRIPTION OF REMAINING PROPERTY

The following IRP sites are classified as Category 2, areas in which only release or disposal of petroleum products has occurred:

- ***Study Section 3 – Mid Upper Main Post***—IRP Site 12
- ***Study Section 4 – Upper Main Post***—IRP Site 7
- ***Study Section 5 – Site 62***—IRP Site 9.

IRP Site 8 and Study Section 6 are classified as Category 4, areas in which a release, disposal, or migration of hazardous substances has occurred, but all removal or other remedial actions necessary to protect human health and the environment have been taken. IRP Site 8 is classified as Category 4 due to petroleum contamination at a former UST site. Study Section 6 is classified as Category 4 due to the presence of TCE in groundwater at concentrations that have attenuated below cleanup standards and likely resulted from the deposition of spent solvent onto the ground. IRP Site 10 and Buildings 1001, 1002, 1003, 1004, 1011, 1012, 1013, 1016, 1103, 1104, 1105, 1106, 1107, 1108, 1109, and 1110 are within Study Section 6. A petroleum release occurred at IRP Site 10 and no releases are known to have occurred at any of the buildings in Study Section 6.

The fenceline in Study Section 5 and the building perimeters within the study section are classified as Category 7, an area that has not been evaluated or requires additional evaluation. Pesticides and herbicides reportedly were used regularly for weed and pest control along fencelines and building perimeters at Site 62. Information obtained during EBS interviews indicated that pesticides and herbicides may have been applied in excess of manufacturers' recommendations or inappropriately (i.e., used in combination with waste hydraulic fluids) (WCFS 1997).

5.14.1 NEPA

National Environmental Policy Act (NEPA) documentation for CEKSF was reviewed. A copy of the NEPA report is included in Appendix D.

5.14.1.1 Recent NEPA Documentation

A search of NEPA databases was undertaken to determine if historical structures, archaeological sites, traditional cultural properties, or threatened and endangered (T&E) species are present at CEKSF. Cultural and natural resources must be protected from any actions that may adversely affect them. The following records were searched:

- Natural Areas
  - Officially designated wilderness areas
  - Officially designated wildlife preserves, sanctuaries, and refuges
  - Wild and scenic rivers
  - Endangered species
- Landmarks, Historical, and Archaeological Sites
  - Historic places
  - Indian religious sites
  - Scenic trails
- Floodplain, Wetlands, and Coastal Zone
  - Flood plain management
  - Wetlands protection
  - Coastal zone management
- Federal Communications Commission (FCC) and FAA Sites Map
  - Cellular
  - Tower
  - Antenna registration
  - Amplitude Modulation (AM) tower
  - FAA digital obstacle file
  - Airport landing facilities
  - Electric power transmission line data
  - Excessive radio frequency emission.

5.14.1.2 Anticipated Level of Documentation

A NEPACheck report was generated by EDR. The complete NEPA report is included in Appendix D.

5.15 APPLICABLE REGULATORY COMPLIANCE ISSUES

No current compliance issues currently exist at the Main Post, Site 62, or Neville Island.

5.16 ADJACENT PROPERTIES

Main Post—The area surrounding the Main Post is primarily agricultural and undeveloped, but residential developments are being constructed immediately south of the facility. Thoms Run/Oakdale Road runs east/west and is located south of the Main Post. SR02030 runs north/south and divides the Main Post into the Upper and Lower Post. Robinson Run flows from east to west and bends around the

north side of the Main Post. Thoms Run originates south of the Main Post and flows east toward Chartiers Creek.

Based on a review of historical topographic maps and aerial photographs, the Main Post and the surrounding area were undeveloped land prior to the existing land use. The Main Post, along with the residential neighborhood that abuts the south side of the site, previously was utilized as farmland.

A database search of adjacent properties was conducted as described in Section 3.4.1. The results of the search are provided in Table 5-8. Adjacent property locations are shown in Figure 5-1.

Table 5-8. Results from State and Federal Database Search – Main Post and Site 62

Map ID	Site Name and Address	Distance/ Direction	Databases Within Search Distance	Additional Details from Databases
A	Kehm Oil First St. & Clinton Ave. Oakdale, PA 15071	1 mile west of Main Post	LUST UST	Three petroleum LUSTs; releases in August 1996, June 1997, and May 1999 Four 8,000-gallon gasoline UST installed in January 1976; three currently in use and one temporarily out of use
A	Taraba Auto Body 121 Clinton Ave. Oakdale, PA 15071	1 mile west of Main Post	RCRA-SQG FINDS	CESQG; no violations found
A	Harry A Zirwas Atlantic 335 Clinton Ave. Oakdale, PA 15071	1 mile west of Main Post	Archive UST	One 6,000-gallon and three 4,000-gallon gasoline USTs installed in July 1985; currently in use
A	Best Feedsfarm Supplies, Inc. 100 Union Ave. Oakdale, PA 15071	1 mile west of Main Post	FINDS	No information
B	Independent Enterprises, Inc. Thoms Run Rd. Oakdale, PA 15071	¾ mile SE of Main Post and 1 mile west of Site 62	ARCHIVE UST	Two diesel USTs installed in July 1980; temporarily out of use
C	Unipaper Recycling Co. 73A West Noblestown Rd. Carnegie, PA 15106	1 mile NE of Site 62	FINDS	No information
C	Collier Stone – McShane Quarry 80 Noblestown Rd. Collier, PA 15106	1 mile NE of Site 62	FINDS	No information
D	Club at Nevillewood 2427 Hilltop Rd. Presto, PA 15142	1 mile ENE of Site 62	AST	1,000-gallon gasoline AST and 1,000-gallon diesel fuel AST installed in May 1992; temporarily out of use
D	Collier Township 2418 Hilltop Rd. Presto, PA 15142	1 mile ENE of Site 62	FINDS LUST	Two petroleum LUSTs; releases in August 1989 and November 1995

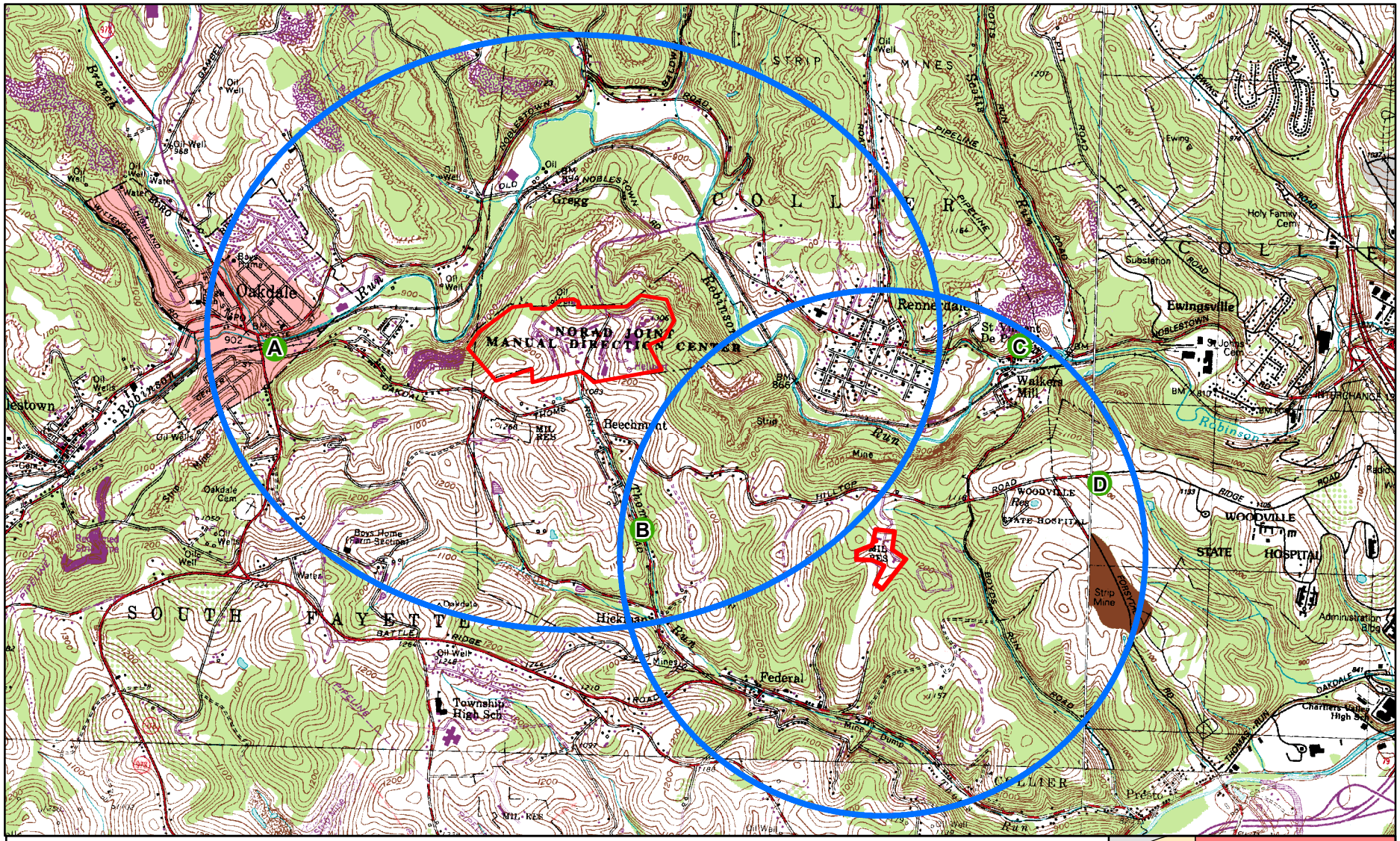


FIGURE 5-1
ADJACENT PROPERTY SURVEY MAP –
MAIN POST AND SITE 62

Site 62—The area surrounding Site 62 is primarily forested and residential. The database search did not identify any adjacent properties that were potential sources of contamination at Site 62. Site 62 is located on a topographic high. Due to this topographic layout, no sources of potential contamination from adjacent or surrounding properties are likely (see Table 5-8). Adjacent property locations are shown in Figure 5-1.

Neville Island—The Neville Island facility once was a part of a 52-acre tract of land that was purchased by the U.S. Government in 1943. The tract of land stretched from the PC & Y Railroad to the Ohio River. The 15-acre site is located on land within the original property purchased by the U.S. Government. The results of the database search are presented in Table 5-9. Adjacent property locations are shown in Figure 5-2. The following paragraphs provide information regarding past and current owners of adjacent properties based upon historical fire insurance maps and aerial photographs provided by EDR (see Appendix D), along with observations made during the site reconnaissance.

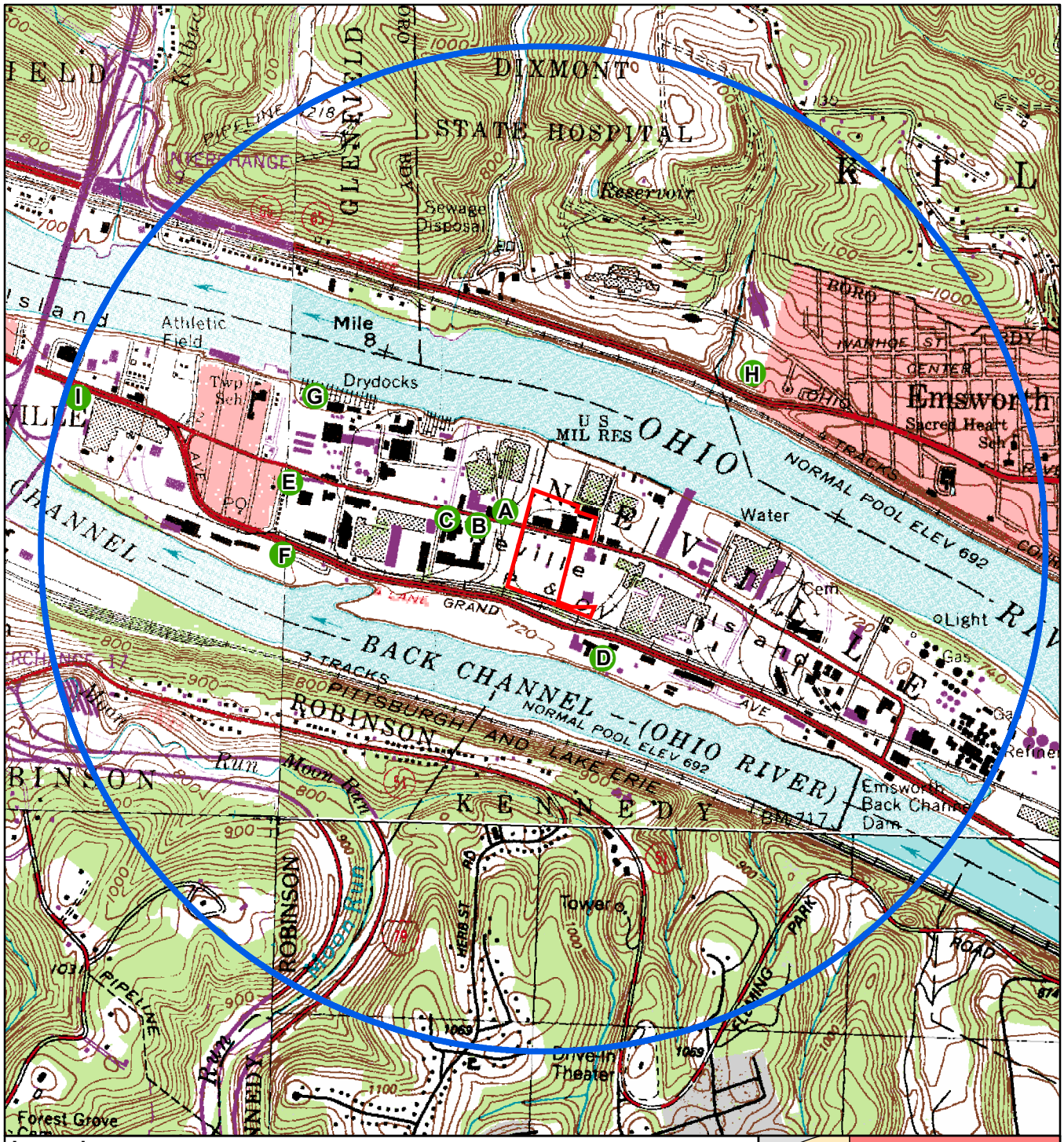
- ***Adjacent Properties to the North***—A 1926 Sanborn fire insurance map shows small structures to the north of the Neville Island facility, which appear to be residential in nature. A 1939 aerial photograph of the area no longer shows the structures present in 1926. By 1949, USACE had fully developed the property north of the Neville Island facility, at 3510 Grand Avenue, and operated a repair station for lock and dam structures in the Pittsburgh area. Objects of interest that existed on the USACE property included an armory, two large warehouses, maintenance shops, and a 150,000-gallon water tower. No significant changes other than the removal of the 150,000-gallon water tower are shown on a 1959 aerial photograph and a 1965 fire insurance map of the property. Presently, the property located north of the Neville Island facility continues to be owned and operated by USACE with no significant change in site layout. POV parking, administrative buildings, and a large warehouse are adjacent to the northern boundary of the Neville Island facility.
- ***Adjacent Properties to the East***—A 1926 Sanborn fire insurance map and 1939 aerial photograph show no commercial or industrial development of the land to the east of the Neville Island facility. By 1949, an access road had been constructed along the eastern boundary of the Neville Island facility, north of Grand Avenue, to allow access to the USACE property. USACE also had constructed an administration building in the northeast corner of the Neville Island facility. Immediately east of this roadway was a building that housed a fire department, a substation transfer yard, and a building identified as the "Seamanship Building" existed farther east of the Neville Island facility and north of Grand Avenue. In addition, by 1949, the U.S. Army Reserve had constructed four building structures, with one labeled as "radar." A 1959 aerial photograph showed no significant changes in land use to the east of the Neville Island facility. However, by 1965, the Army Reserve structures south of Grand Avenue had been removed and replaced with one large building that housed a motor freight company. To the north of Grand Avenue, the fire station still remained, but the transfer yard was gone and the building farther east no longer was identified as a "Seamanship Building." Change in land use occurred between 1959 and 1969. Land use to the east of the Neville Island facility has continued to remain commercial over the years. Currently, Liberty Pittsburgh Systems, Inc., a manufacturer of paper tags and forms for the laundry and dry cleaning industry, operates a facility immediately northeast of the Neville Island facility at 3498 Grand Avenue. Employee parking, an administration building, and a large crane were observed on the property owned by Liberty Pittsburgh Systems, Inc., during the September 2003 site inspection. A facility operated by Express Container Services, 3505 Grand Avenue, is located southeast of the Neville Island facility. During the September 2003 site inspection, employee parking, a large administration/warehouse, and tank trailers were observed on the Express Container Services site.

Table 5-9. Results from State and Federal Database Search – Neville Island

Map ID	Site Name and Address	Distance/ Direction	Databases Within Search Distance	Additional Details from Databases
A	Watson STD Neville Island PLT 2895 Grand Ave. Neville Island, PA 15225	Adjacent west	AST	Four 3,000-gallon, three 4,000-gallon, two 5,000-gallon, one 8,600-gallon, and one 10,000-gallon ASTs currently in use
A	Oil SVC 2899 Grand Ave. Pittsburgh, PA 15225	Adjacent west	UST RCRA-SQG FINDS AST	10,000-gallon diesel fuel UST installed in November 1993; currently in use Three 1,500-gallon, one 2,000-gallon, three 2,400-gallon, one 3,000-gallon, two 3,500-gallon, four 4,000-gallon, seven 4,950-gallon, two 7,000-gallon, and three 9,416-gallon ASTs; currently in use
A	Grease Plant 2901 Grand Ave. Pittsburgh, PA 15225	Adjacent west	U.S. BROWNFIELDS	No information
B	New Penn Motor Express 2950 Grand Ave. Pittsburgh, PA 15225	⅛ mile west	UST	12,000-gallon diesel fuel UST installed in September 1986; currently in use
B	Munic Waste Operation 2951 Grand Ave. Pittsburgh, PA 15225	⅛ mile west	SWF/LF	No information
B	Pittsburgh Pacific Processing Co. 2955 Grand Ave. Pittsburgh, PA 15225	⅛ mile west	RCRA-SQG FINDS	SQG; no violations found
C	Calig Steel Container 3000 Grand Ave. Pittsburgh, PA 15225	¼ mile west	RCRA-SQG FINDS	SQG; no violations found
C	ACME Metals 3000 Grand Ave. Pittsburgh, PA 15225	¼ mile west	U.S. BROWNFIELDS	Phase I environmental site assessment currently underway
C	Pittsburgh Pacific Processing Co. 3000 Grand Ave. Pittsburgh, PA 15225	¼ mile west	FINDS RCRA-LQG	LQG; no violations found
C	Neville Galvanizing, Inc. 3005 Grand Ave. Pittsburgh, PA 15225	¼ mile west	FINDS RCRA-LQG	LQG; no violations found
C	Shenango, Inc. 3100 Grand Ave. Pittsburgh, PA 15225	¼ mile west	CERC-NFRAP RCRA-SQG FINDS	SQG; no violations found
C	Neville Metals 3100 Grand Ave. Pittsburgh, PA 15225	¼ mile west	AST	Two 3,000-gallon diesel fuel ASTs installed in June 2003; temporarily out of use

Table 5-9. Results from State and Federal Database Search – Neville Island (Continued)

Map ID	Site Name and Address	Distance/ Direction	Databases Within Search Distance	Additional Details from Databases
C	Tri State Trailer Sales 3111 Grand Ave. Pittsburgh, PA 15225	¼ mile west	RCRA-SQG FINDS	CESQG No violations found
D	Valley Proteins, Inc. 3800 Neville Rd. Pittsburgh, PA 15225	¼ mile SSE	FINDS LUST AST	Petroleum LUST; release in December 1998 1,250-gallon, 1,350-gallon, and 10,000-gallon ASTs currently in use
E	3400 Grand Ave. Pittsburgh, PA 15225	½ mile west	U.S. BROWNFIELDS	No information
E	Watkins Motor Lines 3505 Grand Ave. Pittsburgh, PA 15225	½ mile west	LUST	Petroleum LUST; release in March 1998; cleanup completed
F	Trumbull Corporation 4500 Neville Rd. Pittsburgh, PA 15225	½ mile WSW	FINDS LUST	Petroleum LUST; release in August 1989
G	Neville Island Maintenance Division 3900 Grand Ave. Pittsburgh, PA 15225	½ mile WNW	LUST	Hazardous substance LUST; release in August 1989
H	Michael J. Joyce 8286 Ohio River Blvd. Pittsburgh, PA 15225	½ mile NE	VCP	No information
I	Neville Chemical Co. Grand Ave./Navy Rd. Pittsburgh, PA 15225	1 mile WNW	CERCLIS FINDS RCRA-LQG TRIS RCRA-TSDF CORRACTS NY MANIFEST	Migration of contaminated groundwater and current human exposures are under control; 57 violations records reported



Legend

Neville Island Maintenance Support Facility Boundary

1-mile radius

A Adjacent Properties

0.25 0.125 0 0.25 Miles

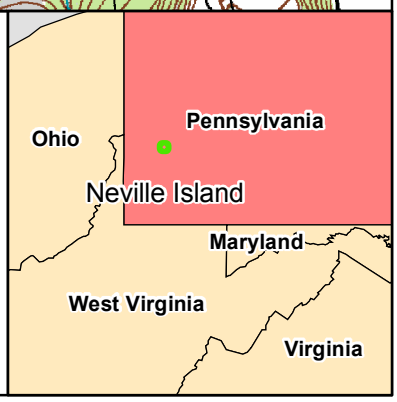


FIGURE 5-2
ADJACENT PROPERTY SURVEY MAP –
NEVILLE ISLAND MAINTENANCE SUPPORT FACILITY

- ***Adjacent Properties to the South***—A 1926 Sanborn fire insurance map and 1939 aerial photograph show no commercial or industrial development of the land to the south of the Neville Island facility. By 1949, PC & Y had added railroad track lines and Neville Road had been developed. A 1959 aerial photograph shows development on the property south of the Neville Island facility and across Neville Road. According to a 1965 fire insurance map and 1969 aerial photograph of the area, no visible changes had occurred since a decade earlier. By 1982, the property to the south of Neville Road had become fully developed for industrial use. Currently, the property south of Neville Road, at 3800 Neville Road, is utilized by Valley Proteins, Inc., which is a meat rendering company that processes inedible waste from animal slaughtering operations to produce saleable liquid fats and protein meals for use by industry and animal feed makers. Private parking, three large ASTs located adjacent to Neville Road, and a manufacturing plant on the Valley Proteins, Inc. property were visible during the September 2003 site inspection.
- ***Adjacent Properties to the West***—A 1926 Sanborn fire insurance map showed a row of six residences to the west of the Neville Island facility, north of Grand Avenue. To the south of Grand Avenue and to the west was the Dravo Contracting Company facility, which owned the CEKSF Neville Island property prior to its purchase by the U.S. Government in 1943. The Dravo complex included a large erecting shop, stock house, machine shop, carpenter shop, and other ancillary buildings. By 1939, the Dravo facility and residences to the west of the Neville Island facility had been demolished and re-vegetation of the former Dravo property could be seen. It appears that the land to the west most likely was purchased by the Vulcan Detinning Company, as the 1939 and 1949 aerial photographs and a 1950 Sanborn map indicate, and this company operated the facility farther west. As shown in the 1950 Sanborn map, Vulcan operated a storage yard and weigh scales to the southwest of the Neville Island facility and a detinning plant to the northwest of the site. The detinning plant took scrap tinplate steel and extracted the tin for resale. The plant consisted of a wastewater treatment plant, a pump house, a storage warehouse, a boiler room, nitrate storage and department, an electrical substation, a warehouse containing electrolytic cells and evaporators, and detinning equipment. Vulcan operations to the immediate west of the Neville Island facility have not changed significantly since 1949. In 1988, the Vulcan detinning plant was purchased by AMG Resources Corporation, but operations did not change. The property southwest of the Neville Island facility, south of Grand Avenue, is now utilized by American Steel Processing & Systems, Inc., another scrap steel processing facility.

Of the nine sites listed on the state or Federal databases within a 1-mile radius of the Main Post and Site 62, four are UST sites. Kehm Oil and Collier Township reported leaks. Taraba Auto Body is an SQG of hazardous waste; however, no violations have been reported. National Priorities List (NPL) sites are not within 1 mile of the Main Post or Site 62.

There are six UST sites (four reported leaks), five SQGs, and three large quantity generators (LQGs) of hazardous waste sites, and no NPL sites within 1 mile of the Neville Island facility. Neville Chemical Company reported 57 violations and contaminated groundwater at their location on Grand Avenue/Navy Road, 1 mile west-northwest of CEKSF. According to the EDR Report, migration of contaminated groundwater and current human exposures are under control (see Appendix D).

6. CONCLUSIONS

Property category codes are used to indicate the degree of contamination associated with the subject property. Table 6-1 identifies the criteria applicable to each. The Community Environmental Response Facilitation Act (CERFA) Categorization Flow Chart in Figure 6-1 provides information on how categories are assigned. Maps of the Main Post, Site 62, and Neville Island with designated property categories are included in Figures 6-2, 6-3, and 6-4, respectively. The facility matrix for CEKSF is provided in Table 6-2. This matrix includes summaries of hazardous substance and petroleum releases, PCBs, asbestos, lead, radiological material, radon, and MEC at each study section and other significant area. Each study section and significant area also is assigned a property category code.

Table 6-1. ECP Categories and Standard Map Colors

ECP Category	Definition	Map Color
1	Areas in which no release or disposal of hazardous substances or petroleum products has occurred, and to which there has been no migration of such substances from adjacent areas.	White
2	Areas in which only release or disposal of petroleum products has occurred.	Blue
3	Areas in which release, disposal, or migration of hazardous substances has occurred, but in concentrations that do not require a removal or other remedial response.	Light Green
4	Areas in which release, disposal, or migration of hazardous substances has occurred, but all removal or other remedial actions necessary to protect human health and the environment have been taken.	Dark Green
5	Areas in which release, disposal, or migration of hazardous substances has occurred, and removal or other remedial actions are underway, but all required actions have not yet been taken.	Yellow
6	Areas in which release, disposal, or migration of hazardous substances has occurred, but required remedial actions have not yet been implemented.	Red
7	Areas that have not been evaluated or require additional evaluation.	Gray

The following property is classified as Category 1, areas in which no release or disposal of hazardous substances or petroleum products has occurred, and to which there has been no migration of such substances from adjacent areas:

- ***Study Section 1 – Lower Main Post***—Entire property
- ***Study Section 2 – Mid Lower Main Post***—Entire property
- ***Study Section 3 – Mid Upper Main Post***—Entire property with the exception of IRP Site 12
- ***Study Section 4 – Upper Main Post***—Entire property with the exception of IRP Sites 7 and 8
- ***Study Section 5 – Site 62***—Entire property with the exception of IRP Site 9, the fenceline, and building perimeters
- ***Study Section 7 – Neville Island Facility South of Grand Avenue***—Entire property.

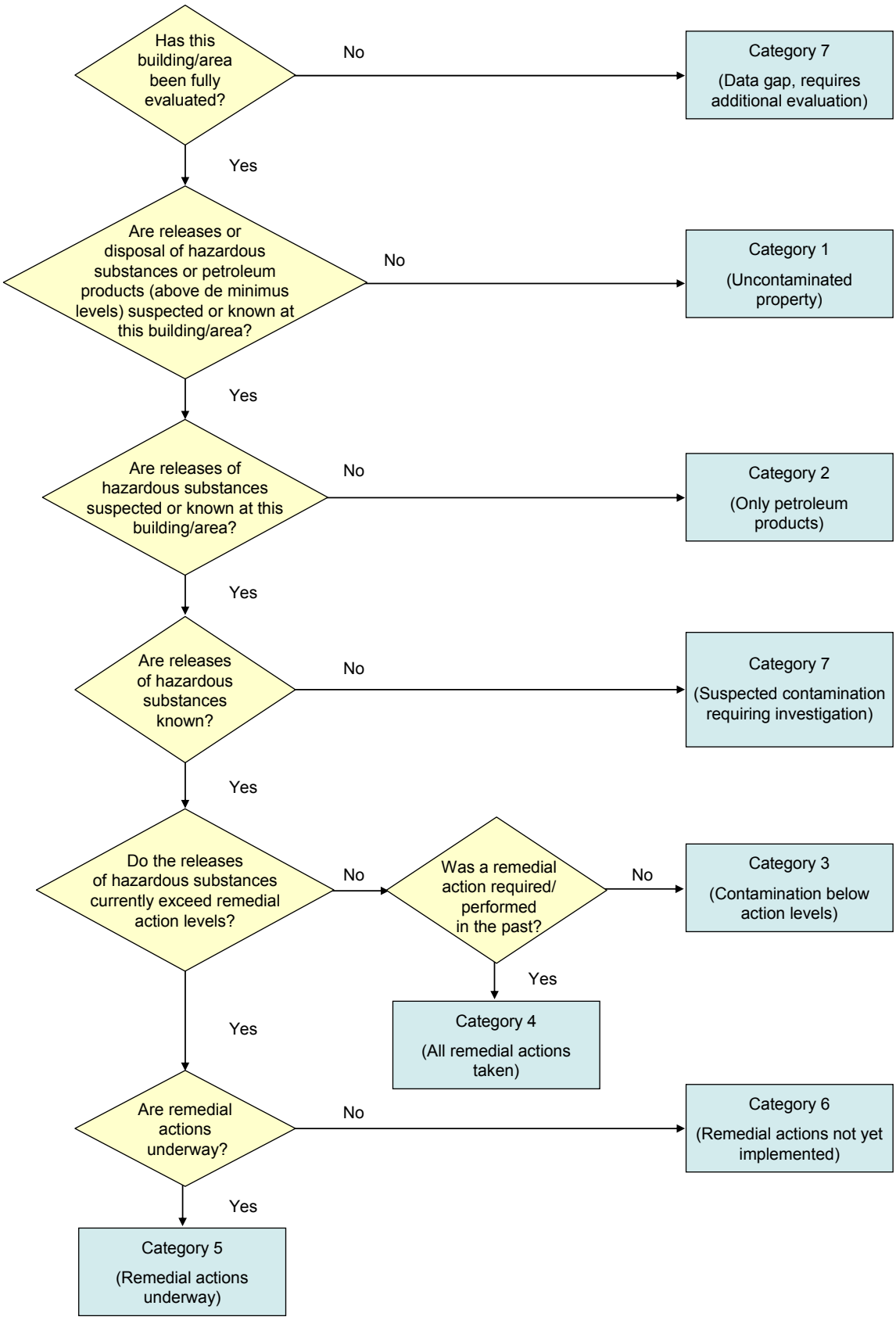
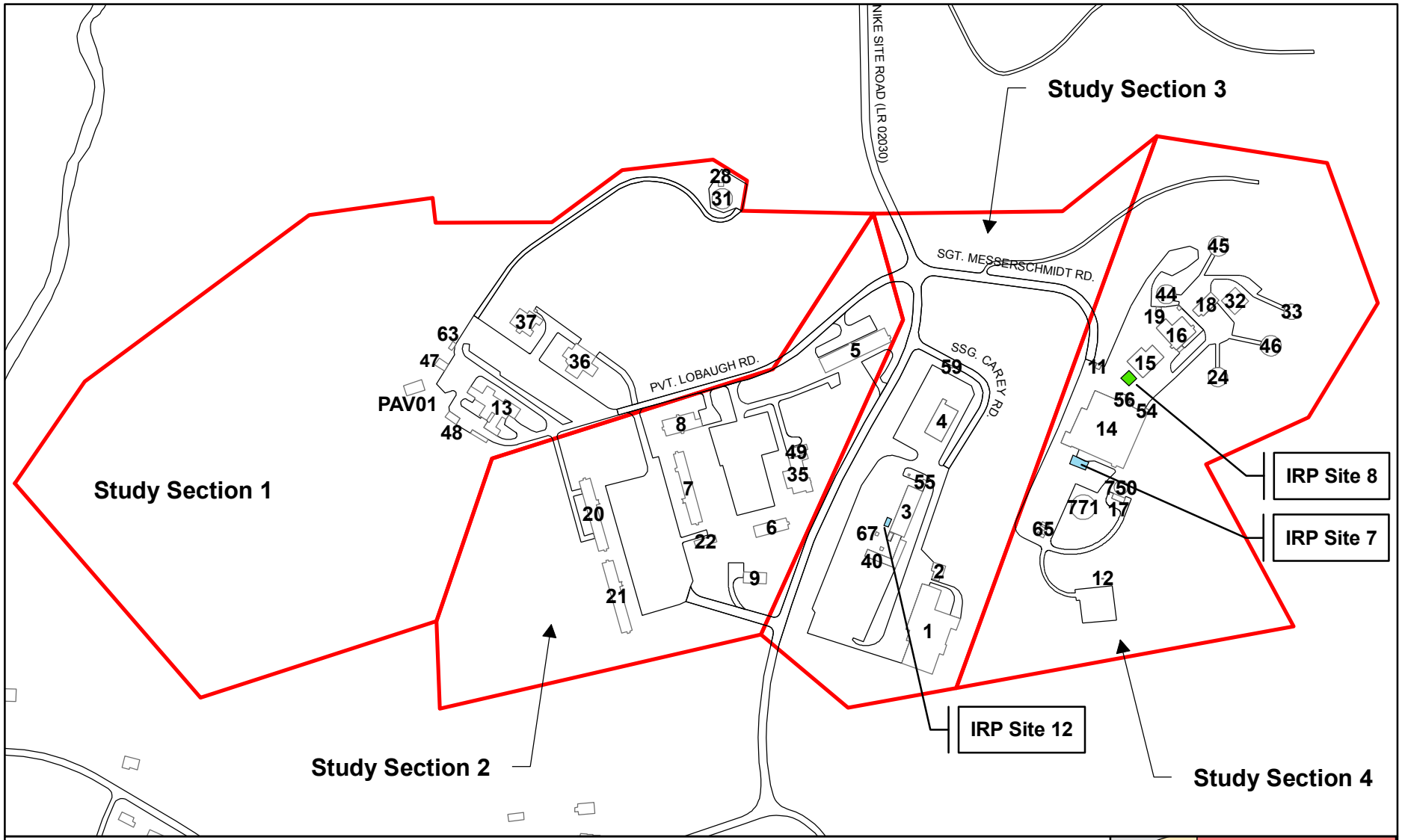


Figure 6-1. CERFA Categorization Flowchart



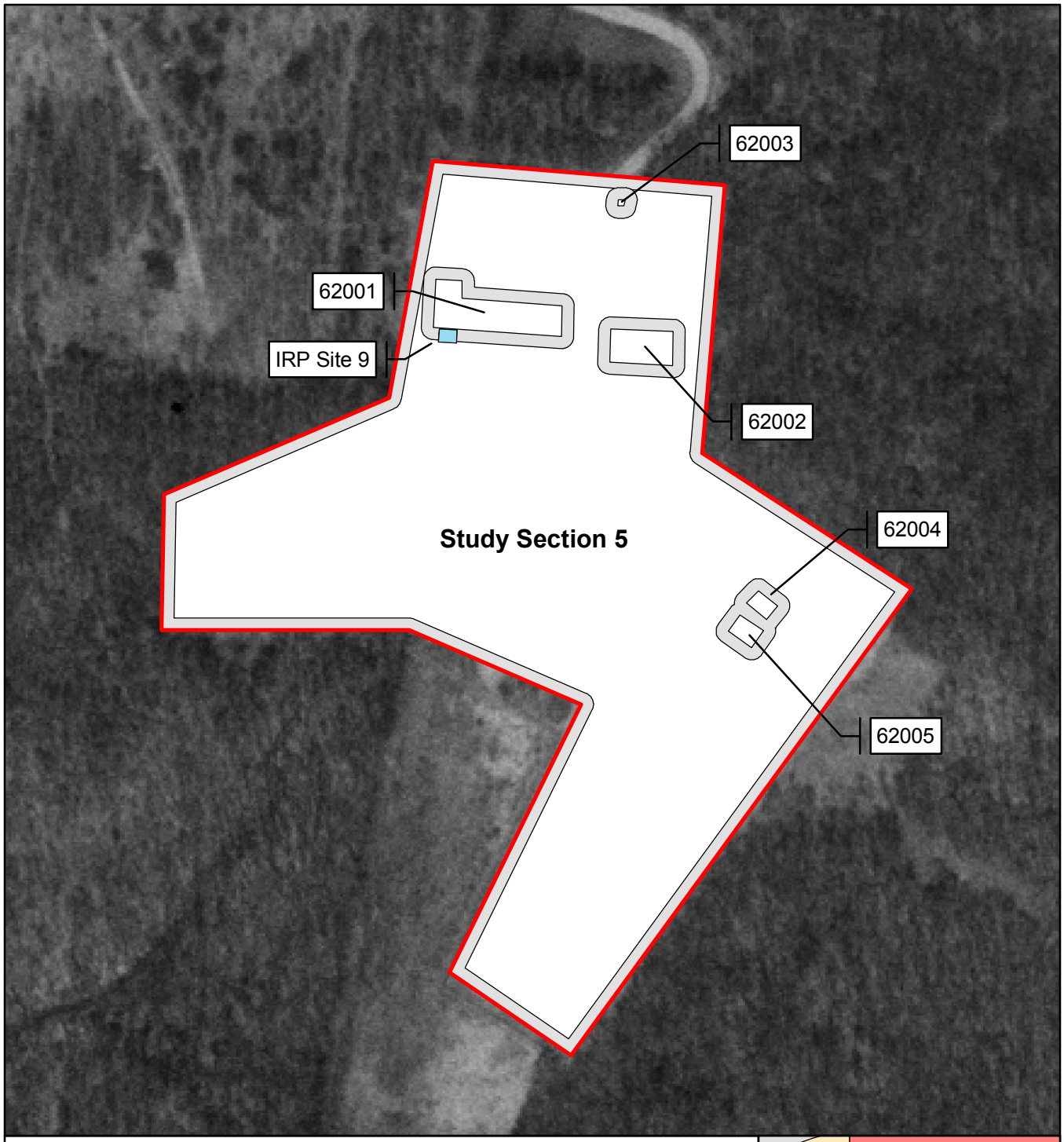
Legend

- Roads
- Buildings
- Study Sections
- Category 1
- Category 2
- Category 4

N

0.1 0.05 0 0.1 Miles

FIGURE 6-2
PROPERTY CATEGORIZATION MAP FOR THE MAIN POST



Legend

- Study Section 5
- Category 1
- Category 2
- Category 7

250 125 0 250 Feet

FIGURE 6-3
PROPERTY CATEGORIZATION MAP FOR SITE 62

Figure 6.4 redacted.

Table 6-2. Summary of ECP Findings

Building/Structure/ Site Number	Property Category	Hazardous Substance Releases	Petroleum Releases	PCBs	Asbestos	Lead	Radiological	Radon	MEC
Study Section 1 – Lower Main Post (excluding buildings)	1	A	A	A	A	A	A	A	A
01-00013 – PX	1	A	A	A	V	V	A	A	A
01-00028 – Storage Shed	1	A	A	A	N	N	A	A	A
01-00031 – Radar Tracking	1	A	A	A	A	N	A	A	A
01-00036 – Distance Learning Center	1	A	A	A	V	V	A	A	A
01-00037 – Military Clothing Store	1	A	A	A	V	N	A	A	A
01-00047 – Pumping Station	1	A	A	A	V	V	A	A	A
01-00048 – PX Layaway Storage	1	A	A	A	V	N	A	A	A
01-00063 – Restrooms	1	A	A	A	N	A	A	A	A
Study Section 2 – Mid Lower Main Post (excluding buildings)	1	A	A	A	A	A	A	A	A
02-00005 – Administration	1	A	A	A	V	N	A	A	A
02-00006 – Administration	1	A	A	A	V	V	A	A	A
02-00007 – Barracks	1	A	A	A	V	V	A	A	A
02-00008 – Mess Hall	1	A	A	A	V	V	A	A	A
02-00009 – Heating Plant	1	A	A	A	V	V	A	A	A
02-00020 – Administration	1	A	A	A	V	V	A	A	A
02-00021 – Administration	1	A	A	A	V	V	A	A	A
02-00022 – Security Operations	1	A	A	A	V	V	A	A	A
02-00035 – Checkerboard Community Center	1	A	A	A	V	V	A	A	A
02-00049 – Storage	1	A	A	A	V	N	A	A	A
02-00069 – Storage Shed	1	A	A	A	N	N	A	A	A
Study Section 3 – Mid Upper Main Post (excluding buildings)	1	A	A	A	A	A	A	A	A
03-00001 – C.E. Kelly Commissary	1	A	A	A	V	V	A	A	A
03-00002 – Storage for Commissary	1	A	A	A	V	V	A	A	A

Table 6-2. Summary of ECP Findings (Continued)

Building/Structure/ Site Number	Property Category	Hazardous Substances Releases	Petroleum Releases	PCBs	Asbestos	Lead	Radiological	Radon	MEC
03-00003 – Field Maintenance	1	A	A	A	V	A	A	A	A
03-00004 – Administration	1	A	A	A	A	V	A	A	A
03-00040 – Maintenance Shop Storage	1	A	A	A	V	N	A	A	A
03-00043 – Radar Tracking	1	A	A	A	V	V	A	A	A
03-00055 – Storage Shed	1	A	A	A	V	N	A	A	A
03-00067 – Storage Shed	1	A	A	A	A	N	A	A	A
03-IRP Site 12 – Former UST Location	2	A	R	A	A	A	A	A	A
Study Section 4 – Upper Main Post (excluding buildings)	1	A	A	A	A	A	A	A	A
04-00011 – Guard Shack	1	A	A	A	A	V	A	A	A
04-00012 – Emergency Response	1	A	A	A	N	N	A	A	A
04-00014 – Control Room	1	A	A	A	V	V	A	S	A
04-00015 – Consolidated Power Generator	1	A	A	A	V	A	A	A	A
04-00016 – Air Defense Command Operations	1	A	A	A	V	V	A	A	A
04-00017 – Pump House	1	A	A	A	V	V	A	A	A
04-00018 – Administration	1	A	A	A	V	V	A	A	A
04-00019 – Storage Shed	1	A	A	A	V	N	A	A	A
04-00023 – Storage Shed	1	A	A	A	V	N	A	A	A
04-00024 – Radar Tracking	1	A	A	A	V	V	A	A	A
04-00032 – FAA Building	1	A	A	A	V	V	A	A	A
04-00033 – Radar Tracking	1	A	A	A	V	V	A	A	A
04-00034 – Storage shed.	1	A	A	A	V	N	A	A	A
04-00044 – Radar Tracking	1	A	A	A	V	V	A	A	A
04-00045 – Radar Tracking	1	A	A	A	V	V	A	A	A
04-00046 – Radar Tracking	1	A	A	A	V	V	A	A	A

Table 6-2. Summary of ECP Findings (Continued)

Building/Structure/ Site Number	Property Category	Hazardous Substance Releases	Petroleum Releases	PCBs	Asbestos	Lead	Radiological	Radon	MEC
04-00054 – Storage Shed	1	A	A	A	A	N	A	A	A
04-00056 – Storage Shed	1	A	A	A	N	N	A	A	A
04-00064 – Hazardous Waste Storage	1	A	A	A	V	N	A	A	A
04-00065 – Former Hazardous Waste Storage	1	A	A	A	V	N	A	A	A
04-00066 – Former Hazardous Waste Storage	1	A	A	A	V	N	A	A	A
04-IRP Site 7 – Former UST Location	2	A	R	A	A	A	A	A	A
04-IRP Site 8 – Former UST Location	4	R	R	A	A	A	A	A	A
Study Section 5 – Site 62 (excluding buildings)	1	A	A	A	A	A	A	A	A
05-62001 – Missile Control	1	A	A	A	V	V	A	A	A
05-62002 – Mess Hall	1	A	A	A	V	N	A	A	A
05-62003 – Sentry Building	1	A	A	A	V	N	A	A	A
05-62004 – Generator Building	1	A	A	A	V	N	A	A	A
05-62005 – Storage Shed	1	A	A	A	V	N	A	A	A
05-IRP Site 9 – Former UST Location	2	A	R	A	A	A	A	A	A
05-Fenceline and Building Perimeters	7	S	S	A	A	A	A	A	A
Study Section 6 – Neville Island Facility North of Grand Avenue (excluding buildings)	4	V	A	A	A	A	A	A	A
06-01001 – Vehicle Maintenance	1	A	A	A	V	V	A	A	A
06-01002 – Vehicle Maintenance	1	A	A	A	V	V	A	A	A
06-01003 – Used Black Beauty Storage	1	A	A	A	N	V	A	A	A
06-01004 – Utility Building	1	A	A	A	N	N	A	A	A
06-01011 – Unused Black Beauty Abrasive Storage	1	A	A	A	N	N	A	A	A
06-01012 – Flammable Material Storage	1	A	A	A	N	N	A	A	A
06-01013 – Former Flammable Material Storage	1	A	A	A	R	N	A	A	A

Table 6-2. Summary of ECP Findings (Continued)

Building/Structure/ Site Number	Property Category	Hazardous Substance Releases	Petroleum Releases	PCBs	Asbestos	Lead	Radiological	Radon	MEC
06-01016 – Loading Ramp	1	A	A	A	N	N	A	A	A
06-01103 – Fuel Pumping Station	1	A	A	A	N	N	A	A	A
06-01104 – CARC Paint Storage	1	A	A	A	N	N	A	A	A
06-01105 – Hazmat Storage	1	A	A	A	N	N	A	A	A
06-01106 – Hazmat Storage	1	A	A	A	N	N	A	A	A
06-01107 – Storage	1	A	A	A	N	N	A	A	A
06-01108 – Vehicle Painting Preparation	1	A	A	A	N	A	A	A	A
06-01109 – Flammable Material Storage	1	A	A	A	N	N	A	A	A
06-01110 – Flammable Material Storage	1	A	A	A	N	N	A	A	A
06-IRP Site 10 – Former UST Location	2	A	R	A	A	A	A	A	A
Study Section 7 – Neville Island Facility South of Grand Avenue (excluding buildings)	1	A	A	A	A	A	A	A	A
07-01008 – Hazardous Waste Storage	1	A	A	A	N	V	A	A	A
07-01009 – General Purpose Storage	1	A	A	A	N	V	A	A	A
07-01010 – Storage Building	1	A	A	A	N	N	A	A	A

V – Verified
S – Suspected
N – Not Suspected
A – Absent
R – Removed/Remediated

Note: A petroleum release occurred at IRP Site 8 and no releases are known to have occurred at any of the buildings in Study Section 6; however, Study Section 6 is classified as Category 4 due to the presence of TCE in groundwater at concentrations that have attenuated below cleanup standards.

The following IRP sites are classified as Category 2, areas in which only release or disposal of petroleum products has occurred:

- ***Study Section 3 – Mid Upper Main Post***—IRP Site 12
- ***Study Section 4 – Upper Main Post***—IRP Site 7
- ***Study Section 5 – Site 62***—IRP Site 9.

IRP Site 8 and Study Section 6 are classified as Category 4, areas in which a release, disposal, or migration of hazardous substances has occurred, but all removal or other remedial actions necessary to protect human health and the environment have been taken. IRP Site 8 is classified as Category 4 due to petroleum contamination at a former UST site. Study Section 6 is classified as Category 4 due to the presence of TCE in groundwater at concentrations that have attenuated below cleanup standards and likely resulted from the deposition of spent solvent onto the ground. IRP Site 10 and Buildings 1001, 1002, 1003, 1004, 1011, 1012, 1013, 1016, 1103, 1104, 1105, 1106, 1107, 1108, 1109, and 1110 are

within Study Section 6. A petroleum release occurred at IRP Site 10 and no releases are known to have occurred at any of the buildings in Study Section 6.

The fenceline of Study Section 5 and the building perimeters within the study section are classified as Category 7, an area that has not been evaluated or requires additional evaluation. Information obtained during EBS interviews indicated that pesticides and herbicides may have been applied in excess of manufacturers' recommendations or inappropriately (i.e., used in combination with waste hydraulic fluids). The fenceline and building perimeters within Study Section 5 are Category 7 because waste hydraulic fluids, oils, or fuels may have accumulated in the soils, and sampling has not been conducted.

7. CERTIFICATION

All information/documentation provided accurately reflects the condition of the property. This report meets the U.S. Department of Defense (DOD) requirements for completion of an Environmental Condition of Property (ECP) Report.

Georgiann Sekela, P.E.
Director, Project Office
Charles E. Kelly Support Facility

Roger H. Walton, P.E.
Environmental Engineer
U.S. Army Environmental Center

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